# AMERICA'S INSATIABLE DEMAND FOR DRUGS

### **HEARING**

BEFORE THE

# COMMITTEE ON HOMELAND SECURITY AND GOVERNMENTAL AFFAIRS UNITED STATES SENATE

ONE HUNDRED FOURTEENTH CONGRESS

SECOND SESSION

AMERICA'S INSATIABLE DEMAND FOR DRUGS, APRIL 13, 2016 ASSESSING THE FEDERAL RESPONSE, MAY 17, 2016 EXAMINING ALTERNATIVE APPROACHES, JUNE 15, 2016

Available via the World Wide Web: http://www.fdsys.gov/

Printed for the use of the Committee on Homeland Security and Governmental Affairs



AMERICA'S INSATIABLE DEMAND FOR DRUGS—2016

# AMERICA'S INSATIABLE DEMAND FOR DRUGS

## **HEARING**

BEFORE THE

# COMMITTEE ON HOMELAND SECURITY AND GOVERNMENTAL AFFAIRS UNITED STATES SENATE

ONE HUNDRED FOURTEENTH CONGRESS

SECOND SESSION

AMERICA'S INSATIABLE DEMAND FOR DRUGS, APRIL 13, 2016 ASSESSING THE FEDERAL RESPONSE, MAY 17, 2016 EXAMINING ALTERNATIVE APPROACHES, JUNE 15, 2016

Available via the World Wide Web: http://www.fdsys.gov/

Printed for the use of the Committee on Homeland Security and Governmental Affairs



U.S. GOVERNMENT PUBLISHING OFFICE

 $22\text{--}771\,\mathrm{PDF}$ 

WASHINGTON: 2017

#### COMMITTEE ON HOMELAND SECURITY AND GOVERNMENTAL AFFAIRS

RON JOHNSON, Wisconsin Chairman

JOHN McCAIN, Arizona ROB PORTMAN, Ohio RAND PAUL, Kentucky JAMES LANKFORD, Oklahoma MICHAEL B. ENZI, Wyoming KELLY AYOTTE, New Hampshire JONI ERNST, Iowa BEN SASSE, Nebraska THOMAS R. CARPER, Delaware CLAIRE McCASKILL, Missouri JON TESTER, Montana TAMMY BALDWIN, Wisconsin HEIDI HEITKAMP, North Dakota CORY A. BOOKER, New Jersey GARY C. PETERS, Michigan

Christopher R. Hixon, Staff Director
Brooke N. Ericson, Chief Counsel for Homeland Security
José J. Bautista, Professional Staff Member
Servando H. Gonzales, U.S. Customs and Border Protection Detailee
Gabrielle A. Batkin, Minority Staff Director
John P. Kilvington, Minority Deputy Staff Director
Holly A. Idelson, Minority Senior Counsel
Stephen R. Viña, Minority Chief Counsel for Homeland Security
Brian F. Papp, Jr., Minority Professional Staff Member
Ellen W. Harrington, Minority Professional Staff Member
Laura W. Kilbride, Chief Clerk
Benjamin C. Grazda, Hearing Clerk

### CONTENTS

	Page					
WEDNESDAY, APRIL 13, 2016						
Opening statements: Senator Johnson Senator Carper Senator Ayotte Senator Booker Senator McCaskill Senator Portman Senator McCain Prepared statements: Senator Johnson Senator Carper	1 2 21 24 27 30 33 47 48					
WITNESS						
General John F. Kelly, USMC (Retired), Former Commander of the United States Southern Command (2012–2016)  Jonathan P. Caulkins, H. Guyford Stever Professor of Operations Research and Public Policy, Heinz College, Carnegie Mellon University  Cheryl G. Healton, Dean, College of Global Public Health, New York University  Tony Sgro, Chief Executive Officer, EdVenture Partners  Robert J. Budsock, President and Chief Executive Officer, Integrity House, Inc.  Alphabetical List of Witnesses	5 7 9 12 14					
Budsock, Robert J: Testimony Prepared statement Caulkins, Jonathan P: Testimony Prepared statement Healton, Cheryl G.: Testimony Prepared statement Kelly, General John F.: Testimony Prepared statement	14 121 7 70 9 93 5					
Soro Tony:						
Testimony	$\begin{array}{c} 12 \\ 105 \end{array}$					
APPENDIX						
Response to post-hearing questions for the Record: Mr. Kelly Mr. Caulkins Ms. Healton Mr. Sgro Mr. Budsock	126 138 146 155 159					

TUESDAY, MAY 17, 2016	Page
Opening statements: Senator Johnson Senator Carper Senator Ayotte Senator Tester Prepared statements: Senator Johnson Senator Carper	253 253 267 272 285 286
WITNESS	
Hon. Michael P. Botticelli, Director, Office of National Drug Control Policy Kana Enomoto, Principal Deputy Administrator, Substance Abuse and Mental Health Services Administration, U.S. Department of Health and Human	255
Services Diana C. Maurer, Director, Homeland Security and Justice, U.S. Government Accountability Office	257 259
ALPHABETICAL LIST OF WITNESSES	
Botticelli, Hon. Michael P.: Testimony Prepared statement	255 288
Enomoto, Kana: Testimony Prepared statement Maurer, Diana C.:	257 298
Testimony	$\frac{259}{308}$
APPENDIX	
Information submitted by Mr. Botticelli Information submitted by Mr. Botticelli Information submitted by Mr. Botticelli Responses to post-hearing questions for the Record Mr. Botticelli	329 330 332 333
Ms. Enomoto Ms. Maurer	$\frac{339}{350}$
WEDNESDAY, JUNE 15, 2016	
Opening statements: Senator Johnson Senator Carper Senator Portman Senator Lankford	355 356 371 375
WITNESS	
D. Scott MacDonald, M.D., Physician Lead, Providence Crosstown Clinic Ethan Nadelmann, Ph.D., Executuve Director, Drug Policy Alliance David W. Murray, Senior Fellow, Hudson Institute Frederick Ryan, Chief of Police, Arlington, Massachusetts	358 360 363 367
ALPHABETICAL LIST OF WITNESSES	
MacDonald, D. Scott, M.D.: Testimony Prepared statement	358 403
Murray, David W.: Testimony Prepared statement Nadelmann Ph.D., Ethan:	363 433
Testimony Prepared statement with attachment	$\frac{360}{410}$

	Page
Ryan, Frederick:	
Testimony	367
Prepared statement	470

#### AMERICA'S INSATIABLE DEMAND FOR DRUGS

#### WEDNESDAY, APRIL 13, 2016

U.S. SENATE,
COMMITTEE ON HOMELAND SECURITY
AND GOVERNMENTAL AFFAIRS,
Washington, DC.

The Committee met, pursuant to notice, at 9:33 a.m., in room 342, Dirksen Senate Office Building, Hon. Ron Johnson, Chairman of the Committee, presiding.

Present: Senators Johnson, McCain, Portman, Ayotte, Ernst, Carper, McCaskill, Tester, Heitkamp, Booker, and Peters.

#### OPENING STATEMENT OF CHAIRMAN JOHNSON

Chairman Johnson. Good morning. This hearing will come to order.

I want to thank all of the witnesses for taking the time, not only to appear here today, but for taking the time to submit what I think are just extremely thoughtful testimonies.

I hate to say this, but I am looking forward to this hearing. It is such a terrible subject. It is such an enormous problem facing this Nation.

I took a swing through Wisconsin in January. We called it a "national security tour." And, I asked every public—local, State, and Federal—public safety official that we talked to, in probably about six different stops, what is the primary problem you are dealing with in your job. And, without exception, it was drugs—drug abuse and drug addiction—not only because of the crime it creates, but also because of the broken lives and the broken families.

Senator Ayotte has been, certainly, a big leader, in terms of highlighting the heroin overdoses, which are prevalent in New Hampshire—but also in Wisconsin. We had a 24-hour period in Milwaukee, Wisconsin, where there were six overdoses. Just in the last couple of years, the overdoses have increased almost fourfold.

I know, Senator McCain—we did a hearing down in Arizona with his Governor—it is an enormous problem as it relates to the border. And, that is kind of the second point of my opening statement here, which, by the way—I have a written statement which, with consent, can be entered for the record.<sup>1</sup>

Senator CARPER. Without objection.

Chairman JOHNSON. This Committee has a mission statement. It is pretty simple: to enhance the economic and national security of America. We established four basic priorities for the issues we are

<sup>&</sup>lt;sup>1</sup>The prepared statement of Senator Johnson appears in the Appendix on page 47.

going to look at: border security, cybersecurity, protecting our crit-

ical infrastructure, and combating Islamic terrorism.

On border security, alone, we have now held 15 hearings to look at the different aspects of it and have published a more than 100-page report on our findings. Among many causes, certainly my conclusion, I think—and a number of Members on this Committee would agree with me—the primary root cause of our unsecure border is America's insatiable demand for drugs, because it has given rise to the drug cartels, who, by and large, control whatever section of the Mexican side of the border they want to control—as General Kelly certainly showed us, in Guatemala, when we were with him—destroying public institutions throughout Central America and in some South American countries.

This is an enormous problem and there are no easy solutions. We have been fighting a war on drugs for many decades, spending more than \$25 billion a year. In testimony, General Barry McCaffrey, in front of this Committee, said that we are only interdicting between 5 and 10 percent of the illegal drugs coming into this

country. We are not winning this war.

So, the good folks, like General Kelly, have been fighting, heroically, the supply side of this equation. But, it is our insatiable demand that also has to be fought. I know Nancy Reagan had her "Just Say No" program—and I know there were mixed results with that. But, the fact of the matter is, we have been extremely effective as the world's leading advertising country. We know how to market. We have reduced tobacco use. We need to put that same type of committed, long-term effort into doing everything we can to reduce our insatiable demand for drugs, because it creates so many problems—so much heartache.

So, again, I just really want to thank the witnesses. I really am looking forward to a really thorough discussion and to laying out the reality. We are going to be talking about different solutions. We are going to be talking about things that are controversial, probably. This is not black and white. We have to have a thorough and honest discussion about this, because we all agree on the end goal. We have to reduce that insatiable demand for drugs.

Ve have to reduce that insatiable demand for drugs.
So, with that, I will turn it over to Senator Carper.

#### OPENING STATEMENT OF SENATOR CARPER<sup>1</sup>

Senator CARPER. Thank you, Mr. Chairman. Thank you so much

for bringing this together.

I want to preface my remarks by just saying that General Kelly is out of uniform for the first time in a long time. We appreciate your service so much. How many years did you serve in all?

General Kelly. Forty-five years and 5 months.

Senator CARPER. Wow. What? Did you start at about 9 years old? [Laughter.]

Thank you for every one of those years.

And, Cheryl, it is just great to see you. Cheryl and I worked together standing up an outfit called the American Legacy Foundation at the—it came out of the State Attorneys Generals' (AGs') efforts—50-State tobacco settlement—and just did great work in de-

<sup>&</sup>lt;sup>1</sup>The prepared statement of Senator Carper appears in the Appendix on page 48.

terring young people from smoking. And, we are very grateful for your efforts there and for all you continue to do. Thank you so much for joining us.

And, all of the rest of the panel as well. Tony, it is very nice to see you again. You can teach us all how to pronounce your last name it is and we will do just fine here. Thank you for joining us.

But, as the Chairman has said, this is a serious matter and we are going to focus on America's devastating addiction to illegal drugs.

I just came back from—last week, in our 2-week recess, I went to China. I had not been there before. I had been to Hong Kong a couple of times, but had never been to China. I learned a lot. They have their problems. They have their share of problems over there, as you know. But, they also do some things pretty well that, maybe, we can learn from. They have, pretty much, intact two-parent families. Drug addiction is not a problem there. Gambling is illegal. They do some things very well and, maybe, there is something that we can learn from what they are doing in this regard. I like to say, "Find out what works, do more of that." Now, I am saying that we should find out what does not work and, maybe, learn from that as well.

But, we look forward to hearing from all of you. This is a difficult issue. It is not only a health emergency in our country and our States, but it is also a—it contributes to the security challenges that a number of our Latin American neighbors continue to face each day. And, those of us who have been down there know exactly what I am talking about. General Kelly has been there with us on several occasions and we are grateful for that.

But, drug abuse—particularly, prescription drug and heroin abuse—has been a growing problem across our country for a number of years now. It has led to tragic consequences, not just for those who are suffering from addiction, but also for their families and for the communities in which they live.

The Centers for Disease Control and Prevention (CDC) notes that, between 2002 and 2012, the rate of heroin-related overdose deaths, nationally, nearly quadrupled. In my home State of Delaware, there were 189 suspected overdose deaths in 2014 alone. That is a little State—189 people. And, around 3,000 adults sought treatment for heroin in our State's primary treatment facilities.

American demand for heroin and other drugs also fuels the violent tactics of the traffickers who move drugs, goods, and people across our borders. American drug demand is also having a dramatic effect on—and a deadly effect in South and Central America. As our Committee has found, much of the corruption and violence in the Northern Triangle—in Guatemala, Honduras, El Salvador, and other parts of Central and South America—are fueled largely by our appetite for illegal drugs. This corruption and violence are major causes of the surge of migration from the Northern Triangle to the United States in recent years, as well as a source of misery to those who do not flee.

I know that General Kelly will speak to the extremely damaging impact our drug use has on our security and the security of our neighbors in the Northern Triangle—not to mention the lives of the users themselves.

Today, we are going to have the opportunity to discuss ways to best address the root causes of our demand for drugs. We will also explore the merits of media campaigns, peer-to-peer (P2P) outreach, and other educational initiatives that are aimed at reducing this demand. I am especially pleased, again, to welcome Cheryl Healton, who has been an instrumental force behind the successful public health initiatives that I mentioned earlier aimed at reducing the use of tobacco—particularly, among young people—and who stood up this foundation, colleagues, in 2001 and went to work on it. If you look at the use of tobacco, among young people, between 2001 and 2010, it is really remarkable what happened—and Cheryl and her team deserve a lot of credit for that. We are going to find out, today, how some of those lessons might be imparted and shared with us, as we face addictions to other kinds of substances.

And, because addiction and substance abuse are medical conditions that can often be treated effectively, we will also discuss the role of prevention and treatment—how they can play an important

role in reducing demand.

In sum, these problems that we are facing are complex and the potential solutions are not easy or quick. We know that. Getting a handle on drug abuse and the tragic problems that stem from it will require an "all hands on deck" effort, if we are to be successful in addressing what drives people to use these harmful substances and to help them overcome their addictions.

Again, my thanks to my Chairman. My thanks to our colleagues, particularly, to all of you. And, thank you to our staffs for bringing us together for this moment. Thank you. Welcome.

Chairman JOHNSON. Thank you, Senator Carper.

It is the tradition of this Committee to swear in witnesses. So, if you will all rise and raise your right hand.

Do you swear the testimony you will give before this Committee will be the truth, the whole truth, and nothing but the truth, so help you. God?

General Kelly, I do.

Mr. Caulkins. I do.

Ms. HEALTON. I do.

Mr. SGRO. I do.

Mr. Budsock. I do.

Chairman JOHNSON. Thank you. Please be seated.

Our first witness is General John F. Kelly. General Kelly served as Commander, United States Southern Command (SOUTHCOM), in Miami, Florida from November 2012 until January 2016. He retired from active duty after 45 years of service to the Nation in the United States Marine Corps (USMC), both as an enlisted infantryman and an infantry officer on February 1, 2016.

General Kelly, again, thank you for your service to this Nation and thank you for being here.

# TESTIMONY OF GENERAL JOHN F. KELLY, USMC (RETIRED), FORMER COMMANDER OF THE UNITED STATES SOUTHERN COMMAND (2012–2016)

General Kelly. Thank you, Mr. Chairman. I would like to start by saying it is a tremendous honor and privilege to be here this morning and to appear before this Committee to talk about this

very vital topic.

I have submitted what I know is a lengthy written statement, but I also know how useful that is to the staff—particularly, to get these kind of insights. And, I will just be brief and sit, because I think the real, probably, nub of this whole thing is the queston and

answer (Q and A) segment.

But, I would just start by saying that, when I first assumed duties in SOUTHCOM, the thing that struck me was the visibility—the very accurate visibility that that organization had then, and has now, on the movement of drugs—cocaine, heroin, methamphetamine (meth) and pharmaceuticals—from along this incredibly complex network through my zone, through the Western Hemisphere, up to the Southwest border, and into the United States. It was very frustrating, because we had such clarity of the movement and we had such good partners working with us—particularly, in Colombia—and I cannot underline that enough. They are heroic in what they do—as are some of the other countries. But, the Colombians have really dedicated themselves to getting at this problem and to helping us—as well as helping themselves.

But, the point is, my Title 10 responsibilities in that role were the detection—we did that, very well—and the monitoring of the movement—we did that extremely well—not interdiction. Interdiction, of course—I was part of the interdiction team, but, tech-

nically, it is a law enforcement event.

But, that said, very early on, I became very frustrated at, really, the lack of assets available to interdict drugs in vast amounts—tons at a time. And, to watch those drugs make it into Central America. Once they get into Mexico, they enter a whole other kind of network that makes it, essentially, a given that these drugs will appear in Boston, Wisconsin, and Idaho—places like that. It is really unstoppable once it gets ashore. All of the drugs that I think you are most concerned with are either trafficked—they are all produced in Latin America—in Central America, and then, of course, they are all trafficked up through to the border.

That same network, though, will carry anything. As I say in my written statement, the people that manage this network do not check the reasons for coming to the United States, do not check bags, and do not test for explosive residue on hands. If you pay the fare, you are in the United States. And, I do not mean the people that kind of rush the border—the Mexicans, as an example—that just come—or the unaccompanied minors that are coming here for economic reasons. These people are coming here for a reason. They are paying a lot of money to get here and they are getting in.

So, from a national security standpoint, as I have said, certainly, in the Senate Armed Services Committee (SASC) and in the House Armed Services Committee (HASC) the 3-years I was in the job in

<sup>&</sup>lt;sup>1</sup>The prepared statement of General Kelly appears in the Appendix on page 50.

SOUTHCOM, I would say that, when there is a major event in the United States—whether it is a biological attack, a dirty bomb, or something like that—when we do the forensics, we will find that those people came here through the network that comes up

through the Southwest border.

But, I will just simply end with the fact that, as I got more and more frustrated not being able to do more and more, I realized that the real problem—and all of the problems in the South—would go away—the network would fall apart, Colombia would not have to fight this fight, and the Hondurans would not be on the edge of the

abyss, if we would get our arms around the drug demand.

And, what I would leave you with—and I give you this example in my written statement—when I was a kid, 70 percent of Americans—according to CDC figures, 70 percent of Americans smoked. As a 9-vear-old, I was sent down to the corner store to buy a pack of cigarettes for my mother and my father. Today, you cannot do any of that. Today, less than 20 percent—according to CDC numbers-smoke. So, we know how to do behavior modification, but we just have not done it. With all of the good things that people have tried to do to combat drugs, there is no comprehensive plan.

And, I do highlight, in my written statement, what the Drug Enforcement Administration (DEA) and the Federal Bureau of Investigation (FBI) have done by producing a very powerful anti-demand program that they are focusing on grammar school kids, middle school kids, and high school—teachers, actually, to try to get them in the fight. And, I have been told many times, "Kelly, this is not your concern. This is a law enforcement concern." OK. But, as I say so frequently, people are not doing it, And, since they are not doing it, the FBI and the DEA—people like that are, in fact, taking this

We know how to do this. I do not know why we do not do it. And, it is just killing Americans at kind of a remarkable rate.

So, I will leave it at that, Mr. Chairman. Thank you very much. Chairman JOHNSON. Well, again, thank you, General Kelly. And, yes, I appreciate—I think most of the witnesses provided pretty robust statements. They will all be entered into the record and I ap-

preciate you keeping it short.

Since you left a minute, I just want to give you the kudos. This hearing is because of you. It was on our helicopter flight to the border between Guatemala and Mexico that you asked me the question, because, again, you are battling the supply. And, you asked me, "Senator, when is the last time America had a concerted, national public relations advertising campaign against the use of drugs?" And, I said, "Well, boy, I remember Nancy Reagan's 'Just Say No' campaign and then a number of years later, I remember that famous egg commercial: 'Here is your brain. Here is your brain on drugs.'" And, you said, "No, that was all part of the same effort. That was back in 1985. That was 30 years ago.

And so, I mean, really, the reason we are doing this is because of that conversation in that helicopter—it was kind of hard to hear some of it, but I really credit you with bringing this, certainly, this

dimension of the problem to the forefront. So, thank you.

Our next witness is Jonathan Caulkins. Mr. Caulkins is the H. Guyford Stever Professor of Operations Research and Public Policy at Carnegie Mellon University's Heinz College and is a member of the National Academy of Engineering. Dr. Caulkins specializes in systems analysis of problems pertaining to drugs, crime, terror, violence, and prevention—work that has won him several awards. Issues surrounding marijuana legalization have been a particular focus of his in recent years. Dr. Caulkins.

# TESTIMONY OF JONATHAN P. CAULKINS,<sup>1</sup> STEVER PROFESSOR OF OPERATIONS RESEARCH AND PUBLIC POLICY, HEINZ COLLEGE, CARNEGIE MELLON UNIVERSITY

Mr. CAULKINS. Thank you. It is a privilege to have the chance

to speak.

You mentioned that, when you were back in your home State, people were listing this as the largest problem. When I was a Doctor of Philosophy (Ph.D.) student in engineering at the Massachusetts Institute of Technology (MIT), in the late 1980s, the reason I chose to dedicate my life to building quantitative models of drug traffickers, markets, and policy is exactly because it was listed, by

the public, as the Nation's biggest problem.

In my written testimony, I tried to, basically, say three things. The first is to agree—yes, the flows are large—and to try to put some numbers to them. There are hundreds of metric tons, per year, of the hard drugs and thousands of metric tons, per year, of marijuana. And, the value, as it crosses the border, is probably over \$10 billion a year. You may have heard that \$100 billion is the dollar value of the U.S. drug market. That is at retail. Most of the price increase happens inside of the country, so the value at the border is lower—but \$10 billion is still a lot of money.

In terms of root causes, I will note that the root cause, at some level, is just because Americans are people. We do consume more illegal drugs than most of our peer countries, but we do not actually consume more intoxicants, in total, in the sense that we consume less alcohol than many of our peer countries do. This use of intoxicants is sort of part and parcel of the human condition.

The main part of the testimony was about the fact that, even if we did everything in the best possible way, in terms of our drug policies and their conventional programmatic levers, that would not eliminate the security hole. The hokey metaphor I used is that it is like we have a two-car garage. Both doors are open right now, so burglars can enter. If we did everything right, we might, at the outside, be able to reduce the flow by half, but that would still leave one door wide open.

I was asked about a couple of particular tactics. Media campaigns to control illegal drugs have not fared well in scientific evaluations. It seems like they ought to work. The people who do them are sincere. But, when evaluated, they do not evaluate well—and

not only here, but also in the international literature.

I was asked about treatment. The academic consensus is absolutely in favor of expanding drug treatment, but, mostly, because of the potential to alleviate the suffering of the people who have dependence problems—not because that would quickly reduce the quantity consumed.

<sup>&</sup>lt;sup>1</sup>The prepared statement of Mr. Caulkins appears in the Appendix on page 70.

It is always important to differentiate between the opioids and everything else. For opioids, there are pharmacotherapies that allow us to substitute a legal opioid for the illegal opioid—and that does help reduce purchases on the illegal market. But, we do not have any such technologies for the stimulants, like crack cocaine and methamphetamine.

I was asked about legalization. It is absolutely true that, if we did legalize, that would essentially solve the border security problem. This is because legal businesses can out-compete illegal businesses when it comes to delivering a legal product. But, we are unlikely to the solution of the solutio

likely to do that for the hard drugs—and for good reason.

Cannabis legalization seems to be the way the country is going. If we eliminated that part of the overall flow of illegal drugs, that would eliminate the majority of the weight, but only the minority of the value—maybe a quarter of the dollar value of the smuggled drugs. The marijuana liberalization we have seen to date is well short of national legalization—although very substantial—and, I think, it is better to understand it as part of a large body of liberalizations that include the medical laws—not just the State legal recreational regimes that started in 2012.

There is no question that the market share of imports in the cannabis market has gone down, but the quantity of cannabis consumed in the United States has doubled. So, the impact of policy liberalization on the flow across the border is a lot smaller than you would think if you look only at the market share. It is a smaller market share of a bigger market. In the long run, if we do proceed with national legalization, that would, presumably, largely

eliminate the marijuana part of the overall drug flow.

The one exception to this fairly pessimistic view of how much the conventional drug policy levers can do is, a very innovative approach called "Swift, Certain, and Fair (SCF)," which uses extremely frequent testing of people under criminal justice supervision, while they are on community release, coupled with certain, but very modest, sanctions. South Dakota's "24/7 Sobriety" program is the classic example. Drug tests are administered literally twice a day. If somebody tests positive, they are instantly placed in jail—but for only 24 hours.

These programs have had stunning success at reducing drug use, but there are real barriers to expanding them. They are a challenge to the conventional approach to treatment because they are not really treatment. They may be hard, perhaps, to do in larger jurisdictions. But, if anything is going to dramatically reduce the use of hard drugs, I think it would be some version of "Swift, Certain, and Fair."

Then, the last point that I try to make is—

Senator McCain. Some version of—

Mr. CAULKINS. "Swift, Certain, and Fair"—is that, in some other respects, there has been the potential to shrink the amount of collateral damage caused by drug markets, even if the volume of drugs in the markets does not go down as much. So, for instance, we can try to reduce the number of drug-related homicides committed in the United States per metric ton of drugs distributed and consumed. I do not know whether or not that principle could be ap-

plied to border security problems, but that possibly seems, to me, to be worth investigating.

Thank you.

Chairman JOHNSON. Thank you, Dr. Caulkins.

Our next witness is Cheryl Healton. Ms. Healton is Dean of the College of Global Public Health (GPH) at New York University (NYU) and Director of the Global Institute of Public Health. Prior to this appointment, Dr. Healton served as President and Chief Executive Officer (CEO) of Legacy, the leading foundation dedicated to tobacco control. During her tenure with the foundation, she guided the highly acclaimed national youth tobacco prevention countermarketing campaign, "Truth," which has been credited, in part, with reducing the prevalence of youth smoking to near record lows. Ms. Healton.

# TESTIMONY OF CHERYL HEALTON,¹ DEAN, COLLEGE OF GLOBAL PUBLIC HEALTH, NEW YORK UNIVERSITY

Ms. Healton. Mr. Chairman and Members of the Committee, I am privileged to appear before you this morning to testify about unmarketing illicit drugs to youth before they start using them as well as how we can work to curb the adult demand for drugs.

My name is Dr. Cheryl Healton and I am Dean of the College of Global Public Health at New York University. Prior to my appointment at NYU, I worked for 14 years at American Legacy, a national 501(c)(3) nonprofit charity with a well-respected history of producing game changing public health initiatives proven to reduce tobacco use. Best known for its bold counter-marketing campaign for youth, "Truth"—now in its 16th year—the campaign has been a major part of a comprehensive, national, State, and local tobacco control strategy. Together, these measures have resulted in remarkable declines in youth tobacco use prevalence rates, from 23 percent in 2000 to below 7 percent today.

percent in 2000 to below 7 percent today.

I have also served on the Board of Directors of the Betty Ford Institute (BFI) and Phoenix House, a large nonprofit drug and alcohol rehabilitation organization.

Using tobacco as a case study today, it is important to understand what it took to prompt dramatic social norm change, which resulted in these shifts in knowledge, beliefs, attitudes, and behaviors. Public health experts know that four factors figure prominently in maintaining dramatic declines in tobacco consumption.

The first factor is bold, highly targeted counter-marketing public education campaigns.

The second factor is ever-increasing excise taxes on products at the State and Federal level to prompt cessation among price-sensitive consumers and to reduce initiation.

The third factor is policy initiatives that restrict access to tobacco, safeguard the public from secondhand smoke, and provide access to cessation services for those addicted to tobacco products.

Cumulatively, these measures combine to change social norms and save lives. Yet, the unspoken fourth leg of this stool is critically important: mustering the political will to enact what we know works—even though it ruffles feathers and annoys special inter-

<sup>&</sup>lt;sup>1</sup>The prepared statement of Ms. Healton appears in the Appendix on page 93.

ests. Public health too often loses out to corporate profit motives and the associated political influence, so we fail to do what we know must be done to achieve the life-extending results we all desire.

While today's discussion focuses on those who peddle illicit drugs to our most vulnerable populations, the business models are not dissimilar. Those who profit from selling drugs to risk-seeking and troubled teens do so to make long-term customers of them. They care more about the lucrative sales than health. They attract young customers when their developing brains are the most vulnerable to risk-taking and addiction. Then, they reap the long-term profits, as

users remain addicted and age.

The United States cannot be safe from drug-related criminal activity without, first, reframing the relationship between drug use and crime and, second, sharply reducing the insatiable appetite for illicit drugs. This can be accomplished through the prevention of youth initiation, deglamorizing use by disruptive and innovative mass media campaigns as well as un-selling use, and inducing those who are addicted—or teetering on the verge of addiction—to seek very prompt treatment. It goes without saying that drug treatment needs to be broadly available and covered by insurance plans.

I have provided the Committee with key studies which demonstrate that well-designed and well-executed, paid mass media campaigns improve health. In the case of the "Truth" campaign, youth social norms and behavior shifted, first in response to a Statewide Florida campaign and, then, a larger, national campaign. In the national campaign, after the first 4 years, 450,000 youths did not initiate—as a direct result of the campaign. In an analysis at 2 years, at least 22 percent of the decline in youth smoking was

directly attributable to the campaign.

Researchers at Johns Hopkins University (JHU) and Columbia University also concluded that, in 2 years, alone, the campaign averted \$1.9 billion to \$5.4 billion in future medical care costs.

These are key lessons for the primary prevention of illicit drug use and should be applied as a basis for a new and improved program at the national level. The same impact on initiation may be achieved by powerfully hard-hitting, youth-focused communications—especially, those designed by and for youth at the highest risk of using drugs. Messages must be targeted to those most likely to initiate drug use and must provide compelling reasons to avoid initiation—including the fact that those profiting from their drug use are using them—even if that person is a low-level dealer they see as their friend or their boyfriend or girlfriend.

The Office of National Drug Control Policy (ONDCP) supported the Partnership for a Drug-Free America's—now called the Partnership for Drug-Free Kids'—paid advertising campaign, which was sharply curtailed after a decade of persistent budget cuts. It is critical to bring it back—but to restructure it, so that it is truly independent of the kinds of oversight that can undermine a public

education campaign's ability to succeed.

This, specifically, means that the creative development must come from paid advertising developed and placed at market rates to ensure that the work is done by the hardest hitting and best paid agency possible—and to ensure it gets the right media placements. Youth market research has to be undertaken to appropriately target the design to subsets of high-risk youth, which will likely result in bold advertisements that are exceptionally unpalatable to adults and government Agency staff. I believe that point is the key reason that the former campaign failed—and it did

We need vigorous, real-time evaluation to decommission advertisements that are not resonating with the intended audiences and to quickly replace them with those that do. This is essential, as ads have possible boomerang effects and it is difficult to predict those in advance.

To effectively reach adults, the approach is similar. But, if we persist in using a moralistic, criminal justice model for those addicted and at risk, we will miss the opportunity to turn the tide on an epidemic that the National Institutes of Health's (NIH's) data suggests we have been achieving some success with—and that must continue.

In closing, there are proven ways to reach these young, impressionable audiences—and adults—with successful messaging. It requires the abandonment of previous, failed policies in favor of game-changing new ones.

Thank you.

Chairman JOHNSON. Thank you, Dr. Healton.

I do want to quickly ask a question, because—as long as you raised it. What is an example of an unpalatable ad?

Ms. HEALTON. Well, I mean, I will use the "Truth" campaign as

an example. Our first advertisement piled 1,200 body bags around a tobacco company in New York City-downtown Manhattan. The first call I got was from the Department of Health, which had received a call from then-Mayor Rudy Giuliani's office asking to pull our ability to execute the advertisement. Luckily, Mayor Giuliani, ultimately, declined that invitation to pull our ability to shoot the advertisement.

And then, we received lots of push-back about the advertisement—including from networks that would not play the advertisement and including networks that actually took our advertisements, before they aired, and sent them to PhilipMorris USA. If they did that for Coca-Cola and Pepsi, they would be in court over it.

Chairman JOHNSON. OK. I did not want to have that moment

pass without getting an example.

Our next witness is Tony Sgro. Mr. Sgro is the Chief Executive Officer of EdVenture Partners (EVP). EVP builds industry-education partnerships with over 800 universities by connecting students, educators, and industry leaders for societal changes and brand building purposes. Mr. Sgro has more than 40 years of experience in marketing, advertising, and promotion. Mr. Sgro.

# TESTIMONY OF TONY SGRO,¹ CHIEF EXECUTIVE OFFICER, EDVENTURE PARTNERS

Mr. SGRO. Chairman Johnson, Ranking Member Carper, and Members of the Senate Homeland Security and Government Affairs Committee (HSGAC), thank you for allowing me the honor of

speaking with you today.

I have been asked to do two things today. First, to introduce you to "Peer-to-Peer: Challenging Extremism (P2P:CE)," a countering violent extremism (CVE) university initiative and competition sponsored by the Department of Homeland Security (DHS), the National Counterterrorism Center (NCTC), the Department of State (DOS), and the technology giant, Facebook. "Peer-to-Peer: CE" is based upon a simple premise. Who better to develop alternative-narratives and counter-narratives to extremist messaging than the very same audience extremists want to recruit? Government has recognized it cannot do it, so it makes perfect sense to enlist techsavvy youth to be part of the solution to push back on hate, terror, and extremism.

The second thing I have been asked to do, after introducing you to "Peer-to-Peer: Challenging Extremism", is to demonstrate how this clay-like model can, similarly, be utilized to push back on drug demand by enlisting the help of street smart digital natives, who can play a role in the substance abuse solution—as they know the drug and social media culture of their communities better than anyone in this room.

Briefly, this is how we make "Peer-to-Peer: Challenging Extremism" work on America's college campuses—and, please, substitute the word "extremism" for the words "drug demand" when I speak,

so you get a sense of the possibilities.

"Peer-to-Peer: Challenging Extremism" challenges a class of university students, over the entire semester, while earning a grade, to develop a social or digital media initiative, product, or tool to counter extremism in their communities. They do robust research, brainstorm extremely creative "Peer-to-Peer: Challenging Extremism" campaigns, and, after they present their campaigns for review, we give the class real money to spend—a \$2,000 budget—and say, "Now, go bring your idea to life. Do not just give us a plan about challenging extremism, go do something." When you give students money to spend to actually do something, it changes the dynamics of learning. And, they absolutely love taking this class and doing something positive in their communities.

The results we have seen, on 98 different universities in over 30 countries, thus far, with "Peer-to-Peer: Challenging Extremism" have been phenomenal. These campaigns are credible, authentic, and believable, because they were created by youth for youth.

Here are two brief examples. At Missouri State University (MSU), the "Peer-to-Peer: Challenging Extremism" class created, amongst other activities, four different oversized, downloadable posters for seventh and eighth graders, educating them about social media safety. They also developed a middle school social media curriculum designed to cover extremist recruitment prevention,

<sup>&</sup>lt;sup>1</sup>The prepared statement of Mr. Sgro appears in the Appendix on page 105.

which the Governor has expressed interest in expanding to middle

schools throughout the State.

Or, at Curtin University in Australia, where students created a mobile application (app) for vulnerable, young Muslims called "52 Jumaa," which means 52 Fridays. The "Peer-to-Peer: Challenging Extremism" program—and the app they created—was so successful, it changed the behaviors and lives of self-proclaimed, at-risk Somali youth in Perth. One student's brother went to Syria and was killed. Another Somali youth's brother was in jail for gang violence. Parents of these troubled, college-age young men thanked our faculty administration profusely for offering "Peer-to-Peer: Challenging Extremism." These kids were on a similar path to destruction and, because of "Peer-to-Peer: Challenging Extremism," they are now looked upon as role models in the Somali community in Perth.

I could share many more stories, but given time limitations, I simply cannot. However, I believe you might recognize the transferability of this peer-to-peer model and can see it adapted to other

social ills, such as tackling America's drug problem.

This is how it could be done. It could use the same peer-to-peer model, where a class forms an agency to address program objectives that read something like this: "You, class, are challenged to create and implement a social or digital media initiative, product, or tool to curb America's insatiable demand for drugs. Your campaign will promote drug awareness, abstinence, intervention, prevention, or whatever you identify, in your communities, that will be most effective in preventing drug demand and substance abuse." We can wordsmith the objectives, but I think you get the idea.

From a how-to perspective, we would invite faculty that teach courses in marketing, advertising, and social media as well as those that teach about youth drug culture, addictive disorders, drugs in society, and narcoterrorism to see how these faculty and

students attack the drug problem.

Additionally, the top teams come to Washington to present and compete in a national face-off competition. The "Peer-to-Peer Substance Abuse Challenge" becomes a national campaign and movement, like it has with "Peer-to-Peer: Challenging Extremism." And, Generation Y and Generation Z are owning this community-based, problem solving approach to push back on substance abuse in their cities and towns.

Finally, let me close with these four short points. First, the peer-to-peer model is scalable. For example, with "P2P: Challenging Extremism," our proof of performance pilot was 20 universities. Today, "Peer-to-Peer: Challenging Extremism" has 55 colleges participating—and, in the fall semester, 150 universities in 50 countries will be unleashing a social media tsunami against the Islamic State of Iraq and Syria (ISIS).

Two, peer-to-peer models can be targeted to reach youth in States where drug demand is growing or already crippling. EdVenture Partners has worked with over 800 rural, suburban, and urban campuses throughout the United States for the last 26 years.

Third, the peer-to-peer model becomes a "Silicon Valley-like" incubator of new, fresh ideas to tackle the drug problem, where the best ones can be grown, scaled, resourced, and pushed out—similar to what we are doing with "P2P: Challenging Extremism."

And, lastly, the P2P model is cheap—dirt cheap in government

dollars—according to the National Counterterrorism Center.

However, I like the way the Committee says it best: "the peer-to-peer model is high impact, low cost, and easy on U.S. taxpayer dollars."

With that said, I would like to thank you for allowing me to share my thoughts about, potentially, using a peer-to-peer strategy to confront America's insatiable demand for drugs.

Chairman Johnson. Thank you, Mr. Sgro.

I do kind of wonder what comes after Generation Z. [Laughter.] Mr. SGRO. We do not know yet.

Chairman JOHNSON. OK.

Our next witness is Robert Budsock. Mr. Budsock is President and CEO of Integrity House, a nonprofit organization that provides a full range of addiction treatment and recovery support for individuals diagnosed with substance use disorders. Mr. Budsock has been with Integrity House since 1984, having started his career in clinical services. Mr. Budsock.

Senator BOOKER. Mr. Chairman, he prefers Bob, please.

Chairman JOHNSON. OK. Bob.

# TESTIMONY OF ROBERT BUDSOCK,¹ PRESIDENT AND CHIEF EXECUTIVE OFFICER, INTEGRITY HOUSE, INC.

Mr. BUDSOCK. Chairman Johnson, Ranking Member Carper, and Members of the Committee, it is an honor to be here today with

you and the other leaders that are testifying.

As Senator Johnson said, I am Robert Budsock. I am the President and CEO of Integrity House, and we are a nonprofit addiction treatment program providing services in the State of New Jersey. Integrity House was founded in 1968 and our mission is to provide comprehensive addiction and recovery support to help individuals reclaim their lives.

Addressing the demand for illegal drugs is one of our Nation's greatest challenges. The consequences of drug use for individuals include: drug dependency and addiction, involvement with the criminal justice system, chronic health issues, overdose, and, in many cases, death.

Many of the challenges faced by this Committee are linked to the demand for drugs. The consequences of the demand for drugs include: drug trafficking and violence, billions of dollars in costs in our criminal justice and public health systems, and compromises to our border security.

Through science and research, we know that drug addiction is a brain disease that can be treated effectively.

I would like to present some facts about the insatiable demand for illegal drugs that we are experiencing in America. Illicit drug use in the United States has been increasing at a frightening rate. The annual National Survey on Drug Use and Health (NSDUH), conducted by the Substance Abuse and Mental Health Services Administration (SAMHSA), estimated that 24.6 million Americans age

<sup>&</sup>lt;sup>1</sup>The prepared statement of Mr. Budsock appears in the Appendix on page 121.

12 and older had used an illicit drug in the past month. That is

9.4 percent of the entire population.

One of the factors that has led us to categorize the current crisis, in the United States, as an epidemic is the huge increase in the number of overdose deaths. Accidental death from the use of drugs recently surpassed motor vehicle accidents as the number one cause of death for young people in our Nation.

cause of death for young people in our Nation.

According to the CDC, in 2014, there were 47,055 overdose deaths and, approximately, 129 Americans, on average, died from an overdose every day. Tragically, overdose deaths are increasing in every State, in rural areas, cities, and suburbs alike—among all

segments of our population.

Drug addiction is a complex disorder that can involve, virtually, every aspect of an individual's ability to function—in the family, at work, and at school. Because of the complexity and pervasive consequences of addiction, treatment, typically, must involve many components. Some of those components focus directly on the individual's drug use. Others, like employment training, focus on restoring the addicted individual to productive membership in the family and in society, enabling him or her to experience the rewards associated with abstinence.

Like other chronic diseases, addiction can be managed successfully. Treatment enables people to counteract addiction's powerful, disruptive effects on the brain and behavior as well as to regain control of their lives. But, the chronic nature of the disease means that relapsing back to drug use is not only possible, but also likely, with symptom reoccurrence rates similar to those for other well-characterized chronic medical diseases—such as diabetes, hypertension, and asthma—that also have psychological and behavioral components

components

Based on scientific research conducted by the National Institute on Drug Abuse (NIDA) over the past 40 years, I would like to highlight five key principles that form the basis of effective treatment. Addiction is a complex—but treatable—disease that affects brain function and behavior. No single treatment is right for everyone. People need to have quick and ready access to treatment. Effective treatment addresses all of the patient's needs—not just his or her drug use. There is a correlation between length of stay and the effectiveness of treatment. Staying in treatment long enough is critical. Short-term programs or interventions are just not effective for everyone.

It has been known for many years that the treatment gap is massive. That means, despite the large and growing number of those who need substance abuse treatment, few receive it. I cannot name another disease or chronic health condition where this is tol-

erated or allowed to perpetuate.

One barrier that I would like to discuss is that, if you get your health insurance through Medicaid—it is barred from paying for community-based residential treatment at a facility of 16 beds or more. This happens under something called the Medicaid Institutions of Mental Diseases (IMDs) exclusion, which originated in the 1960s as part of a national effort to deinstitutionalize large psychiatric hospitals. Though community-based residential treatment programs for substance use disorders did not exist when the IMD

exclusion was established, addiction treatment programs are considered IMDs in the eyes of Medicare and Medicaid—thus disqualifying reimbursement for care at a program like Integrity House and hundreds of other similar programs around the country.

Integrity House is a longtime and active member of Treatment Communities of America, a national association of nonprofit addiction treatment programs, who has advocated for years for expanding access to treatment by eliminating the IMD exclusion.

Thank you.

Chairman JOHNSON. Thank you, Bob.

I realize this hearing is about the insatiable demand for drugs, but, General Kelly, I want to go to you because you have been on the front lines of the war against the supply of drugs. And, I just want to kind of get your input, in terms of where we are on that.

When we were down in Guatemala and Honduras and we talked to, not only you, but also other people on the front lines—people just incredibly dedicated to try and do that work—one of the comments that really stuck in my mind was from somebody, who had been battling this a long time, about how we are really not looking at stopping the flow. We are just talking about redirecting it out of the country they are operating in. I mean, we had the drug flow from Colombia through the Caribbean Islands up into Miami. And, that got redirected through Central America.

So, just kind of speak to that basic dynamic—what we are really dealing with—because, the fact of the matter is, heroin—the cost of heroin in 1981 was over \$3,000 a gram. We are going to do a field hearing outside of Milwaukee on Friday and research for that shows that, in some places in Milwaukee, that is down to \$100 per gram—about \$10 a hit, which is why you are seeing heroin take

the place of opiates, in terms of addiction.

So, just talk about the fact that we are not—well, I do not want to put words in your mouth. Talk about how we are doing with

interdicting the supply.

General Kelly. Thank you, Mr. Chairman. I would just comment that the demand signal, from the United States, has many thousands of very bad people responding to that demand. At the higher levels of the cartels, these guys are international businessmen and they control the network. They control the price. They control the flow—not only up through the Western Hemisphere into our own country, but around the world, frankly—I am speaking right now about cocaine.

Back in the 1980s, when the flow of cocaine and other drugs went up the Caribbean Islands into, primarily, Miami—the old "Cocaine Cowboy" days—the vast majority, as I understand it, of the heroin consumed in the United States—and it was a lot—not as much as today, but a lot—was coming from Asia and, essentially, Afghanistan. That no longer is the case, because, as the cartels saw the increase in demand for that particular drug, they just started to produce it—primarily, today, in Mexico, but also a little bit in Guatemala. They grow the poppies, they have the factories, and they make the heroin that comes in.

For methamphetamines, a lot of legislation and a lot of very good law enforcement activity in the United States shut down the many thousands of small meth labs operating in the United States. And, again, these international businessmen-cartel leaders-saw the demand and, now, most of the methamphetamine consumed in the United States is produced in industrial quantities, in Mexico, using precursors that are now either illegal in the United States-because, again, of what Congress has done—or are very hard to get. They just import it in from China and other parts of Asia.

So, no matter what we do to try to interdict it, it will come, so

long as there is the demand.

Chairman JOHNSON. Talk about the brutality of the cartels, because, when we were down in Central America, you were kind of describing how they are, basically, untouchable because they are so brutal. Central America is battling two things: corruption and impunity. That last one kind of surprised me—impunity. Well, impunity because the drug cartels operate with impunity and then that transfers over to the other parts of society, where you have the extortionists murdering people if they do not get bribes. Just speak to how our insatiable demand for drugs has destroyed—or is destroying—public institutions in Central America.

General Kelly. Well, due to the immense profits that come out of our country and are available to the cartels, to the network of people, and to the criminals, they have an unlimited amount of money to bribe—or an unlimited amount of money to kill. In my opinion, no legislator, prosecutor, police officer, or police chief in his

right mind would do anything to stop the flow of drugs-

Chairman JOHNSON. Because what happens to those individuals who try?

General Kelly. Because they are either—well, the example I would give you-in a Latin American country or a Central American country, when I was talking to a Minister of the Interiorkind of like our AG or FBI Director, he said, "Look, I will not take their money." I think I have told you and Senator Carper this story. "I will not take their money and they know it. And, I will continue to go after them." This was what he said when he first got in office.

But then, he just received a computer disc (CD) in the mail and the first sequence of the CD had his two little girls leaving the house in the morning, bouncing down the street on their way to school. And, the next sequence had him, his wife, and the two little girls on Sunday morning, walking out of the house and going down to Sunday mass. And, there was a third and a fourth. And, as he said, "No way. I will not take their money, but I am not going to go after them." And, that is the intimidation factor.

And, their brutal tactics are as bad as anything ISIS and the rest of the extremists use. They have no laws. They have no regulations. They have no morals. They have no limits to what they will do. And, they hold many of these countries, particularly the Cen-

tral American countries, in really a grip of fear.

Chairman JOHNSON. I often hear—we often hear that taking drugs is a victimless crime. When we were in Guatemala, we did visit a shelter for sex trafficked little girls. And, again, it is the drug cartels that are run by business people and they expand their product lines into human trafficking—sex trafficking. By the way, those little girls were ages 11 to 16. There were also little cribs there, because they become pregnant. I think the average age was 14.

Can you just speak to what these drug cartels—how do they expand their business and really cause the mayhem and the broken lives down in Central America?

General Kelly. Again, think about businessmen. If there is a need and they detect a need, then they will provide the need. Again, when pharmaceuticals were getting more and more expensive—pills were getting more and more expensive in the United States—and, because of legislation and some other factors, pills became very expensive and less available—then the businessmen—the cartel members—went into business and started producing pharmaceuticals. It is the same thing with heroin—we have already talked about that—and methamphetamines. It was good news up here, but so it moved down to Mexico.

But, in terms of other needs, Latin American and Caribbean citizens will tell you—and their law enforcement people—that the movement of guns is, primarily, from our country to the South. And, many of the guns used to commit crimes in Central America, Mexico, and the Caribbean are trafficked, by the same traffickers,

into those places.

Anything that we demand in this country, they will provide. I think the United Nations (U.N.) figures tell us that 18,000 or so young women—mostly adolescents—young girls—are trafficked into our country every year as sex workers. I do not think they know they are coming here to become sex workers, but they come here every year—some little boys, as well, to provide the same services.

So, they will respond to what the demand is. And so, we have to, in all of these cases—in my view—reduce the demand, signifi-

cantly, and keep up the pressure on the networks.

I am told that this network is really mostly about drugs—which it is—and mostly about profit—which it is—and that it is not in the interest of the traffickers to allow other things—like, say, a terrorist—to come into the country. But, I will go back to what I said in my written statement—and I say it all of the time. These people that control the networks do not check passports. They do not check bags. They do not care why you are coming, as long as you can pay the freight. And, you will get in. You will get in. Or, it will get in—depending on what you want to get here.

Chairman JOHNSON. They are some of the most evil people on

the planet.

So, again, I am looking for kind of a one-word answer. As somebody who has been on the front lines for years and in command of others—of heroic efforts to try to win the war on drugs—the supply

side—are we winning that war?

General KELLY. I could give you a one-word answer, but I will give it to you at the end. I would just simply say that we think that an unlimited amount of drugs get into this country—in the hundreds of tons—not even counting marijuana—in the hundreds of tons of cocaine, heroin, and methamphetamines. It gets in, no problem. It gets all the way to Portland, Maine as fast as it gets to San Diego, California.

We know that tens of thousands of people come into this country—I am not talking about people coming for economic reasons

and people seeking a better life—I am talking about sex workers and other people. They get here, no problem.

Millions and millions of items—of counterfeit, industrial-type

items—like electronics—get in.

This very question was posed to me in my last SASC hearing and I gave the same answer. If all of that is getting in, no problem, then I would argue that our border is not secure.

Chairman JOHNSON. Thank you, General Kelly. Senator Carper. Senator CARPER. We are glad you came. You have given us a lot

to chew on and we thank you for that.

I have a couple of aphorisms that these guys and gals, on our Committee, hear me use all of the time. I like to say, "There are no silver bullets—a lot of 'silver BBs." Some of them are better than others and you have mentioned some of those "silver BBs," today.

Oftentimes, I say, "find out what works and do more of that." Several of you have mentioned programs or initiatives that have

worked very well.

I also am a big advocate, as my colleagues know, of root causes—like, do not just address the symptoms of problems. Let us go after the root causes.

And, I got hooked on this, with respect to going to the border. We have all of these tens of thousands of people trying to get into our country, mostly from Honduras, Guatemala, and El Salvador. The flow of people between our country—illegal aliens between our country and Mexico—there are more Mexicans going back into

Mexico, these days, than coming the other way.

So, the folks that are coming here, largely, from these three countries—we call it the Northern Triangle—so my focus has been on determining why their lives are so miserable. What is it about their lives that compels them to try to get here—to risk life and limb to make that 1,500-mile trip to the U.S.-Mexican border to get in. It is the violence, which we are complicit in by virtue of our addiction to these drugs that are trafficked through the Northern Tri-

angle nations.

What I want each of you to do is to, maybe, think out loud for us, maybe, for a minute apiece, about a comprehensive strategy in this country that might be funded to address this problem. And, while you think about it, I will just say that we spend a ton of money on law enforcement—arresting people, prosecuting them, and putting them in jail for drug-related crimes that are committed. We spend a ton of money, in my State and in every State that is represented here—State dollars, local dollars, and Federal dollars—to incarcerate people. And, we spend a ton of money for treatment.

My gut tells me that there is money out there that, if we could just take a fraction—just come up with a fraction of what we are spending in the areas I just described—we could probably fund a pretty darn good comprehensive strategy.

Let me just start with General Kelly. Just take a minute and tell us what could be some of the key elements of a national strategy.

General KELLY. Well, I will start in the North and just simply say that it is all about demand. So, doing whatever it takes to reduce demand to the greatest degree that we can. And then, it is—

coming South—then it is law enforcement and it is the rehabilitation to take care of these sick people—because they are sick people. As you get further South, down into the zone that I used to work in, it is doing better with our partners—because many of our partners are, in fact, willing to do more for us. They just are limited in certain ways. Then, you move a little bit further South into the production zones—same kind of things. Help them get at the poppies, coca, or whatever and work with the partners more and more and more. And, again, they are all good partners—some are better than others in their capabilities.

But, it just came to me that, frankly—I will be a little bit cynical—it just does not seem to me that the country is all that interested in reducing the demand. It is, certainly, not that interested—for a lot of different reasons—in providing the kind of assets to the SOUTHCOM Commander that are needed to interdict. And, I cannot say, by the way, enough good things about the FBI, the DEA, and DHS. They are just the best of the best. They are superb men and women.

But, it is about finances—the amazing amounts of money that have to be laundered out of our country—and the billions and billions and billions and billions of dollars—we think maybe as much as \$100 billion—has to be laundered. So, it has to go into some banking institution. And, we know—I think—where those banking institutions are. It would just be great, in my mind, to just go after those institutions and take that money away, because, if you go to sleep at night as a drug cartel leader with billions of dollars in the bank and you wake up the next morning and it is going—wherever it went, but it is gone—you are not a drug cartel leader anymore. You are a dead man.

So, that is what I would say. It is very comprehensive.

Senator Carper. Great. That is great. Thank you. Jonathan.

Mr. CAULKINS. It is important, whenever we are talking about drugs, to disaggregate marijuana from the hard drugs. Mr. Budsock said 24 or 25 million Americans will self-report having used an illegal drug within the last 30 days. The comparable number for marijuana, alone, is 22 million.

Marijuana is a mass market drug. There are more than half as many Americans who use marijuana, on a daily or near daily basis, as there are Americans who drink alcohol on a daily or near daily basis. Marijuana use is within a factor of two of alcohol, in terms of daily or near daily use.

That is a very different situation than for cocaine, crack, heroin, and meth, where the consumption is enormously concentrated in a very small number of people. Eighty percent of the consumption is accounted for by just 20 percent of the people who use. It is,

maybe, three million people.

The majority of the hard drugs are consumed in the United States. And so, the majority of that flow across the border comes from people who are, literally, under criminal justice supervision, in the sense that they are on probation, on parole, or on pretrial release. If you want to cut the flow of the hard drugs, you have to focus on that very small number of people who are living very chaotic lives and are interacting with the criminal justice system. If

you want to affect marijuana—that is much more of a mass market public health target.

Senator CARPER. Good. Thank you so much. Cheryl.

Ms. HEALTON. I have just a few points. One, I think we need to

decriminalize—which does not mean legalize.

We need to instill the availability for mass treatment, particularly, for the opioid epidemic that we now have, which you will see in my testimony, can be, partially, laid at the feet of the pharmaceutical industry, sadly, because the pricing of these drugs is driving people to street heroin.

And, we need to unsell drug use to both users and non-users—and that, I think, can be done. And, some of the stories that General Kelly told us, I think, are great starting points for motivating people to change their behavior. We consume 40 percent of the world's cocaine and 20 percent of the world's opioids. We are the number one problem in the world, in terms of drug consumption.

And, I would just make one added point to the points that Jonathan Caulkins was making. And, that is that the opioid problem is much more complex, because—it is either 11 or 17 percent—or somewhere in that range—of adolescents who report using pills. And, the modal pill that they are using are opioids—often left over from their last dental visit or the dental visit of a friend. And, that, in turn, leads to a young adult opiate addiction for a substantial proportion of those kids, which, as you can see in the tables that are out there, is producing a very large number of intentional and unintentional deaths. It has now surpassed traffic accidents in the United States, which is a startling statistic. As a 35-year public health professional, if you told me 25 years ago that drug-related deaths could exceed traffic accidents, I would look at you as if you were out of your mind.

Senator CARPER. My time has expired, but, when we have a second round, Mr. Sgro and Mr. Budsock, I am going to come back and ask the same questions of you. But, those are wonderful answers. Thank you so much for giving us those thoughts.

Chairman JOHNSON. Senator Ayotte.

#### OPENING STATEMENT OF SENATOR AYOTTE

Senator Ayotte. I want to thank you, Chairman. And, I want to thank all of you for being here.

General Kelly, I wanted to follow up, because this is a topic that you and I have talked about, in the past, when you were SOUTHCOM Commander. And, one of the things that struck me is that I have been working on the demand side with people, like Senator Portman, and we have worked, for several years, on what is called the Comprehensive Addiction and Recovery Act (CARA) that was passed in the Senate in the last few weeks. And so, it has a prevention piece, a treatment piece, and some support, in terms of the relationship between prescription drugs and heroin.

But, I want to get to this interdiction issue too, because these drug cartels have been particularly clever. They have flooded this market and driven down the price of heroin, going to rural areas in New Hampshire, Ohio, and other places in this country. And so, I actually think that, for the demand side, we have to do all we

can to get at—but we also need to drive the price up on the supply side.

And, when you were SOUTHCOM Commander, I remember you testifying about—and I think your written testimony today reflects that—we see a lot of these drugs coming over, but we are not putting as much teeth into the interdiction piece as we possibly could. In fact, what you said is that the effort to get at our drug demand begins—or should begin—on the cartel's end of the field, with much greater effort. And, the U.S. military is almost absent in the effort, due to an almost total lack of Naval forces.

So, as someone who serves jointly on the Senate Armed Services Committee, I want to know what we can do to help on that end, working with our partners—obviously, Customs and Border Protection (CBP), the Coast Guard, and law enforcement—that could give more assets to what we need to do, while we are working on the demand side—because I think this is an important piece as well.

General Kelly. We need a bigger Navy. That is the answer. I mean, last year in SOUTHCOM-joint effort-and again, law enforcement is as important to me down there—or was as important

to me down there, as Naval forces and the Coast Guard.

But, 70 percent of the 191 metric tons of cocaine that we took out of the flow—and this is in one-ton to two-ton—generally speaking—one-ton to two-ton loads—70 percent would not have been taken had it not been for the occasional Canadian ship that showed up down there—or the Dutch buoy tender, the Coast Guard, or the occasional French or British ship. Seventy percent.

Our Navy is absent for a lot of different reasons. There are a lot of things going on around the world and the Coast Guard Commandant, when he first came in, decided to double the number of

Senator AYOTTE. Right.

General Kelly [continuing]. That is good, but that is only three or four. And, the way to get at this cocaine problem is to get it when it is on the high seas, when it is still moving, and before it makes landfall.

Methamphetamines and heroin produced in Mexico—that does not move through the transit zone, so to speak, so that really does become a question of how closely we can work with the Mexicans to get vast quantities of those drugs. Their best counter-drug organization down there is the Mexican Marines. They do very well. And, there are a lot of reasons for that. But, they do take a lot of drugs in movement.

But, if you are not getting a lot of it to drive up the price—one of the things that I think I learned from the DEA, here on Capitol Hill, to buy an illegal Oxycontin or something like that—Percocet or something like that—a single pill will cost you about \$90. The same amount of heroin to get you to the same place is \$6.

Senator Ayotte. Right.

General Kelly. And, that is why they move to heroin. And, unless you can do something about inhibiting the flow—and I do not believe that is entirely a Southwest border issue. I think it is deep down in Mexico—Sinaloa—places like that. But, again, our drug demands have turned vast amounts of Mexico into insurgent-held if you will—insurgent-held regions that are dominated by the

Joaquín "El Chapo" Guzmans of the world—and not even their army will go in there.

So, the problem is, again, the demand—and, frankly, in my mind—not to criticize countries like Mexico, Honduras, or others for not doing enough—because I spent the last 3 years of my life looking North—not South—and they would tell us, "Look, we are doing the best we can down there. Why do you not get your arms around your demand."

Senator Ayotte. And, that gets me, Dr. Healton, knowing what has happened with the Legacy Foundation and having been an Attorney General, myself, before I served in the Senate—I have two young children. I have an 8-year-old and an 11-year-old. I have to tell you, their attitude toward smoking is totally different than attitudes when I was a kid. They, literally, see someone smoking on the other side of the road—and this is not something they do because their parents have said to do this—they will move to the other side of the road.

And so, the notion that we cannot do an ad campaign that would really focus on this issue—and, especially, I think, focus on the opioid issue, because the national data shows four out of five people start with prescription drugs and then go to heroin. I believe we can do it.

But, something you said is really interesting. And, I think we are trying to support efforts here to get resources toward the prevention piece—and that is this. How do we structure this in a way so that, if we give the Federal resources—along with combining them with State and local—we put it all together and we say, "We are going to go after this and we are going to get this message out." How do we do it in a way so that it is a sufficient body that does not get the sort of bureaucracy stifling response of, "Well, that message is too troubling" or so that, when you have a talented advertising organization that has researched it, collected the data, and then come up with this—and that was what was so effective. I remember seeing the guy on the smoking campaign with the tracheotomy. I mean, you remember that.

But, do you have any thoughts, for us, on how we could structure something that would give sufficient—the Legacy Foundation had its support and independence as a nonprofit that was formed. Obviously, there is an oversight board—many Attorneys General involved—but you had the sufficient authority and flexibility to be able to create a really hard hitting campaign—and that is what we need.

We cannot sugarcoat this with our young people. We cannot sugarcoat this with adults. Otherwise, we are not going to get this message through. And, I have met too many families whose sons, daughters, sisters, brothers, and grandchildren have died—and it is about not sugarcoating what our families are experiencing.

So, how do we do this?

Ms. HEALTON. So, I have two models that I would recommend. One is driven by the Federal Government and one is a more private model driven by the States.

In terms of the one driven by the Federal Government, I would create—I actually think NIDA or SAMHSA would not be a bad

place to rest the bidding. But, I would open it up for a national bid and I would leave it alone once it is won.

What hurt the ONDCP campaign—and I have pored over their results for years and have been very disheartened because they had a fabulous staff—still do—it is now drugfree.org—but they were not allowed to do what was needed to do the job. And, I believe the job can be done. I came to Legacy making the following statement, "I do not think you can advertise your way out of an epidemic"—and I believed it at the time.

And, in fact, I was almost going to stop the national campaign because we were pouring \$100 million of money into it, in the first year, and we did not have any peer-reviewed literature. And, luckily, in February 2000, a paper came out, from Florida, that showed a 40-percent decline in middle school smoking and a 20-percent decline in high school smoking. And then, in good conscience, I could say, "Go ahead. Let it go." Within 6 months, we were in court. We were in court for 7 years and \$17 million worth of litigation fees were was spent trying to shut us down.

So, one thing you need to understand is, when you go after prescription opioids—which are saturating our young people, saturating adults, and producing the resurgent heroin epidemic—you will be going up against the pharmaceutical industry. So, one model is the model I just described.

The second model may be preferable—or, maybe, it is a parallel model. You do something not unlike what Washington State did, in terms of Oxycodone and its effects. You do, basically, a metropolitan statistical area (MSA) focus on the "unintended"—in quotes—consequences of pharmaceutical misadventures in pushing pain analgesics that, in turn, lead to heroin addiction and sow the seeds in our young kids, who just want to get a root canal, where the next thing you know—5 years later—they are a heroin addict. Not a good idea. There are fixes, but it will unleash a storm of unhappiness on the part of the pharmaceutical industry.

Senator Ayotte. Well, I have to share with you—first of all, the storm of unhappiness that we are in right now, with people who are dying and lost—incredible people who had such potential—that is the storm of unhappiness. The other storm—as big as it could be—is minor compared to this storm.

Chairman JOHNSON. Senator Booker.

#### OPENING STATEMENT OF SENATOR BOOKER

Senator BOOKER. Thank you, Mr. Chairman. And, thank you both to the Chairman and Ranking Member for holding such an important hearing.

So, really quickly, just, Bob, can you just hit that point, which is so important, one more time—that we have a law written that restricts funding for multi-bed facilities when, now we know—and I know this from being Mayor of Newark—that the best providers, in my city, who are creating transformative change, taking people from addiction to recovery and from criminality to productivity, are being denied funding. It is such a ridiculous bureaucratic block that is undermining grassroots efforts to meet this crisis. Could you just make it plain one more time, so we have it on the record,

about the idiocy of this bureaucracy-and something that we need

to change, in order to see more progress in communities?

Mr. BUDSOCK. Yes, Senator. So, the IMD exclusion was written into the Medicaid regulations back in the early 1960s. And, the IMD exclusion means that, in treatment facilities, such as Integrity House—and there are many other facilities like Integrity House all across the country—if an individual comes to us and they have Medicaid as their primary health care coverage, they are not eligible to access the full continuum of services that are necessary to treat their disorder. So, they are able to access certain parts of that continuum, but they are not able to access the residential services if the facility has more than 16 beds—and just about 99 percent of the agencies similar to Integrity House, throughout the United States, have facilities that are larger than 16 beds.

Senator BOOKER. So, there are things we can do, right away, that can make a difference with this issue. And, this is one of them that is, to me, frustrating that we have not made an administrative

change to fix.

Just to give a larger perspective, having been—I live in the central ward of Newark, New Jersey. I would imagine that I am one of the Senators that returns to the poorer Census track to live. I live up the street from Integrity House and have been wrestling with the ravages of this reality for my entire professional career, seeing how we, as a society, would much—it seems to me, we are much more willing to pay exorbitant amounts to treat the symptoms of a problem. The law enforcement costs alone are outrageous, in terms of, again, local government, jails, police officers, courts, and prisons. But, that is just one massive cost.

The other massive cost here is hospitals—and what I had to struggle with are the charity care costs for people being brought to the emergency room on a continuous basis. And, the depth—and this is why I appreciated Senator Ayotte's remarks—the depth of this crisis in our country is astonishing—especially when you real-

ize how unique America is as a country.

Not only due to the fact that, every day, 1 out of 10 Americans is breaking U.S. drug law—not to mention the fact that, of the prescription drug consumption—opiate consumption—I thought it was 50 percent. My staff corrected me. It is about 80 percent of the globe's pills that are being consumed by people in this country. The overwhelming majority of that—of people who consume those pills—or people who get addicted to heroin—the gateway drug to them are these pills in which there are—again, we are the mass drivers of that consumption on the planet Earth—not to mention, Doctor, what you were talking about when it comes to heroin and the percentage of this country using it.

But, then, let us even shift to just the antidepressants being consumed on the planet Earth. There is something going on here that we, as a Nation, are devouring drugs—prescription and illegal drugs at rates not seen in humanity—not seen anyplace else on the

planet Earth.

And so, it seems like we are paying for this problem, but we are not doing anything to get to the root cause. And, that is why I am so appreciative of this—is that what is causing us, as a Nation, to turn so dramatically to drugs—legal prescription and illegal drugs?

And, that is what frustrates me, because I am tired of us spending billions and billions of dollars—trillions of dollars, as a country—not dealing with the real root cause of the problem, which is this

insatiable demand for drugs.

And so, I appreciate—we were just talking, when you were giving your testimony, Doctor, about the effectiveness of the tobacco campaign and how it really—as Senator Ayotte said—has changed the consumption patterns in this country. I go to Europe and you now see what America used to look like. So, we have done it there, but we are not even chipping away—it is getting worse in these other areas.

So, I have a minute left. And, maybe, Doctor, I can go with you and then, Bob—just because you are my neighbor and I have to go home—and split that time. Doctor, what is going to get to the root cause of this? Is it just public relations (PR), or is it something even deeper within our society that we have to start having an honest conversation about?

Ms. Healton. That is a very difficult question. Why do we use drugs? Humans have been using mind-altering substances for—Senator Booker. But, Doctor, I am sorry—just to interrupt vol.—

Ms. Healton. Yes.

Senator BOOKER. This is not a human problem. It is an American problem——

Ms. Healton. Yes, it is——

Senator BOOKER [continuing]. Because you do not see this going on—at this rate—in other countries.

Ms. Healton. You are right. So, you could come up with lots of reasons, but the fact is, we have a very substantial profit motive in our country. Capitalism is our system, so people are very enterprising. And, people can create markets. Just like they create markets for the newest T-shirt and the nicest jeans, they can create markets for drugs. And, when you have kids who have time on their hands and are bored, they will turn to that. We do not have the kind of family structure we had in 1950. It is a different world here—the modern world. So, I would say, it is a combination of drivers like boredom and poverty—I mean, if I were to pick two drivers.

Senator BOOKER. Right. And so, Bob, you would say that one thing we need to do is to increase access to treatment. The majority of people we incarcerate—you see this, whether it is Newark—or pick your town—across the country—we are putting people in jail with addictions and we are not treating that. Is that what—so, the root cause that you think some of this is due to?

Mr. BUDSOCK. Yes. Statistics have shown that over 80 percent of individuals that are involved in the criminal justice system have either a drug-related charge or a charge that, actually, was brought upon them as a result of their insatiable demand for illegal drugs.

Do I have a minute to speak?

Senator BOOKER. No. Mr. BUDSOCK. No.

Senator BOOKER. Unfortunately, because I am over my time. And, I just want to say, Chairman, really quickly, there is something missing here. In other words, it cannot just be capitalism, be-

cause there are other capitalist countries. We are different, somehow—and I would love to figure out a way to get to the root answer of that question, because I just do not think—I think that all of these people are doing admirable things to stop it, but there is something that is driving this that is different than in any other country—and we have similar economies, similar democracies, and similar free market systems, but America is unique, globally, in this problem.

Chairman JOHNSON. Well, again, we are trying to get some of these answers. I come from a business standpoint. I could not addict my customers to plastic by giving them a free sample. You can addict a child to drugs—and that is what really drives a lot of

these markets. Senator McCaskill.

#### OPENING STATEMENT OF SENATOR MCCASKILL

Senator McCaskill. Thank you.

In 2010, General Kelly, I chaired a hearing on the Oversight of Government Management Subcommittee, as part of this Committee, on our counter-narcotics efforts in Latin America. At that point in time—I mean, it was difficult for us to get information—and we were, primarily, looking at the billions of dollars in contracts that had been given by the State Department for counternarcotics efforts in Latin America.

Six years ago, we had spent \$7 billion in Latin America over the previous 10 years. And, the vast majority of that was being spent on contractors. Some of them were sole source contractors—Alaska Native corporations—where there did not appear to be a good rationale as to why. I mean, this was the hearing I will remember—never forget, because I discovered that contractors had prepared the people testifying at the hearing for the hearing about contractors—and it was one of those moments that made you think, "Have we gone down the rabbit hole so far that we do not realize how silly this has gotten?"

So, I would like to ask you, as somebody who has been in command of SOUTHCOM, what are the metrics we are using for the massive investment the American taxpayer has made in counternarcotics efforts in South America? And, is it still as dysfunctional as it was in 2010, in terms of the coordination between the State Department contractors, SOUTHCOM, the DEA, and all of the other players in the space?

General Kelly. That is truly a great question. On the issue of money that is managed by the State Department, there is a lot of money managed by the State Department used to get at some of these problems. That money does not really touch me when I——

Senator McCaskill. Should it?

General Kelly. I would tell you, give me that money and I would be able to fix the problem. I think there is—the combination of the U.S. military—and I am not trying to militarize this thing, but there is a military aspect to it—the combination of the U.S. military down in the zone and our law enforcement people—to include the FBI, the DEA, and, frankly, the NSA—they are not law enforcement—but the CIA and all of the alphabet soup that is inside of DHS—phenomenal men and women—and we really do bring that together, regionally—we being SOUTHCOM—through a joint

task force that is in Key West, Florida—a Joint Interagency Task Force (JIATF). It is the model for tactical—or for intelligence fusion around the world. In fact, it was replicated years ago in the fight in Iraq, Afghanistan, and now worldwide against terrorism. It is very effective.

As I mentioned—I think you were gone—but I can see—we can see 10 percent—or 90 percent of the production and the flow, but we could only get at just a small percentage because we do not have end game authority. I did not have end game authority—that is, seizure authority. And, I did not, frankly—even if I had the au-

thority, I did not have the assets.

The countries that produce drugs in Latin America and the Caribbean—well, Latin America—are suffering from our drug demand in a way that is unimaginable in our country. The violence rates are just off of the page. In the United States, the U.N. figures go like this: roughly 5 per 100,000 of our citizens are killed every year. That is how they measure violence. In Latin America—places like Honduras—it is 91 out of 100,000. Colombia is down into the 30s now. They have done that, essentially, by themselves.

But, in the countries that we-this group-this SOUTHCOM group of interagency actors—where they have spent time and effort—Colombia, as an example—things have gotten markedly better. The Colombians, again, have really done it themselves. We have provided encouragement and advice, but no boots on the

ground.

Senator McCaskill. Well, what is the State Department doing? I mean, you were there. You had vision. What is the State Department doing with these billions of dollars?

General Kelly. They—as you have outlined—they invest it in ways that, perhaps, are acceptable to the State Department, but are not getting at-

Senator McCaskill. Like, what are they doing?

General Kelly. Well, I mean-

Senator McCaskill. Like, give me an example of the activities they are paying for with the contractors.

General Kelly. As you point out, they would fund—as an example-counter-drug or counter-gang violence-counter-gang participation by young kids in countries—pick a country—Honduras or somewhere like that.

But, I can remember once sitting and talking to—I would always meet with the human rights groups when I would travel to these countries—which was frequently—and I was sitting there with a very senior person from our country team. And, we were talking about this kind of topic and I said, "Well, how about preventing kids from getting into the gangs," which are really the point of the spear on drug trafficking and all of that—and drug marketing. And, very quickly, the State Department representative said, "We have a very good program for that. In fact, we spend \$10 million a year in this country." And, I said, "Well, how long has this been going on in this country? I mean, how long have we been spending the money?" I was told, "Well, 10 years."

Well, even a Marine infantryman realizes that that is \$100 million. So, I asked a question, "Is the problem of kids going into the gangs-and by extension into the drug trafficking-is it better than it was 10 years ago?

Senator McCaskill. Or worse?

General Kelly. That would, in my mind, make it a good investment. Is it the same? In my mind, that would be a bad investment. That is failure. Or, is it worse? And, he acknowledged, it is geometrically worse.

So, I would just say that the way that we and the interagency the military, certainly—the way we look at solving a problem is that you set up a program and start to pay for it. But, every 6 months or 3 months, whatever—we did this in Iraq and Afghanistan—we do this everywhere—I did it in SOUTHCOM with the monies that I held. Three months later, we look—is it getting worse, better, or is it the same? And then, we make an adjustment.

Senator McCaskill. It is really frustrating. I wish—and I know that the Chairman is on the Senate Foreign Relations Committee (SFRC)—and it is frustrating to me, because I think the State Department means well. It is not that they are not trying to do things. But, these are legacy efforts without real metrics. And, as our Chairman likes to say, metrics matter in business. They ought to matter in government. Metrics matter. And, the idea that we are spending—just in that one example—\$100 million in Honduras on an anti-gang problem and the problem has gotten exponentially worse as opposed to better. Why are we not figuring out a better way-even if it means moving some of that budget over to some of the players in the task force in Key West, Florida.

And, I would like us to continue to follow up on this, because I was stunned at the lack of information that was available and the lack of metrics that were available for \$7 billion in investment and that was 6 years ago. It has probably been another \$7 billion since then, in terms of counter-narcotics in Latin America.

And, before my time is up, I want to just briefly talk to Mr. Budsock. I was, I think, the second prosecutor in the country to aggressively go after a drug court model. And, I got a lot of blowback, politically, from my police department (PD)-from a lot of people—that this was going to be something where we were going to bust down a drug house and then going to give them a bus pass, a job, and a pat on the head. Well, it was a little more complicated than that, but, as you well know—and as anybody who works in this field knows—that drug courts began on the bottom, exponentially grew, and have remained an incredibly effective way to get at the public health issue of drugs and crime.

And, I would like—and maybe, Dr. Healton—one of you to speak to why have we stalled on expanding the drug court model into things like reentry courts. I mean, we take somebody who has been in the drug culture for all of their life, we put them in jail for 18 months, then we give them a bus pass and \$20, and we are shocked that they are back in jail within 6 months. Why are we not making—since we know drug courts are cheap and they work why are we so stubborn about not putting more resources into this model that has worked so well at turning folks around and reduc-

ing the recidivism rate?

Mr. Budsock. Thank you, Senator. I think one of the major success factors for the drug courts, is that they are treating addiction as a chronic disease

Senator McCaskill. Right.

Mr. Budsock [continuing]. Not as an acute illness. So, what happens is that, when an individual enters drug court, they receive a very rigorous schedule, that goes on for a period of anywhere from 3 to 5 years, where they are reporting to the drug court once a week on their progress. They are participating in a treatment program. And, also, their employment is being monitored and they have realistic and achievable goals that they must accomplish to progress throughout the drug court program. And, again, the key is that addiction is being treated as a chronic disorder.

In New Jersey, we have seen an expansion of drug courts, specifically, the criminal justice model. However, there are other areas where drug courts would be effective when it comes to the family. There is one county in New Jersey that has a family drug court and we are hoping to see the expansion of that into other counties. And, anytime that an individual is involved with the criminal justice system, where there is a detection of drug use or drug dependency—the model has proven to be very effective.

Senator McCaskill. Yes. I would just like to see us do it on the back end. So much of it has been focused on the front end-and the

back end is where recidivism occurs so often.

Chairman JOHNSON. Senator—let me—because we are 2 minutes over—but let me just give—there is one metric that we can use. You might have missed it when I first started questioning General

In 1980, in inflation adjusted dollars, the cost of heroin was \$3,260 per gram. I do not know what it is in St. Louis, but, in Milwaukee, it is about \$100 a gram.

Senator McCaskill. Yes.

Chairman JOHNSON. So, we are spending \$25 billion a year to interdict the supply of drugs and you want an indication-you want a metric? Dropping from over \$3,000 per gram to \$100 per

Senator McCaskill. I would like a little more granular-

Chairman JOHNSON. I understand, but that is a pretty effective

Senator McCaskill [continuing]. Have to tell me where-

Chairman JOHNSON. Let us put it this way. We are not winning the war.

Senator McCaskill. Yes.

Chairman Johnson. Senator Portman.

# OPENING STATEMENT OF SENATOR PORTMAN

Senator PORTMAN. Thank you, Mr. Chairman. I really appreciate you and Senator Carper holding the hearing and your focus on this issue—not just with this hearing, but over the last couple of years—realizing that we do have an epidemic on our hands and getting this Committee engaged. In fact, you have allowed us to have a hearing in Ohio on April 22 to examine the impact of opioid addiction—and the epidemic we have in Northern Ohio—and I appreciate that. You guys are focused on the right thing, in my view.

About 22 or 23 years ago, when I was first elected to the U.S. House of Representatives, a young mother came to see me and she wanted to talk about what we were doing on the drug war, as she called it. Her son had just died of heroin—I am sorry, of huffing gasoline, of all things, and smoking marijuana. He just dropped over dead. He was 16 years old. His name was Jeffrey Gardner. I

still have his gold identification (ID) bracelet.

She came to my office and she said, "What are you doing?" And, I was ready for her. It was my first year in Congress. I said, "We are spending \$15 billion a year on interdicting drugs, on eradicating drugs in Colombia, and on prosecutions." She said, "How is that helping me?" I called a meeting of my church. They were in denial. People said, "It does not happen here." I called a meeting of the school. They said, "We cannot get involved because it will hurt our ratings." I called a meeting of our neighbors. Nobody showed up.

And, I was embarrassed not to have a better answer for her and that is what got me involved in this. I was the author of that "drug-free media" campaign in 1998, which had its ups and downs—and we had some real difficulties with it—but the fact is, prevention—and General, you are the one that said it—it is de-

mand.

And, I agree the price of heroin is too low and I agree we should be doing more to deal with that, to stop the Fentanyl from coming in, and so on. But, folks, if we do not get at the demand side, it will be something else next. It was cocaine back in the 1990s. And, I was the author of the Drug-Free Communities Act of 1997, which has now helped spawn 2,000 community coalitions. I started one back home. I chaired it for 9 years. I am still very involved with it. And, we have seen our rates of use by youth going down, Mr. Caulkins—even among marijuana—which is, as you say, the single biggest drug abused.

But, we now have this new epidemic and it has hit us hard. So, I guess my response to the really good question Senator Carper raised is that it has to be comprehensive, but it has to focus on demand also. If it does not, you cannot solve the problem. You cannot build a fence high enough. And, by the way, methamphetamine can be made in a basement and marijuana can be grown here—and it is. And, if it does not come from Mexico, it can come from Afghanistan through Canada—and it does. And, Fentanyl is coming from

China, we are told.

So, I mean, I do not have the answers, clearly, after being at this for more than two decades. But, I do think this CARA is a really good step in the right direction. It focuses on exactly what you all are talking about, today. I know a lot of you have helped us on it and I thank you for that. But, it does focus on prevention and education. It does fund these community coalitions and gets them more involved in the opiate issue, because that is the crisis we face. We almost have to focus on the crisis now, including the treatment and the recovery side of it, because we have so many people who are addicted.

I meet with them almost every week in Ohio. I meet with recovering addicts and I ask the question, frankly, that was asked by Senator Booker—a really good question: why? And, a lot of these kids are suburban kids. So, this notion that it is all inner city it is not anymore. In fact, in terms of our rate of use in Ohio, we think it is biggest per capita in the rural areas—of prescription

drug abuse and heroin addiction.

So, I really think it is the right question. I do not have the answer, but I do think that CARA is a step in the right direction, because it is comprehensive. It is broad. It is about \$80 million. Is that enough? No, there should be more spent, but it is an additional \$80 million, over time, if we can get this done. We passed it in the Senate with a 94 to 1 vote. Do you know what that means? That means that every single Senator sees it back home now—all of them.

And, it is the number one cause of accidental death—and it is destroying families and ripping communities apart. I mean, I talk to my prosecutors back home. They say 80 percent of the crime is now related to opioid addiction. So, it affects every emergency room and

every firehouse.

I have a couple of quick questions. One—and this is to Dr. Healton, again—in terms of a broader media campaign—you have studied this, I know—and, again, the "drug-free media" campaign—we started it in the 1990s. We had the Partnership for a Drug-Free America as our partner—as a private sector partner. We tried to do something unique in government to bring the private sector in—the creative people from Madison Avenue—rather than doing it inhouse. It did not work as well as we intended, in part because government did get involved and it was not the Madison Avenue, private sector, and hard-impact advertisements we tried to get. Plus, we lost the money. I mean, it was hard to keep the money coming.

But, what do you think should be done, in terms of this broader prevention campaign, as an online or a broadcast media effort?

Ms. Healton. Well, the "Truth" campaign at inception came at a time where 90 percent of young people were getting their media through television—

Senator PORTMAN. Yes.

Ms. Healton [continuing]. As did the early days of the ONDCP. It was a little bit easier. It is more complex now, but it is doable. And so—I have made the comments before—I would hand it over with a hands-off approach, because it does get too complicated. When adults get into the approval process, the creativity becomes further and further distant from the target. And, in the case of substance abuse, you are picking the roughly 40 percent of young people who are open to using drugs—illicit or otherwise—and they are an interesting and different subset. You need to design your advertisements, specifically, for them—this is one of the reasons why the advertisements are often very hard-hitting.

Also, you are to be commended for all of the work that you have done. I have been following your career on this issue for decades and thank you for everything you have done. People have to step up to this problem—even though the room is empty and you have been with the problem for a long time.

It is my belief that it is easier to talk young people out of using tobacco than it is to talk young people out of using drugs. Drugs are highly mind altering. They are reinforcing in other ways. Kids

have troubled lives. They turn to drugs to self-medicate. It is a very

complex problem. It is not quite as simple as tobacco.

But, I do think it can be fixed. I think, in the right hands, we can make a huge impact. And, I think we can know, quickly, whether we are making an impact and, if we are not, stop. It is the same reason I said that I almost stopped the "Truth" campaign, because \$100 million is a lot of money to spend without any hard evidence that it is likely to work.

Senator PORTMAN. I really appreciate that answer. And, you are talking about, basically, a request for proposal (RFP), where you put it out and you have a merit-based process, but then, you are

hands off and allow them to do what they do best.

And, by the way, the good news is that we can target people more than before, because every company in the private sector is in marketing and has better—and more—data. In the political realm, we have more data. And, you can use that data to be able to target those kids who are the most vulnerable—who are most susceptible to falling into the grip of addiction. And, that is why I think it is worth doing.

Again, to Senator Carper's question, we still spend a whole lot more on the demand side than on the supply side—I am sorry, on the supply side than on the demand side. And so, you are talking about \$100 million. It is a lot of money. On the other hand, it is relatively small compared to the billions of dollars—probably close to 20 billion now—that you would ascribe to the supply side. Again, I am not saying the law enforcement—and the supply side—is not important. Of course, it is. But, ultimately, you are not going to

solve it until we get at the demand side.

My time has expired. Senator McCain is now here and we can have a chance—he has been a leader on this issue too. But, I just really appreciate the work you guys are doing in the trenches every day and we are very eager to get your perspective—which is more academic, where you can kind of look at what is really working and what is not working. It is like we have a fire, though, right now. We have to put out the fire—and that means better treatment and more treatment options, better recovery—evidence-based—and helping some of these people whose lives are just being destroyed by this grip of addiction—this really difficult grip of opioids—to get back on their feet.

So, thank you all very much and thank you to the Chairman and Ranking Member for holding this hearing.

Chairman JOHNSON. Senator McCain.

### OPENING STATEMENT OF SENATOR MCCAIN

Senator McCain. Both Professor Caulkins and Dean Healton talked about how the "Just Say No" efforts to reduce the use of to-bacco have been very effective. Why do we not do that with drugs?

Mr. CAULKINS. It is really important to split drugs up into their different bins.

Senator McCain. OK. Now we are talking about—

Mr. CAULKINS. Marijuana——

Senator McCain. Well, wait a minute. Let us talk about the major problem right now all over the country, particularly in the Northeast and the Midwest—and that is manufactured heroin.

Mr. CAULKINS. If I might—so, marijuana is sort of similar to alcohol and tobacco in that it is consumed by a lot of people. The prescription opioid abuse crisis is absolutely driven by our policy of making painkillers much more widely available. For the other bin—the heroin, cocaine, and meth bin—it is, perhaps, one percent of the country's population that is completely dominating their consumption and, hence, the cross-border flows.

Senator McCain. That is not—

Mr. CAULKINS. It is hard to reach the one percent with the media—

Senator McCain. That is not the perception of the Governors of these States. In fact, Governors in the Northeast and the Midwest are saying that manufactured heroin has driven the drug overdose deaths up astronomically. Maybe they are using the wrong figures, but I do not think so. Go ahead.

Mr. CAULKINS. No, it is correct that that use has soared, but the consumption is still dominated by the small number of people who use with great frequency. It is only a subset of all people that have used within the last 12 months that are driving most of the use—and this is, actually, true not just of drugs. It would probably be true of plastics too. There are some high-volume consumers. That is a relatively small number of people.

There is definitely an opportunity for a media campaign to change mores and norms around prescription drugs and their derivatives. I think it is a lot harder to do that for the three million or so daily and near daily users of cocaine, crack, meth, and, actually, heroin, who dominate the consumption that drives the cross-border flow of those drugs.

So, I am trying to differentiate marijuana from the prescription drugs and to differentiate the prescription drugs from the classic

hard drugs.

Senator McCain. I am trying to address the issue of what is a, relatively, new threat. And, that is manufactured heroin—manufactured in Mexico, primarily—right, General Kelly?—that is now flooding in the view of every Governor—including the Governors of Wisconsin and Ohio—that is flooding the market—and people who have been using Oxycontin, which is six times more expensive—and other painkiller—are now turning to this manufactured heroin, which has driven up, dramatically, the deaths from manufactured heroin drug overdoses. Now, that may be only one percent. I do not know that. But, I do know that the number of deaths have skyrocketed, which has gotten the attention of every Governor in America.

Go ahead.

Mr. CAULKINS. The question is just—is this the kind of thing that is best addressed with a broad-based media strategy or a different strategy? I absolutely agree it is an extremely important problem. I thought the premise of your question was why we are not addressing it with something more like a "Just Say No" strategy.

Senator McCain. Why are we not addressing it at all? Go ahead, Dr. Healton.

Ms. HEALTON. Well, first of all, I think a lot of the heroin problem that we are now seeing has its roots in moving from pills to cheaper heroin because of market forces.

Senator McCain. And, supply.

Ms. HEALTON. Yes, exactly, and supply, which, of course, helps to lower the price of heroin—as long as it is getting in as readily

But, in France, after they made a drug that is a safe replacement for an opioid widely available, there was a 79 percent reduction in deadly overdoses. So, there is a treatment arm that is urgently needed—and, frankly, it is time to get tough with the pharmaceutical industry. And, I think I did provide the Committee with

some background information

Senator McCain. I agree with that. I agree about getting tough with the pharmaceutical industry. But, the fact is—and I will ask General Kelly—that most of the deaths can be attributed to manufactured heroin that is coming from Mexico. I am no friend of the pharmaceutical industry, but the pharmaceutical industry is not

setting up heroin manufacturing in Mexico. General?

General Kelly. Yes, Senator. As we have discussed—and I stated a couple of times, today—the heroin—virtually all of it—97 percent or more—comes from Mexico—and that is a reaction. It used to come from Afghanistan and the Golden Triangle-Burma. But, these cartels are run by unbelievably good businessmen and they

Senator McCain. Are they getting into this country fairly easily? And, why?

General Kelly. Yes. The estimation is that, to feed our demand, about 45 metric tons of heroin has to get into the market inside of the United States—about 45 metric tons. You would fill this

So, why does it get in so easily? Because the cartels and the network—as we have discussed many times—are so efficient—so good at what they do. It gets in in a relatively small amount—5, 10, or

15 kilos at a time—and then, it gets distributed.

A little earlier today, Senator, we were talking about whether the Southwest border is secure. I would just—as I said last year and the three previous years in your hearings—all of the drugs that the demand requires get in. Thousands and thousands of human beings get in—and all of the rest of it that comes in through the network. So, I would have to say that the border is if not wide open, certainly, open enough to get inside of the country what the demand requires.

Senator McCain. So, we are talking about a demand and we are also talking about a supply. And, could I have a quick recitation

of how you can secure the border?

General Kelly. I do not have a lot of experience on the border, but I would tell you, I think the men and women that are in law enforcement and at DHS and all, they would—and I have visited the border—and what they would argue for are policies—this is them talking—policies that they understand and can execute whether it is about drugs or people—and just more of an effort whether it is technology or other ways—to search more vehicles as they cross.

But, really, at the end of the day—and that is a goal line stand, one day after another. I would argue, in the case of heroin—as you know, Senator, there are parts of Mexico that the Mexican authorities will not go. And, that is where this drug is produced—where the poppies are grown and all of that. And, I would just argue that we need to help the Mexicans help themselves and allow them the training and what not to go into those regions, because it is all—95 percent of it is grown in Mexico—the poppies—and then, turned into either manufactured heroin or real heroin—and then, trafficked into our country. But, it is the demand.

Senator McCain. Mr. Chairman, could I ask your indulgence, maybe, just if there are any comments our other two witnesses would like to make?

Chairman JOHNSON. Sure.

Mr. SGRO. Thank you, Senator. And, I do not claim to have experience with drug demand. However, as a marketing communications professional and having taken on the tough challenge of preventing young people from being recruited by extremists—that is a tough problem as well. And, what we have seen with the "Peerto-Peer: Challenging Extremism" program is that it is a communications issue. It is an awareness issue. It starts with awareness. And, from a marketing function—and Doctor, you will know this—you have awareness, interest, evaluation, trial, and adoption. That is "marketing 101."

We need to have really strong education on top of awareness, because, ultimately, interested people who are curious are going to come down the funnel and we need touchpoints with youth all of the way down the funnel to prevent them from pursuing, trying, and getting addicted to drugs.

Another point—television does not work with Millennials or Generation Z. It is social media driven. One of the key takeaways that we have learned with extremism is that it is who creates the message that delivers the credibility.

Senator McCain. I can assure you that at least the three of us are aware of the habits of Millennials—and our attempts to communicate with them. [Laughter.]

Mr. SGRO. It is almost useless. [Laughter.]

Chairman JOHNSON. If you could stick around for just a couple of minutes, I want to kind of go down the same vein—and, maybe, it can—coming from a marketing background, myself—because I want to ask this question. Why has the advertising campaign against tobacco use been so effective and yet, why did it not work in the war on drugs—and it starts with the percent of the population that we are targeting?

In 1996, youth smoking peaked at 38 percent of the population—38 percent as one percent of the population. Now, it is down to 7 percent. What Dr. Caulkins is talking about is how we are trying to target one percent—the real problem users, in terms of driving all of these problems. So, if you have a broad-based advertising campaign targeted at one percent, it is not going to be as effective as a broad-based advertising campaign targeted at 38 percent.

Plus, the difference in the tobacco advertising campaign, compared to the campaign combatting drugs—tobacco is legal—and so,

you can also increase taxes to reduce the demand. You can restrict access to restrict the demand.

So, there are some key differences between the campaign that has been successful with tobacco and the campaign that—let us face it—has not been successful with drugs. And so, you have to recognize those differences—and as Mr. Sgro was talking about too—realize television advertising is not effective, particularly, when you try and do a broad-based, expensive broadcasting campaign that is trying to target one percent of the population—which is the problem.

I mean—just kind of comment. Is that kind of an accurate evaluation? Dr. Healton.

Ms. Healton. It is 90 percent accurate—

Chairman JOHNSON. OK.

Ms. Healton [continuing]. But, I want to focus on the 10 percent that is not accurate, because I think it is a very important 10 percent. The one percent that Jonathan is describing, that is not the focus of a primary prevention public education campaign. A primary prevention public education campaign is targeting those who have never started.

The "Truth" campaign was not targeting existing smokers. As a matter of fact, existing smokers intensely disliked the "Truth" campaign. They felt put down by it. They, actually, did respond positively to it, in the main, in terms of changing their behavior, but the bulk of the behavior change occurred by people never starting.

And, the goal of a primary prevention education campaign is to stop kids from ever starting. And, you have to—you absolutely must include in this campaign the dangers of using opioid medication—period. The kids directly have to know it, because they are being handed it by doctors in sports medicine clinics, on their college campuses, at their dental offices, and from their friends for a price.

Chairman Johnson. That is my next question, OK. And, by the way, you are exactly right. And, I appreciate you pointing that out.

What is the gateway? We keep hearing that opiate drugs are the gateway for heroin, but what about the marijuana use? We are talking about 22 million Americans, in the last month, using marijuana, as opposed to two million or three million using the heavier drugs. What is the true gateway here?

Mr. BUDSOCK. I can speak to that.

Chairman Johnson. Sure.

Mr. Budsock. Well, the first thing I would like to cover is that I was recently participating in a roundtable discussion with some physicians in the State of New Jersey. They were talking about changing behaviors in emergency room medicine. And, one of the physicians asked if you would give heroin to your 13-year-old daughter. And then, what they did was start to explain that, chemically, a Percocet or an Oxycodone—chemically, they are very similar to heroin.

I actually have my 13-year-old daughter with me here, today. She is a soccer player who has gotten some minor injuries before. But, I would be terrified if a doctor wanted to give my daughter a Percocet for an injury because of what I know—how chemically similar it is to heroin—and also because I know that different peo-

ple—addiction is a brain disease—and everyone's brain is wired a little bit differently.

And, you could go ahead and you could give that Percocet to 10 different people and 10 people may just take it once or twice and be done with it. But, then the 11th person, maybe, their brain is a little different and what happens is that they quickly become addicted and they have that insatiable desire to just have more and more of that drug. Quickly, they cannot get the prescription medicine. So, once they find they get cut off by the doctors, it is very expensive to buy prescriptions on the street. They quickly go to the low-cost heroin.

Chairman JOHNSON. Which, by the way, one of the pieces of legislation we have proposed would make sure the Centers for Medicare and Medicaid Services (CMS) does not penalize providers by asking those survey questions—"how did you think your pain was managed?"—because that is driving some of that, along with the other points you are talking about.

Dr. Healton, you had a comment about this.

Ms. Healton. Well, I would just say that, for about 25 years now, there has been a prevailing theory about nicotine being, actually, a very powerful gateway drug. And, the theory is—Denise Kandel, recently—I guess about 5 years ago—she, her husband, Eric Kandel, and Art Levine wrote a paper reporting on—I would not be a scientist if I did not talk about mice, but a mouse model in which, if you addict mice to nicotine and then challenge them with cocaine, they are much more likely to use the cocaine and to use it at higher levels. And, they proved it, literally, at the molecular level.

It has not been replicated in humans yet, but there is sort of a growing body of evidence that nicotine and alcohol, which are, usually, the first drugs that young people use, are the most popular two drugs—prior to the big decline in tobacco. So, they kind of prime the pump for altered states.

Chairman JOHNSON. I have two other lines of questioning I need to get at. So, we have begun the experimentation with marijuana legalization. I have talked to Chiefs of Police, in Wisconsin, that are involved in national associations and I just asked them, "So, what are you hearing?" And, again, this is just anecdotal, which you always have to be concerned about.

The reaction, to me, has been a disaster from a public safety standpoint. I mean, does anybody want to chime in on—do you know anything about that? I mean, where are we, in terms of the experiment, on a State basis, with the legalization of marijuana? Dr. Healton.

Ms. HEALTON. Well, I think the jury is out—and there are studies that are being done—because, really, in the final analysis, you have to weigh marijuana as a legal drug comapred to what the situation would be like with marijuana as an illegal drug. We have not seen an increase in marijuana use among the teens in the monitoring—

Chairman JOHNSON. Did you say you have not or you have?

Ms. HEALTON. Have not. Chairman JOHNSON. OK.

Ms. HEALTON. It is flat. It is still high. I want to say it is, like, up there in the 30s——

Mr. CAULKINS. Use is up in adults.

Ms. Healton. As I said, I am talking about youth. For youth, it is flat. I would not be surprised if it is up in adults. Sadly—and many people do not want to talk about this—but you could think of drug use as kind of a zero-sum game. People migrate from one to the other. The issue with marijuana is that it is well known—except for synthetic marijuana, which is a separate issue—to be, relatively, safer when compared to other drugs. I think it is socially toxic for young people because of what it does to motivation—a separate issue. But, in terms of whether it is going to kill you, it is hard to find—

Chairman Johnson. What about the potency over the last few decades?

Ms. HEALTON. Maybe you want to speak to it?

Mr. Caulkins. Yes. I can—

Ms. HEALTON. I mean, I could speak to it-

Mr. CAULKINS. To be a little bit self-promotional, my second book on marijuana legalization just came out this month. So, it is always risky to ask me about this because it is exactly where my deepest

expertise lies.

But, yes, potency has increased—that is the short answer. The market is bifurcated, including both commercial-grade and sinsemilla marijuana. The proportion that is the high potency sinsemilla has gone way up and there are also increases in potency within each of those bins. Furthermore, there is an increasing use of extract-based products, like vaping and dabbing, because, now that there is legal production, it is economical to extract tetrahydrocannabinol (THC) from parts of the plant that used to be destroyed.

Chairman Johnson. So, does marijuana move into the very—again, you are bifurcating it, I am not—but does it move into more of a status of like heroin, cocaine, or methamphetamine—

Mr. CAULKINS. No. If anything, it is the opposite. Marijuana use is becoming normalized.

Chairman JOHNSON. I am talking about, in terms of potency and the effect on the human brain and health——

Mr. CAULKINS. Oh, yes. So—really importantly—even very high potency marijuana does not stop your heart or your lungs. It is, behaviorally, a problem. About two to three times as many "past month marijuana users" will self-report that using it causes them problems at work, at school, and with family, as compared to the number of "past-month alcohol users," who will self-report that the alcohol is causing problems in those areas. So, it interferes with life functioning, but it does not kill you the way that heroin and opiates do.

Chairman Johnson. My last line of questioning is—we talk about treatment. First of all, what is the effectiveness of it? I mean, how effective is treating addiction and what is the cost? I will look to Bob.

Mr. BUDSOCK. Yes. So, what we have determined is that—or not we, basically, the field that studies addiction treatment has definitely determined that there is a correlation between the length of

treatment and success. So, for individuals whose addiction is treated like an acute disorder, in other words, they go into a treatment facility for 14 days—for 21 days—and they just get spun out of that facility without any continuing care or aftercare—the rate of those individuals going back to active drug use is very high.

Chairman JOHNSON. Which is what—90 percent? Ninety five per-

cent?

Mr. BUDSOCK. You know what, it is very high. I would say—Chairman JOHNSON. Does anybody have a—

Mr. BUDSOCK. I do not have the statistics in front of me, but it is at a very high rate. But, that also does not mean that it is a complete failure.

Chairman JOHNSON. I understand. When you save one person, that is wonderful.

What about longer-term treatment, then? What is the effectiveness?

Mr. Budsock. So, what has been proven is that, with long-term treatment—when I say long-term treatment, addiction is treated like a chronic disorder—the same way that you would treat diabetes, hypertension, or asthma—what is found is that individuals that have that long-term continuing care have fewer returns to drug use, more stable employment, and more stable family situations—

Chairman Johnson. OK. Well, give me—I want stats. I mean, are we talking—are we 80 percent effective or are we 20 percent effective, even with long-term treatment? Again, I am trying to get to how——

Mr. BUDSOCK. It depends on, specifically, what you are measuring. I could tell you, recently, we had a study at Integrity House. For individuals that completed the residential component—and after they completed the residential component they continued in outpatient treatment and upon discharge from the outpatient treatment—and the outpatient treatment varied in length anywhere from 3 to 12 months—the day that they completed that outpatient treatment—which lasted between 3 and 12 months—95 percent of those individuals were abstinent.

Chairman JOHNSON. And, what does that—

Mr. Budsock. That does not mean—

Chairman JOHNSON. What does that long-term treatment cost,

per person, per year—just a ballpark amount?

Mr. Budsock. Yes. So, it depends on the intensity. The intensive, residential treatment, where individuals are supervised 24 hours a day, is about \$100 a day for treatment. Once the individual completes that intensive residential stay, they move into a less intense level of care and that cost could be—if they come back for outpatient three times a week, it will be approximately \$100 for each day that they come back for treatment.

Chairman JOHNSON. So, on an annual basis, it would be \$36,000, if it was a daily type of thing. Does that comport with what other people—again, I am just trying to get some sort of figure. Dr.

Healton.

Ms. HEALTON. Well, the figures are, generally, correct, but people are not in treatment, generally speaking, for a full year. They may

be in for 30 days—and the insurers are pushing that back like crazy.

There is a very well known paper—I can get it for you—that came out in the New England Journal of Medicine (NEJM) probably 15 years ago that unequivocally concluded that, for drug treatment, more is more. The more treatment that you get, the higher the probability that you will succeed for a longer period of time.

Drug addiction is very similar to high blood pressure. It is not going to disappear. It is just—you are going to keep treating it. And, what you want to do is have the longest periods of sobriety and abstinence that you can get and have the safety net there for the person who slips off.

So, if you have someone who is an addict—whatever they are addicted to—alcohol, pills, or heroin—if, out of 8 years, they can be drug-free for 6 years, that is a success story. And, that is how the field is now viewing success. Drug addiction is a chronic disease.

This is another reason why primary prevention is so cost effective, because, once someone crosses over, they are at risk for drug addiction, in a cycle that simply is without end.

Chairman Johnson. OK. I have gone way too long. Senator Car-

per.

Senator CARPER. Well, as we get close to the end of this hearing, I had high expectations that we were going to learn a lot—this was going to be valuable—more so than even I had hoped—so, we

thank you very much for that.

I had asked a question earlier and General Kelly, Mr. Caulkins, and Dr. Healton took a shot at it. And, that was about helping us put together some of the elements of a comprehensive strategy—and I am convinced that we could save a lot of money here—and treatment is expensive—so are some of the other things we talked about here—that comprehensive advertising campaign would be expensive, but, as I always like to say, "compared to what?" I have a friend. If you ask him how he is doing, he says, "Well, compared to what?" So, compared to what we are already spending, this would probably be—maybe, not a bargain, but, surely, a deep discount.

Mr. Sgro, I want to come back to you and ask you to go back to the question that your three compadres there answered for me earlier. And, I would like for you, and then Mr. Budsock, to take a shot at the same question.

Mr. SGRO. Yes. Thank you, Senator. I made some comments in your absence and I will just kind of stick by those. And, that is that the Millennial-mindset generation and the Generation Z-mindset are very suspicious of top-down, command messaging. And, the ability to have young people be a part of the solution—just given the sheer size of that demographic—is so important, because the ability to impact behavior exists between friends. And, not just—

Senator CARPER. Say that again. The ability to—

Mr. SGRO. To impact behavior exists amongst friends. They are not going to be resentful—nor rebellious—with each other—compared to a top-down command—parents, law enforcement, or whatever it might be.

Senator Carper. OK.

Mr. SGRO. And, I think another really important issue, when it comes to the platform of messaging—there is a difference between what happens in different parts of Los Angeles. Is it Instagram, WhatsApp, or another social media platform that is being used? So, things are changing—we have seen—every 15 weeks on social media—and that is how young people communicate. They may not talk to each other, but they will text each other. So, the platforms are equally as important as what, actually, the message is.

Senator CARPER. Thank you. Mr. Budsock.

Mr. Budsock. Yes, Senator. So, the first thing I would like to talk about is cost—and it is important—we came up with a figure of \$36,000 a year—and that would be somebody that is undergoing intensive services for 12 months. In most cases, those intensive services probably need to be only for the first 6 months. So, it would probably be \$18,000 to treat the individual for the first 6 months and then, that cost would decrease for the continuing care.

The other thing that is important——

Senator Carper. The thought comes to mind—I used to know these numbers better when I was Governor—but we used to say it cost \$20,000 a year to keep an adult incarcerated in the State of Delaware—and, for youths, it was several times that. So, it is not far off of that—it is probably closer to \$25,000, \$30,000, or \$35,000, today, for the incarceration of an adult for a year.

Mr. BUDSOCK. And, I believe the cost—that is a minimal cost. That is probably out in very rural areas, like Wyoming. I know, in New Jersey, it is as expensive as \$60,000 to \$70,000 a year to incarcerate someone—and I believe there is a study that actually has

the exact figures for that.

Senator CARPER. The thought occurs to me—excuse me for interrupting. The thought occurs to me, if you have someone who is incarcerated for a drug-related crime, part of that \$100 a day, if you will, is—if they are incarcerated—for actually doing a good job on treatment while they are incarcerated, you actually save some money.

Mr. Budsock. Yes, absolutely.

Senator Carper. Go ahead. I am sorry to keep interrupting.

Mr. BUDSOCK. Well, the other thing is that there are multiple studies that indicate that, for every dollar invested into treatment, there is a return to the economy anywhere from \$4 to \$7 in associated reduced costs related to crime, inactive workforce, etc. And, if you factor in the cost for health care savings, it could be as big of a return as a \$12 return for every \$1 invested.

And, the other thing is—going back to your earlier question——Senator CARPER. I am going to ask you to wrap it up really quickly, because I have one more question, but just go ahead.

Mr. Budsock. OK.

Senator CARPER. Finish your thought.

Mr. BUDSOCK. I will wrap it up quickly. I am trying to put myself in your seat up there and saying, "OK, what do I need to know to actually make sure that we are reducing demand?"

One piece is prevention—to make sure that we have effective

prevention programs that are teaching kids refusal skills.

The second is to make sure that treatment is available—that individuals who need it have quick and ready access to treatment—

and that there is parity—that addiction treatment is covered in the

same way that a physical illness is covered.

And, the final piece is to repeal the IMD exclusion. I spoke about it earlier. It has been around since 1964 or 1965 and for the current world that we are working in, it is absolutely an unfair barrier for many people.

Senator CARPER. OK. Thank you.

Let me come back to Dr. Caulkins. I think you mentioned—I think it was a South Dakota program earlier, "Swift, Certain, and Fair"—and, I guess, I want to know what possible role would a program like that, which has apparently been successful in one State—what possible role could that play on a broader scale?

Mr. CAULKINS. Sure. "Swift, Certain, and Fair" is the broad concept. "24/7 Sobriety" is the name of the particular program in South Dakota. It has now spread to Montana and North Dakota. Hawaii's Opportunity Probation with Enforcement (HOPE) is a

parallel program.

They have the potential to have a huge impact because of the fact that today's consumption of the hard drugs is concentrated in this, relatively, small number of people. And, these programs have been astonishingly successful at reducing use, even among that difficult population. So, treatment makes people better off and, in the

long run, it may cut down on consumption.

But, "Swift, Certain, and Fair" regimes are a very different paradigm. They just test very frequently—in South Dakota, literally, twice a day—originally, with driving under the influence (DUI) offenders. They are doing that, now, for alcohol and for other substances too. And, the remarkable thing is that an awful lot of people respond when you monitor that closely and there is an immediate sanction—not a severe sanction, but an immediate sanction even if they are dependent and even if they are not in a traditional treatment program.

One idea is that you can use "Swift, Certain, and Fair" as a front end and, maybe, 70 percent of the use can be addressed by this testing with sanctions—which is a little bit like a drug court regime—and then, only the folks who fail "Swift, Certain, and Fair" would get to the conventional treatment. And, that would allow conventional treatment to focus on the smaller subset of people

who do not respond to this incentives-based regime.

Senator CARPER. OK. Alright, Mr. Chairman. I have not used but 32 seconds of my extra time, but could I get another couple of minutes?

Chairman JOHNSON. OK.

Senator Carper. Thank you very much. That is what we call "the Golden Rule.'

Chairman JOHNSON. I do have to move, so-

Senator Carper. Good. If you need to leave, I would be happy to stay. I promise not to get in trouble.

Chairman JOHNSON. I have some questions myself. Senator CARPER. OK. Fair enough.

The other question I have relates to-somebody mentioned this in your comments—the use of other substances—for example, opioids. We are using opioids for pain and that kind of thing. But, there are substances—pharmaceuticals—that can be prescribed that are not addictive. I know we use other substances to treat people who are addicted to different types of drugs. What is the future of that? What is the promise of that particular approach for folks that might be addicted—whether it is to meth, cocaine, or heroin? What can be done? Is there any potential there for success, please?

Mr. Budsock. I can speak, specifically, about opiate addiction. There is research proving that medication-assisted treatment (MAT), such as methadone, Suboxone (buprenorphine and naloxone), and Vivitrol (naltrexone), have all been very effective in helping the individual—giving the individual time for their brain to normalize and also to help them avoid the intense cravings that they are experiencing when they initially put down the heroin.

What is important is that everyone realizes that it is medicationassisted treatment. There is no quick fix. If you just give someone one of these pharmaceuticals, which are approved by the Food and Drug Administration (FDA) and proven to be effective by research, the medication, alone, will not allow the person to actually trans-

form their lives.

Senator CARPER. OK. Thank you.

The last thing I would say—Cheryl, I do not know if you remember, but there was a campaign, in Montana, focused on meth that I think was very successful for a while. Would you mention that?

And, why did it sort of fade away?

Ms. Healton. Well, there was one evaluation of it that was done—that I am aware of—and that did show effectiveness. It was offered to every State in the Union and, in my opinion, the primary reason that there were only a handful of takers is because it fell into that category of being objectionable to adult viewers, in terms of the advertising.

An example—one example was a young man on meth beating his mother up. Now, this, I am sure, came out of research with meth addicted kids-

Senator CARPER. Right.

Ms. HEALTON [continuing]. Some in recovery and some not. They described how they became active in family violence and they thought that depicting that would turn young people away from it. That was more than a lot of States were prepared to air on their

Senator CARPER. OK. Thank you all very much. Chairman JOHNSON. Thank you, Senator Carper.
I did see that General Kelly wanted to get involved—make some

comment on something, so-

General Kelly. Yes. We talked a lot, obviously, about the very important topic of addiction and that kind of thing—which is, to say the least—usually important. I would just make a pitch. There is another aspect to this and that is—and I think it, probably, would lend itself to kind of advertising campaigns or whateverand that is just the casual use—or the recreational use—of drugs, particularly, a drug like cocaine.

People that use cocaine or other drugs, recreationally—that do not get strung out and that do not go down the road of addictionthey ought to know that their casual, fun use on a weekend really does end up resulting in the murder of police officers in Honduras

or in the intimidation of families in Colombia.

And, I think, just appealing to the right side of the American psyche—and that is understanding that it is not the same as having a couple of drinks after work because of the way that it is produced and trafficked into the United States. And, I have to think that that would—if we did educate—whether it is college students, young businessmen, Congressional staffers, or anyone else—that the casual use of these drugs really does result in terrible things down in the production zone and in the transit zone. Thank you.

Senator CARPER. That is a great point. Thank you.

Chairman JOHNSON. And, it was the point that I made earlier. It is not a victimless crime.

So, listen, the beauty of having five people on a panel is that we get a broad spectrum of views and we get some really good input. The unfortunate nature of it is that, for a lot of it, you are sitting there and not being able to answer all of the questions. So, view this hearing as really just one step in a series of hearings, because this is such an enormous problem. You have done a great job of raising our awareness, helping us to understand this a little better. But, it is incredibly complex.

So, again, I just want to thank all of you for your time, your very thoughtful testimonies, and your very thoughtful answers to our questions. This will continue. We are, actually, continuing it, in Wisconsin, on Friday. And, we are going to continue the conversation, more specifically, in terms of the problems in Wisconsin, but

every State in the Union is suffering under this.

So, with that, the hearing record will remain open for 15 days, until April 28, at 5 p.m., for the submission of statements and questions for the record.

This hearing is adjourned.

[Whereupon, at 11:48 a.m., the Committee was adjourned.]

# APPENDIX

Chairman Johnson Opening Statement: "America's Insatiable Demand for Drugs"

Wednesday, April 13, 2016

As submitted for the record:

Over the last 15 months, this committee has spent a great deal of time studying and describing the realities of American border security. The accumulated testimony on the committee's record indicates that America's borders are not secure. It is my conclusion that, among many causes, the root cause of our insecure border is America's insatiable demand for drugs. Today's hearing will further explore this topic.

Drug trafficking is a big business. Mexican transnational criminal organizations, which represent the greatest criminal drug threat in the U.S., generate somewhere between \$19 billion and \$29 billion per year in U.S. drug sales. This is enough to motivate the cartels to find a way, any way, to penetrate our borders. Where fences exist, the cartels dig tunnels under them or fly ultralight aircraft over them. Where there is desert, backpackers carry loads across the border, endangering homes in rural areas along the way. For the most part, the cartels simply drive across the border through legal ports of entry, creatively concealing drugs in tires, batteries, or even jalapeño jars.

Once these drugs cross the border, they are sent to distribution hubs in places such as Phoenix or Chicago. From there, the drugs are disseminated by street gangs into local communities throughout America. No community is left untouched by this sophisticated and fully integrated network. The Drug Enforcement Administration (DEA) testified at our field hearing in New Hampshire last year that "the new face of organized crime in America" is "[1]he growing relationship between Mexican-based drug cartels and domestic street gangs."

We spend approximately \$25 billion per year on our "war on drugs." According to testimony before this committee, we interdict less than 10 percent of illegal drugs coming across our southwest border and somewhere between 11 and 18 percent coming in through our maritime borders. We are losing this war, and the low price of heroin combined with the growing number of heroin overdoses in every corner of America is evidence of that fact.

It is time to seriously reassess our strategies regarding America's insatiable demand for drugs, our war on drugs, and the lack of border security that is one result.

One final note: Last year, when I traveled to Central America with members of this committee, we had the opportunity to visit a shelter for little girls. This home, attempting to stay hidden without an address in Guatemala City, is protecting girls who have been the victims of sexual abuse and sex trafficking—often at the hands of the drug cartels. Central American societies have been ravaged by what too many Americans consider a "victimless" crime, drug abuse. We have seen the victims, and it is high time that we commit ourselves to finding real solutions.

I thank all of our witnesses for appearing today, and I look forward to your testimony.

# Statement of Ranking Member Tom Carper "America's Insatiable Demand for Drugs"

#### Wednesday, April 13, 2016

As prepared for delivery:

Thank you, Mr. Chairman, for calling this hearing today on Americans' devastating addiction to illegal drugs. I look forward to hearing from our witnesses on this difficult issue that has developed into a health emergency in many American communities, while also contributing to the security challenges that a number of our Latin American neighbors continue to face each day.

Drug abuse, particularly prescription drug and heroin abuse, has been a growing problem across our country for many years now. It has led to tragic consequences not just for those who are suffering from addiction, but also for their families and communities. The Centers for Disease Control notes that between 2002 and 2013, the rate of heroin-related overdose deaths nationally nearly quadrupled. In my home state of Delaware, there were 189 suspected overdose deaths in 2014 alone and around 3,000 adults sought treatment for heroin in the state's primary treatment facilities.

American demand for heroin and other drugs also fuels the violent tactics of the traffickers who move drugs, goods, and people across our borders. American drug demand is also having a dramatic and deadly effect in South and Central America. As our Committee has found, so much of the corruption and violence in the Northern Triangle – Guatemala, Honduras, and El Salvador – and in other parts of South and Central America is fueled in large part by America's appetite for illegal drugs. This corruption and violence are a major cause for the surge of migration from the Northern Triangle to the United States in recent years, as well as a source of misery to those who do not flee. I know that General Kelly will speak to the extremely damaging impact our drug use has on our security and the security of our neighbors in the Northern Triangle, not to mention the lives of drug users themselves.

Today, we will have the opportunity to discuss ways to best address the root causes of our demand for drugs. We will also explore the merits of media campaigns, peer to peer outreach and other education initiatives aimed at reducing this demand. I'm pleased that our panel includes Dr. Cheryl Healton, who has been an instrumental force behind successful public health initiatives aimed at reducing the use of tobacco, particularly among young people. Dr. Healton will share with us some of the reasons why the important efforts she's been a part of have been successful, and how we can learn from recent anti-tobacco campaigns to best reach young people who may be using or considering using illegal drugs. And because addiction and substance abuse are medical conditions that can often be treated effectively, we'll also discuss the role prevention and treatment can play in reducing demand.

In sum, these problems that we're facing are complex, and the potential solutions are not quick or easy. We know that. Getting a handle on drug abuse and the tragic problems that stem from it will require an all-hands-on-deck effort if we are to successfully address what drives people to use these harmful substances and to help them overcome their addiction. My thanks again to our

Chairman for holding this hearing and to our witnesses for their contributions and their presence here today. We look forward to working with each of you as we continue to take action to identify and address the root causes of America's demand for illegal drugs.

## STATEMENT OF

# GENERAL JOHN F. KELLY, UNITED STATES MARINE CORPS (Ret)

# FORMER COMBATANT COMMANDER,

UNITED STATES SOUTHERN COMMAND (USSOUTHCOM)

BEFORE THE

SENATE COMMITTEE ON HOMELAND SECURITY AND GOVERNMENTAL

**AFFAIRS** 

13 APRIL 2016

#### Introduction

Chairman Johnson, Ranking Member Carper, and distinguished Members of the

Committee: it is a privilege for me to appear before you today to discuss the effects our country's insatiable demand for drugs has on our border, our neighborhoods and communities, the heroic men and women of law enforcement, and on the individuals and their families devastated by the scourge of illegal drug use. You have also asked for my views as the former commander of

United States Southern Command (USSOUTHCOM) on the Trans-National Criminal

Organizations (TCO) and the illegal networks they manage, and how the production and smuggling of drugs through various countries adversely impacts these societies. Finally, you wanted my thoughts on what Washington—but infinitely more important what we as a society can do to reduce the demand for drugs in the U.S.

To frame my remarks I think it is important for the Committee to know two things about me. First, that until mid-January this year I commanded the men and women of SOUTHCOM one of the six geographical combatant commands. The Area of Responsivity of that Miami based headquarters includes all of the countries and principalities south of the U.S., with the notable exceptions of Mexico, the Bahamas, Puerto Rico and the U.S. Virgin Islands. You can be confident that what I've submitted in my written statement, and my answers to any questions you may ask, will be accurate and the truth as I know it. The responses will not be coming from another recently retired general who is now telling all. I have said all of these things, and made all of these points, endlessly in innumerable official meetings in Washington, Brasilia, Bogota, Lima, Tegucigalpa, Guatemala City, indeed throughout the region, and in all of my open and closed congressional office calls and hearings, and to the press, during my 39 months in command of USSOUTHCOM.

It is very important for you to fully recognize that from this region of the world—our own neighborhood, that effectively 100% of the heroin and cocaine, and perhaps 90% of the methamphetamines that plague our fellow citizens-poor and rich, working class and middle class, black and white—are produced and trafficked. This region, particularly from Mexico, is also the source of enormous quantities of pirated pharmaceuticals. The illicit production and transport of these pharmaceuticals took off as a growth industry for the TCOs beginning not so many years ago when the combination of legislation from this body and the aggressive actions on the part of U.S. law enforcement, particularly the FBI, effectively targeted unprincipled and criminal medical practitioners in the U.S. These individuals in the business of writing illegal prescriptions for extremely addictive and routinely abused painkillers like oxycodone and percocet created an illicit industry likely worthy billions in its heyday. As this illicit trade was increasingly choked off in the U.S. the cartels, international businessmen as they are, recognized the demand and filled the demand including the production, trafficking and distribution into the U.S. Regardless of where they are produced these pharmaceuticals are still relatively expensive and increasingly hard to come by, which then increased the demand for very cheap, very addictive, and readily available heroin. Of course the cartels then responded to this demand and so the business of meeting our drug demands goes on. Simply put, then, Mexico is the source of heroin and meth—and this includes the growing and harvesting of nearly 40,000 acres of poppies (DEA estimates) and the labs to produce industrial quantities of both drugs using precursor chemicals imported in bulk from Asia.

Cocaine bound for the U.S. market, on the other hand, is grown, manufactured and sent north along the network comes primarily from Colombia. Unknown to many, Colombia is our very best ally in the region across a range of regional and international issues, and a country with

whom the U.S. has a decades long and very strong "special relationship" as specifically acknowledged recently by President Obama when introducing Colombian President Santos here in Washington. Colombia does more to help solve our demand problem than do we. For years they have eradicated 40,000 acres of coca annually, destroyed thousands of labs, and just last year seized nearly 200 metric tons of cocaine before it ever left their country. They have done this selflessly and at an incredibly high cost in the blood of their military and police professionals. We have helped them in this decades long effort particularly in the area of information and intelligence sharing, and encouragement. What they have done internally dealing with the terrorist group they have been battling for over 50 years, and in the fight against cocaine trafficking over the last 25 years working with the U.S. as an equal partner under "Plan Columbia," is nothing less than miraculous.

Mr. Chairman I think the Committee knows this, and if it does not it should, Colombia is an exporter of security to the rest of the region. The relationship is a terrific example of how sustained U.S. support based on mutual respect and equal partnership can help a people gain control of their security situation, strengthen government institutions, eradicate corruption, and bolster their economy. As I have mentioned Colombia's turnaround is nothing short of astonishing, and today it is a leader among many strong partners to improve stability in the Western Hemisphere. Mr. Chairman, I am confident you and the Committee know that the United States has a special relationship with only a handful of countries. These relationships are based on a firm foundation of trust and are with nations that value the same things we do—family and opportunity for our children, a free press, democracy and rule of law, safe streets, respect for human rights—and we rely on partnerships with such countries to work with us in

achieving regional stability, countries that we look to for international involvement and leadership, countries that we consider our strongest friends and most steadfast allies.

Colombia unquestionably plays that role in Latin America, but also in parts of Africa, the Middle East, on UN missions and other commitments including dispatching one of their frigates to join the international effort to counter-piracy on the high seas in the vicinity of Somalia and Yemen. Closer to home, and through the "U.S. - Colombia Action Plan on Regional Security," Colombia provides vital assistance to its Central American, Caribbean and Mexican neighbors in the fight against criminal networks. They are vitally important in this endeavor because the U.S. military given all of the demands in other more violent or potentially more violent reaches of the world, is unavailable for this critical duty in the Western Hemisphere. And I want to note here that every aspect of U.S. collaboration under this Plan, including activities conducted by Southern Command, is facilitated through U.S. security assistance and governed by the same U.S. laws and regulations—especially those requiring the human rights vetting of units regulating the activities of our own military personnel. Colombia is also the example to every other nation in the region that stares into the bottomless abyss of failed statehood. Colombia once stared into this same darkness, an abyss due largely to the activities of the region's "narcoterrorist" organizations responding to the demand for drugs in the United States, but they changed everything and won. They changed their laws, their tax code, their business environment, their approach to counterinsurgency and counterterrorism operations, their approach to democracy and human rights-and they won.

The <u>vast majority</u> of the tonnage of all four of these drugs—heroin, meth, cocaine, and pharmaceuticals—are then trafficked by the Trans-National Criminal Organizations via the Central American - Mexican criminal network(s) directly into the U.S. This network-of-

networks, by the way, is generally controlled by the Mexican cartels with many subcontractors interspersed throughout the region and the world for that matter. The enterprise begins in the jungles of Colombia, runs along the Central American transit vector, into Mexico. Once in Mexico so effective are the cartels in taking advantage of the laws, corruption and intimidation, of that country and our own, their illicit cargo—drugs, people or anything else that can pay to ride the network—can already be considered to be in Madison, Wilmington, Phoenix, Columbus, Billings, Cheyenne, Boston, and Manchester. The distribution networks reach deep inside every U.S. city, small town, rural community and neighborhood. The men and women involved in this enterprise are among the most cruel and violent on the planet, are unencumbered by morals, laws or regulations, other than to maximize profits. They do not check passports, inspect bags, conduct body scans, or test for explosive residue. Anything and anybody can travel on this network so long as the price can be met, and, frankly, the fare is very reasonable considering.

As an aside, Peru with whom we have very good relations in the military, law enforcement and political realms, and Bolivia who we do not, are the first and second largest producers of cocaine in the world—which is the big profit maker. The production from these two nations feed the world market carried by equally efficient and violent networks that flow west across the Pacific, and east through Brazil and increasingly through Paraguay, Uruguay and Argentina to Africa, Europe and the Middle East. And with trafficking eventually comes consumption. For example, the U.S. is the #1 consumer of cocaine in the world. Brazil, until a few years ago was not a consumer nation at all, but once the network was established it is only a matter of time until the cartels and network "managers" develop a market until today with Brazil achieving the dubious status of being the #2 consumer in the world. The Paraguayans, the Argentines, indeed any transit country will quickly experience the same phenomenon.

Members of the Committee, much like Colombia was able to accomplish over the last 15 years our friends across the region are committed to winning back their streets, indeed their countries, from criminal gangs and drug traffickers, and doing so while protecting human rights. The Hondurans, Guatemalans, El Salvadorans, Jamaicans, Dominicans, they are all ready and willing to partner with the United States. They are eager for expanded cooperation and increased learning and training opportunities with the U.S. military and law enforcement. But they are very frustrated by what they perceive as the low prioritization of Latin America and the Caribbean on our national security and foreign policy agendas, which is especially puzzling given the shared challenges of transnational organized crime and narco-terrorism. They are also frustrated in the current approach the U.S. is taking towards drugs as we move forward towards outright legalization or de facto legalization by expanding the "medical" use of drugs like marijuana. They also cringe when Americans in any capacity or role make the case that "recreational" use of drugs is "harmless," or that the vast majority of drug dealing on our streets is non-violent. All this, while we continue to encourage and often times criticize our friends to the south for not doing what we think is enough to reduce production, or impede the transport of these killer substances though their national territories to the U.S.

In the world in which they live—the Mexicans, Central Americans, Colombians,

Peruvians, and across the Caribbean including Puerto Rico and Virgin Islands—in their world
there is no such thing as a "non-violent" drug deal as thousands die annually in their countries as
a result of the business of supplying drugs to the American market. Good, decent and honest
police officers and soldiers, judges and prosecutors, legislators and journalists, officials from the
various ministries—and their wives, children, mothers and fathers, their entire families—are
intimidated, corrupted or killed so that Americans can get high on weekends or spend their time

"Chasing the Dragon" of addiction. The word "hypocrisy" often times comes up when one speaks with our friends to the south because we do little, certainly in their view, to reduce the demand.

If it is not obvious as this point, I will cut to the bottom line and tell you that the fundamental factor that drives the entire illicit enterprise is our country's demand for heroin, methamphetamines, cocaine, and opiates in pill form. I do not even include marijuana and the many synthetic offshoots which in and of itself is a major factor in so many social ills. It is in fact a "gateway drug" to more destructive illegal drug use, and its use results in a great many destructive physical effects on the brain, the user's health, and social development. Many hoping to cash in on the emerging commercial enterprise that is legal or medical marijuana work hard to discount or deny these facts, but they are facts. It is at the same time ludicrous and inconceivable to me why with all the Americas already struggling with drug and alcohol addiction that we would make available even more substances to poison the body and confuse the brain. To make the powerful modern-day drug that is marijuana available on demand and compound the problem.

Mr. Chairman, it is a fool's position to think that the tax revenue raised by legal sales will offset the physical and social costs of its use. Indications and warnings are already coming in from those states that have legalized the drug or allowed widespread "medical" use and abuse, but something to consider is what the DEA would tell you and that is for every dollar raised from two drugs already legal—tobacco and alcohol—amounts approaching 23 and 17 dollars respectively are paid out by the already overburdened taxpayer to deal with the effects of these two drugs. If those public officials voting to legalize pot either by outright legalization, or via the dispensing of medical marijuana, were responsible they would most certainly, and

responsibly, consider the additional burden that it will have on the tax payer and add additional tax by say 17x onto the price of the drug at the counter.

Our drug demand, including marijuana, to a large degree has wrought devastating consequences in many of our partner nations, degrading their civilian police and justice systems, corrupting their institutions, and contributing to a breakdown in citizen safety. The tentacles of global networks involved in narcotics and arms trafficking, human smuggling (including the 18,000 young women and boys the UN tells us are smuggled into the U.S. every year to serve as sex slaves), illicit finance, and other types of illegal activity reach across Latin America and the Caribbean and into the United States, yet we continue to almost ignore the threat TCOs present to our homeland and the significant and direct risk to our national security and that of our partner nations. Unless confronted by an immediate, visible, or uncomfortable crisis, our nation's tendency is to take these threats that ride the networks into and through the Western Hemisphere for granted or hope for the best. I believe this is a huge mistake. I believe hope was and is the same approach the Europeans in general, and the French and Belgians specifically, took regarding their borders—and they lost.

In 2014 estimates there were nearly half a million migrants<sup>1</sup> from Central America and Mexico—including over 50,000 unaccompanied children (UAC) and families—were apprehended on our border, many fleeing violence, poverty, and the spreading influence of criminal networks and gangs. Assistant Secretary of State Roberta Jacobson testified that the "UAC migration serves as a warning sign that the serious and longstanding challenges in Central

<sup>&</sup>lt;sup>1</sup> U.S. Customs and Border Patrol, FY 14 Border Security Report. According to the CBP, 239,229 migrants from the Northern Tier countries of Guatemala, Honduras, and El Salvador were apprehended in 2014, representing a 68% increase compared to FY 13, 229,178 migrants from Mexico were apprehended, a 14% decrease.

America are worsening." In my opinion, the relative ease with which human smugglers moved tens of thousands of people along the networks also serves as another warning sign: these smuggling routes are a potential vulnerability to our homeland. As I stated many times in open hearings to the House and Senate defense committees, terrorist organizations could easily leverage those same smuggling routes to move operatives or materiel with intent to cause grave harm to our citizens. Mr. Chairman, Members, addressing the root causes of insecurity and instability is not just in the region's interests, but ours as well. This is why responsible public officials never surrender in the effort to highlight the threat and support the Congress' and administration's commitment to increase assistance to Central America, Colombia and other partners in the region—help which should be viewed as an investment and not foreign aid.

These and other challenges underscore the enduring importance of protecting the southern approaches to the U.S., and this cannot—should not—be attempted as an endless series of "goal-line stands" on the one-foot line at the official ports-of-entry or along the thousands of miles of border between this country and Mexico. The men and women of the Department of Homeland Security and local law enforcement that work that border are highly skilled and incredibly dedicated, but overwhelmed. They are overwhelmed by the efficiency of the network and the funding the cartels have to guarantee their illicit products and people will get through. The effort to get at our drug demand begins, or should begin, on the cartel's end of the field and with a much greater effort. The U.S. military is almost absent in the effort due to an almost total lack of naval forces, although the Commandant of the Coast Guard, Admiral Paul Zukunft USCG, seeing the dire need immediately upon assuming his current duties increased the number

<sup>&</sup>lt;sup>2</sup> Testimony of Roberta Jacobson, Assistant Secretary of State, Bureau of Western Hemisphere Affairs, Before the Subcommittee on Western Hemisphere Affairs, United States House of Representatives, November 18, 2014.

of cutters and personnel committed to the effort. The Coast Guard's cupboard is nearly bare, however, given all the commitments the men and women of that organization are required to address in the waters surrounding the United States with an insufficient number of National Security Cutters and other vessels to do what they need to do globally. Our Coast Guard has more demands on it than it can address, but try they do and they are amazing.

The incredibly strong partnerships I enjoyed as the SOUTHCOM commander with the U.S. interagency—especially with the Department of Homeland Security, the Coast Guard, DEA, FBI, ATF, the intelligence community and the Departments of Treasury and State all fused together by the Joint Inter-Agency Task Force-South (JIATF South) in Key West —were and are fundamental to the efforts to try and safeguard the southern defense of the U.S. homeland from. If you want a report card on how effectively the interagency is accomplishing the mission, how the effort to prevent malign cargo and illegal migrants from entering the country is going, I will let you draw your own conclusions. I will say, however, that even though we are so incredibly fortunate to have willing partners like Colombia, Chile, Brazil, El Salvador, Guatemala, Honduras, and Panama, and remarkable interagency cooperation, it's the demand...it's always about the demand.

## **Domestic Impact**

Americans have been consuming hard drugs in immense quantities certainly since the mid-1960s when the use of drugs became literally cool as projected by Hollywood, social "progressives," and even Harvard professors. Since then it has ebbed and flowed—although mostly flowed—over the years, but regardless of what the immediate use trends were along the timeline it has always been a constant in the inner city and working class neighborhoods of our cities. The epidemic we talk about and are so rightly concerned with today is due in very large

measure because the addiction, and the associated violent crime and deaths due to overdose, are no longer a problem of our minority and working class neighborhoods. The death and crime has exploded into the suburbs. The body count is now conducted on Capitol Hill and in Georgetown, on Beacon Hill and the ivy league and Stanford campuses, and not just in the urban areas of our great cities.

Until the last few years the number of our citizens dying from the use of hard drugs trafficked into the United States from abroad by narco-terrorist transnational criminal syndicates, or acquired through illegal prescriptions, hovered around 40,000 annually. To put it another way since 9/11 when 3,000 were killed by another form of terrorism, over 560,000 have been in my view murdered by narco-terrorists. In the past few years even the outrageous number of 40,000 began to spike until last year the number went beyond 46,000. The DEA tells us that in 2013 there were 8,620 heroin deaths due to overdose. These deaths are increasing everyday across the land but particularly in states in the Middle Atlantic, New England and the Midwest. In fact the Center for Disease Control puts the number at 44 a day or over 16,000 a year. To put a more focused face on this growing tragedy, in 2014 the New Hampshire Office of the Chief Medical Examiner predicted more than 400 deaths from heroin overdoses in 2015 which would have been more than double the amount that small state of only 1.3 million experienced in 2013. He was wrong. It was higher. Senator Ayotte among others in this body has been a champion of raising the awareness of the issue not only in her own state, but nationally, but in my view it has in many ways fallen on deaf ears as solving this problem will be hard, really hard, maybe too hard-but I think it is worth trying.

Other impacts on our society are obvious even to the numb. Law enforcement figures tell us that a very-large percentage of individuals arrested for major crimes—including homicide,

theft and assault—are under the influence of illicit drugs. The same sources tell us that 93% of those abusers believe they do not need help even while they are committing violent crimes or selling their bodies to feed their habits, in and out of rehab, or saved multiple times when they are found in the gutters and "crack houses" by police officers and first responders. Most of these abusers started with the gateway drug that marijuana most certainly is, and even while abusing heroin are also routinely using at least one other drug. And the dollar cost is immense with the estimate at over \$200B to deal with drug abuse; much of it on rehabilitation that most agree is at best marginally effective even over the short term.

# **Security Environment**

As stated in the introduction the end results of decades of rampant demand for drugs in the U.S.—and even if we do not care what it is doing to our own society—has caused the spread of criminal organizations that continue to tear at the social, economic, and security fabric of our Mexican, Latin American and Caribbean neighbors. Powerful and well-resourced, these TCOs traffic in drugs—including cocaine, heroin, marijuana, counterfeit pharmaceuticals, and methamphetamine—but have evolved grown in size and sophistication. They have also broadened the services and products they provide. The cartels and networks now largely control the sale and movement of small arms and explosives, precursor chemicals for use in producing industrial quantities of heroin and meth, illegally mined gold which is unbelievably destructive to fragile environments, counterfeit goods, people, and other contraband. They engage in pervasive money laundering, bribery, intimidation, and assassinations at every level of society from the cop on the street to the president of a country. They threaten the very underpinnings of democracy itself: citizen safety, rule of law, and economic prosperity. They have turned particularly Central America and Mexico into among the most dangerous nations on earth by UN numbers of deaths

per 100,000 citizens. They have had the very same impact on our own Puerto Rico and the Americans who reside there. And these criminal cartels pose a direct threat to the stability of our partners and an insidious risk to the security of our nation. If these groups were motivated politically to destroy these countries and bring down these governments by violence we would label them insurgents and lend appropriate support, as we have in Colombia and Peru, to help them fight the narco-terrorist organizations that are The Shining Path and FARC. But because they are motivated by crime and profit, and not aggressive politics or extremist ideology, and despite the fact that are directly and indirectly killing 40,000+ of our citizens every year, many in our government hide make the case that this is law enforcement as opposed to a military problem. I can assure you it is both and the partner nations at risk have no choice but to re-train their military units for internal police duties.

While there is growing recognition of the danger posed by transnational organized crime, it is often eclipsed by other concerns. Frankly, Mr. Chairman, I believe we are overlooking a significant security threat. Despite the very effective efforts of the men and women of law enforcement, TCOs are constantly adapting their methods for trafficking anything and everything, and anybody, across our border. While there is not yet any indication that the criminal networks involved in human and drug trafficking are interested in supporting the efforts of terrorist groups, these networks could unwittingly right now facilitate the movement of terrorist operatives or weapons of mass destruction toward our borders, potentially undetected and almost completely unrestricted. In addition to thousands of Central Americans fleeing poverty and violence, foreign nationals from countries like Somalia, Bangladesh, Lebanon, and

Pakistan are using the region's human smuggling networks to enter the United States.<sup>3</sup> While many are merely seeking economic opportunity or fleeing a "narco-insurgency" that we have largely created, a subset could potentially be seeking to do us grave harm. Thankfully, we have not observed any hard evidence of this occurring...yet. That said, however, as was the case in Boston, or San Bernardino, or Paris or Brussels—and despite the best efforts of our overworked and underappreciated intelligence professionals most notably the CIA, DIA and NSA, and our embattled law enforcement including the FBI, ATF, CBP and Border Patrol, and the uniformed officers on the street—we often learn that the terrorists are here only when the bomb goes off and the body count has begun. I am deeply concerned, and you should be deeply concerned as our elected leaders, that smuggling networks are a vulnerability that terrorists could seek to exploit. I do not see it as a maybe, but as a when.

You should also be troubled by the financial and operational overlap between criminal and terrorist networks in the region. Although the extent of criminal-terrorist cooperation is unclear, what is clear is that terrorists and militant organizations easily tap into the international illicit marketplace to underwrite their activities and obtain arms and funding to conduct operations. It's easy to see why: illicit trafficking is estimated to be a \$650 billion industry worldwide—larger than the GDP of all but 20 countries in the world—and less than one percent of global illicit financial flows is seized or frozen. It is estimated that the profits from cocaine sales alone in the U.S. go beyond \$80B. Indeed, the biggest problem the narco-terrorists have is not getting drugs into the U.S., but laundering the immense profits from the enterprise. The

<sup>&</sup>lt;sup>3</sup> Texas Department of Public Safety, 2013 Threat Assessment.

<sup>&</sup>lt;sup>4</sup> According to the Drug Enforcement Administration, twenty-two of the fifty-nine Department of State designated Foreign Terrorist Organizations are linked to the global drug trade.

United Nations Office of Drugs and Crime. Estimating Illicit Financial Flows Resulting from Drug Trafficking and Other Transnational Crimes. Geneva, 2011.

terrorist group Lebanese Hezbollah—which has long viewed the region as a potential attack venue against Israeli or other Western targets—has supporters and sympathizers in Lebanese diaspora communities in Latin America, some of whom are involved in lucrative illicit activities like money laundering and trafficking in counterfeit goods and drugs. These clan-based criminal networks exploit corruption and lax law enforcement in places like the Tri-Border Area of Brazil, Paraguay, and Argentina and the Colon Free Trade Zone in Panama and generate revenue, an unknown amount of which is transferred to Lebanese Hezbollah. Unfortunately, our limited intelligence capabilities focused on this accumulation of funding make it difficult to fully assess the amount of terrorist financing generated in Latin America, or understand the scope of possible criminal-terrorist collaboration in this region of immense-illicit funding.

## **Demand Reduction**

As a nation we cannot interdict, or shoot, or convict, or rehabilitate our way out of this hell. It will take all of these approaches and more to solve the problem and significantly reduce drug abuse. If U.S. drug demand is a large part of the problem, then reducing that demand is essential to getting our arms not only around the problems in our own country, but also the problem our demand cause our partner nations and the support it gives to terrorism. Demand reduction is to say the least a multi–faceted challenge. It begins in the coca or poppy fields hundreds of miles south of our border with Colombian soldiers killed by IEDs, and the families of Mexican Marines murdered in retaliation for their efforts in our drug fight. It ends in the U.S. in a rehab clinic somewhere inside our country.

But we know how to do this. We know how to design a campaign to save lives and significantly reduce a social cancer. When I was in grade school the Center for Disease Control

informs us that roughly 70% percent of Americans smoked cigarettes. A pack was maybe .30 cents. At nine or ten years old I would routinely walk down to the corner store and buy a pack of Chesterfields for my mother or Camels for my father. Lung cancer was off the chart. Today the CDC estimates that less than 20% of Americans smoke. This unbelievable behavior modification was accomplished first and foremost by an effective and never ending campaign to make Americans wake up to what smoking does to the body, then by raising the price per pack so that it is out of the reach of most intelligent Americans, insurance premiums went up if you smoked, the legal age to purchase was fixed at 18 and is now going to 21 in many states, and by severely limiting where one can light up and essentially making smokers outcasts. It worked.

We also did it to battle and significantly reduce drinking-and-driving saving hundreds of thousands of lives and significantly reducing serious injury due to automobile accidents. The very same applies to seat belt use. Forty 40 years ago no one "buckled up," today only the most irresponsible among us would even start an automobile without first fastening their kids in, then themselves. The same applies to car seats for infants and small children, helmets for young bikers, and even to reducing littering along our streets and highways. The success of these campaigns was not only law enforcement, although law enforcements and penalties were without question part of the solution. As in the case of auto deaths and injury, the success came as a result of a comprehensive and an unrelenting campaign of educating our citizens across every age group focusing on children and young adults in school, new drivers and their parents, and the older generations who until the campaigns were unleashed in the early 1980s just assumed that the carnage our society was experiencing on the highways was simply the price required of a motorized society. But it wasn't.

elected official in his or her right mind opposed it even with intense lobbying efforts by Detroit first against installing seat belts then over mandatory air bags, and certainly did not try to rationalize the problem away and raise tax revenue from it. Everyone got on board—and it worked. Anyone under the age of say 40 today simply cannot imagine a time when we did things differently, when we did not have seat belts and air bags, but there was a time we did. As with the campaign today to raise awareness of climate change—whether one agrees of disagrees with the cause and effect claims—all are at least fully aware of the issue. Even those who reject the science have reduced their energy consumption and know it is good for the environment. We know how to do this, and it is the only way to not only reduce the cost and misery to our own people, but also to the nations to our south who suffer so from our demand. We will never get to zero, but perhaps we can reduce the abuse of drugs by over 50% as we did with nicotine, and save tens-of-thousands of our citizens as we did when we protected them in their automobiles.

And just as importantly reduce the profits available to the criminal and terrorist networks.

I will close with a few final thoughts. The first is that we must keep the pressure on the cartels and destroy their crops before they are harvested, destroy their production facilities wherever they are, and break up the networks by arrest and prosecution. We must also combine these often times kinetic efforts with locating the financial institutions that knowingly or unknowingly support the financial aspect of drug trafficking—and seize their billions. Second, I want to highlight the efforts of my very good friend Mike Botticelli, the Director of National Drug Control Policy, who quite rightly tells us that with addiction we are really dealing with a disease and we should be focused on saving and rehabilitating those unfortunate to suffer the disease, and not just jailing them even for petty crimes. At the same time we must understand

that the overwhelming number of men and women involved in the production, transport, and distribution of these drugs are in it for the money and must be hunted down. We must also acknowledge that regardless of the disease, if serious crimes are committed we cannot turn a blind eye to the act just because the perpetrator is sick. But even while holding him or her accountable, and while punishing them, we should as a society still try to them well. Thirdly, we must develop a national campaign that appeals to the intelligence, or the good nature, or the love of humanity, or paranoia, or social responsibility, or pocket book, or fear of persecution, or whatever—it does not matter—so long as we have an effective program that significantly reduces demand. There are individual efforts out there in American society but they are uncoordinated and go unheralded. The Boy Scouts, the Young Marine Program, Drug Free America Foundation, and dozens of other efforts in our communities but they are individual points of light when what we need are floodlights.

Of note I want to alert the Committee to a combined effort by the Director of the FBI, Jim Comey, and the DEA Administrator, Chuck Rosenberg. The effort, entitled, "Chasing the Dragon," is one that seeks to distribute a CD and study guide to 100,000 grade school, middle school, and high school teachers "....to reach youth before an addiction can set in." The CD is powerful, horrifying, sad, disgusting, depressing, scary, and designed to get some of the most powerful influencers in our society—teachers—onboard in an effort to ideally prevent, and if not then to reduce drug use where it typically begins. Both organizations are also offering additional resources, experts, speakers, anything to help reduce the demand of drugs and the human tragedy it causes in the lives of millions. I would strongly encourage the Committee to bring in representatives of the two premier drug fighting organizations in the world and get their

perspective on this critically important topic. I would also encourage all to sign onto the FBI website at www.FBI.gov/ChasingtheDragon for additional details and perspective.

You might ask yourself, Mr. Chairman, "why is law enforcement and the U.S. military not only into the business of detecting, monitoring, and interdicting the networks and organizations that carry drugs and so many other illicit cargoes into the United States, but increasingly into drug abuse prevention and demand reduction as well"? Many argue it is not our job, although the nation could take a lesson as to how law and enforcement and the nation's Armed Forces have all but set drug free environments within the two organizations. Is it not prevention and demand reduction the responsibility of our parents? Elected officials? Government health care providers? But I would submit that when the kind of men and women that serve in law enforcement, who see firsthand and everyday what drugs do to our children, our families, our society and to the nation, when these kind of men and women see what it does and that the effort to do something about it is too weak or non-existent—they act. I would agree that it might not be their job, but since no one else seems to be doing it as effectively as it could be done....

#### **Testimony**

of

## Jonathan P. Caulkins

H. Guyford Stever Professor of Operations Research and Public Policy

Carnegie Mellon University's Heinz College

Committee on Homeland Security and Governmental Affairs

Wednesday April 13<sup>th</sup>, 2016

SD-342 Dirksen Senate Office Building

9:30 a.m.

# Assessing Efforts to Reduce the Demand for Imported Illegal Drugs

#### Summary

Violent criminal organizations earn more than \$10 billion per year smuggling thousands of metric tons of illegal drugs across U.S. borders each year. It is reasonable to view this as a security concern in its own right (to the US and also to Mexico, Colombia and Peru), above and beyond the deaths and other harms caused by the domestic distribution and use of those drugs.

Legalization of all drugs would largely solve this problem, but at a potentially very severe cost in terms of increased addiction, death, and disability. Legalizing marijuana could eliminate marijuana's share of the problem, but only that share. It is hard to quantify precisely marijuana's share of the security problems associated with illegal cross-border flows, but it is probably less than one-quarter and is almost certainly more like one-quarter than three-quarters.

A variety of policy reforms short of legalization could reduce the drug flows, but even under the very best of circumstances they would continue on roughly the same scale as today. That is, an optimist might hope that cross-border traffic could eventually be halved even without legalization, but it goes beyond optimism to imagine reduction by a full order of magnitude within a decade, or even two. If one viewed the current situation as like leaving both sides of a two-car garage open to thieves, the best we could hope for via better implementation of conventional drug policy levers is to close one of the two doors.

When it comes to shrinking consumption of illegal drugs, there is not much low-hanging fruit that hasn't been tried. Media-based prevention campaigns in particular have not demonstrated much efficacy. Some other forms of prevention are viewed as cost-effective, but mostly because they are cheap, not because they are highly effective in an absolute sense. The research community is generally supportive of expanding treatment, but it is important to recognize that the "technology" of treatment is much stronger for heroin and other opiates than it is for stimulants such as methamphetamine and cocaine (including crack). And even for opiates, treatment is better thought of as a way of easing the suffering of the person who is dependent than as a "cure" that eliminates their demand.

There is one innovative strategy—called "swift, certain and fair" monitoring and punishment of users under criminal supervision—that has the potential to make a decisive difference if all the stars align. Early evaluations have produced some startlingly large reductions in rates of testing positive, but widespread implementation would require a very large change in organizational culture and practice.

The inability to solve the border security situation by shrinking demand raises the question of whether and how the magnitude of the security risk might be minimized even as drugs continue to be smuggled across the border in significant volumes. That question is sensible because there is no necessary relationship between the amount of smuggling and the security harm created. Indeed, most drug smugglers are in it just for the money; they harbor no particular animus toward the United States. If law enforcement could engineer an environment within which the most damaging smuggling methods are the least profitable, and the profitmaximizing smuggling strategies are relatively benign, then greed and competitive pressures might mold the smuggling "industry" into practices that are less bad from a security perspective.

I do not know whether that principle can usefully be operationalized. Principles that are appealing in the abstract often stumble when confronted by practical realities. Even talking frankly about the trade-offs inherent in such a "realpolitik" approach might be awkward. But my certainty that U.S. demand for imported illegal drugs will not disappear any time soon leaves me curious about exploring those possibilities.

The remainder of this document expands on these themes. Because the scope of the topic is so broad, for various matters I give just quick capsule summaries and references to articles in which I have discussed that issue in greater detail.

## I. Different drugs present different challenges

As Peter Reuter and I wrote in earlier Congressional testimony: 1 "To understand almost anything about the effectiveness of US drug policy it is first essential to distinguish between four categories of illegal drugs: (1) diverted pharmaceuticals, (2) all the minor illegal drugs (PCP, GHB, LSD, etc.): (3) the major "expensive" illegal drugs (cocaine/crack, heroin, and meth(amphetamine), and (4) cannabis."

The minor illegal drugs are not so important for present purposes. The scale of their markets is relatively small, some of the production happens within U.S. borders, and the importation is not, as far as I know, any more serious a threat, dollar for dollar, than is the more lucrative importation of the major drugs.

Diverted pharmaceuticals – primarily opiate pain relievers – kill an astonishingly large number of Americans every year. This problem is now belatedly getting considerable attention, though it is unclear what took so long. CDC reports that between 1999 and 2014, an astounding 165,000 Americans died from overdoses related to prescription opioids alone – far more than died in the Korean and Vietnam wars combined.<sup>2</sup>

Nevertheless, that ongoing catastrophe has little direct bearing on border security. Pharmaceuticals are diverted into non-medical use primarily within U.S. borders, so that diversion is not a threat to U.S. border security.

There may be an important indirect effect, however. For various reasons, many people who would not have proceeded directly to heroin use become dependent on prescription opioids, and then subsequently switch to heroin.<sup>3</sup> That may sound like a leap, but in terms of chemistry and psychoactive effects, all of the opioids – including both pharmaceutical companies' medical products and street heroin – are close cousins.

It is an active topic of research today trying to sort out, how much of the recent very large increase in heroin overdoses can be blamed on: (1) past failures to adequately monitor and circumvent diversion of prescription opioids, (2) recent successes – in some states – to clamp

<sup>&</sup>lt;sup>1</sup> Reuter, Peter, and Jonathan P. Caulkins 2009. "An Assessment of Drug Incarceration and Foreign Interventions." May 19<sup>th</sup> testimony to the Domestic Policy Subcommittee of the Oversight and Government Reform Committee.
<sup>2</sup> http://www.cdc.gov/drugoverdose/data/overdose.html.

<sup>&</sup>lt;sup>3</sup> Mars, S. G., Bourgois, P., Karandinos, G., Montero, F., & Ciccarone, D. (2014). "Every 'never' I ever said came true": Transitions from opioid pills to heroin injecting. *International Journal of Drug Policy*, 25(2), 257-266.

down at least partially on that diversion, including by making the pills harder to grind up and inject, and/or (3) expansions in Mexico's heroin production that might have occurred anyhow. As far as I can tell, we do not yet know the answer and may never fully resolve the matter. For this sort of question, it is hard for scientists to construct counterfactuals describing what would have happened under alternate scenarios.

For present purposes, the simple fact is that the large pool of people who have now become addicted to prescription pain killers makes it all the more difficult to imagine large reductions in U.S. demand for heroin in the coming years.

In sum, neither the minor drugs nor diverted prescription pharmaceuticals are the (direct) source of large cross-border drug flows. The primary concern for border security is the traditional "big four" illegal drugs: cocaine (including crack), heroin, meth, and marijuana.

#### II. The scale of the problem

It is understandable to want to know the volume of illegal drugs flowing into the United States each year, and it is also understandable why the best estimates available are both highly imprecise and potentially inaccurate. For obvious reasons, drug traffickers do not report their activities to official agencies.

Therefore, all numbers discussed in this section should be understood as good faith estimates of quantities that are very difficult to estimate. They could easily be off by a factor of two. That is, when I say that we think that (illegal) retail sales of cocaine in the U.S. are in the neighborhood of \$25 - \$30 billion per year, and that the value of that cocaine at the time it crosses the U.S. border is perhaps one-seventh its value at retail, 4 so roughly \$4 - \$5B per year, it is entirely possible that the value of cocaine crossing the border could be as low as \$2B - \$2.5B per year or as great as \$8B - \$10B per year.<sup>5</sup> Furthermore, there is even greater uncertainty concerning what proportion of the revenues earned within the U.S. by moving the cocaine from the import level down to the street represent profits earned by the same "organizations" that

<sup>&</sup>lt;sup>4</sup> E.g., an import price of \$17,000 per kilogram that is 82% pure vs. a retail price of \$145 per pure gram gives a 1 to

<sup>7</sup> ratio.

Note: not all of the monetary value of the drugs imported ends up in the pockets of the smugglers who bring it across the U.S. border; some of that money flows further back up the supply chain because there are multiple layers of criminal enterprises between the farmers who grow the crops from which the drugs are made and the organizations that carry those drugs across the U.S. border.

control the importation. ("Organizations" is in quotes because the relationship between wholesale dealers in the U.S. and their suppliers who ship the drugs into the U.S. is more akin to a business partnership, than a single vertically-integrated enterprise in the sense of Henry Ford's River Rouge industrial complex of old).

With that big caveat, the best numbers on the scale of U.S. drug markets come from the series of publications called "What America's Users Spend on Illegal Drugs" (WAUSID). The latest in this series was produced by RAND and published by ONDCP in 2014 with annual estimates covering the years 2000 - 2010.<sup>6</sup> (I am a co-author.) Since the Arrestee Drug Abuse Monitoring (ADAM) system has been discontinued, it would be quite difficult to produce a new estimate updating those series.

(There are many excellent ongoing data collection efforts, including the National Survey on Drug Use and Health and the Monitoring the Future studies of high school students, but the smaller number of heaviest users truly dominate total spending and consumption. Those heavy users are badly under-represented in surveys, but many are criminally involved. So when we used to interview and collect urine samples from arrestees, it was possible to produce plausible estimates of total consumption and spending, whereas at present we can only estimate the number of users — a number that is dominated by the less frequent users who collectively account for a quite modest share of demand.)

The table below reproduces the 2010 WAUSID estimates for weight and value, both of which are relevant. Four facts must be kept in mind when interpreting these numbers. For cocaine/crack, heroin, and meth, weight is expressed in terms of pure weight. So if 24 MT of pure heroin crossed the border, but at an average purity of 50%, then it is 48 MT, not just 24 MT, of material containing heroin that was shipped across the border.

The dollar figures pertain to retail sales. Drugs are marked up enormously as they move down the multi-layered distribution chain within the U.S., so most of the retail revenue is earned

<sup>&</sup>lt;sup>6</sup> Kilmer, Beau, Susan S. Everingham, Jonathan P. Caulkins, Greg Midgette, Rosalie Liccardo Pacula, Peter H. Reuter, Rachel M. Burns, Bing Han, and Russell Lundberg (2014). What America's Users Spend on Illicit Drugs: 2000-2010. RAND RR-534-ONDCP, Santa Monica, CA.
<sup>7</sup> A quote from a journal article we wrote based on the WAUSID study makes the point. For drugs other than

A quote from a journal article we wrote based on the WAUSID study makes the point. For drugs other than marijuana, "the household survey under-estimates frequent use to a much greater degree. For example, based on the 2010 NSDUH, one would conclude there are only 60,000 daily or near-daily heroin users in the United States. Our ADAM-based projection models suggest that the correct total is closer to 1,000,000." Caulkins, Jonathan P., Beau Kilmer, Peter H. Reuter, and Greg Midgette. (2015). Cocaine's Fall and Marijuana's Rise: Questions and Insights Based on New Estimates of Consumption and Expenditures in U.S. Drug Markets. *Addiction*. 110(5): 728-736.

by criminals operating within U.S. borders. In round terms, the value at import for Mexican marijuana may be about one-quarter of the value when sold on the street and the proportion is even lower for the other drugs, perhaps closer to one-seventh.<sup>8</sup>

Essentially all cocaine and heroin used in the United States is imported. Imports share of the meth market has fluctuated over time, with various rounds of precursor chemical control, but is generally believed to be high. The story for marijuana is more complicated because of domestic production and is discussed further below.

Somewhat more is imported than is consumed, because some of what is imported is seized within the United States.

Kilmer et al.'s (2014) estimates of the size of the major U.S. illegal drug markets

	Retail Sales Value	Quantity Consumed
	(billions of 2010 dollars)	(metric tons)
Marijuana	\$41	5,700
	\$30 - \$60	4,200 - 8,400
Cocaine	\$28	145
(including crack)	\$18 - \$44	92 - 227
Heroin	\$27	24
	\$15 - \$45	13 - 40
Methamphetamine	\$13	42
	\$6 - \$22	19 - 71

There are many caveats and uncertainties surrounding these numbers, but the punchlines concerning U.S. border security remains clear. First, marijuana accounts for the majority of the weight but a minority of the value of the illegal drugs smuggled across U.S. borders. Second, these are big numbers: (1) Hundreds of metric tons of "hard drugs", (2) Thousands of metric tons of marijuana, and (3) The value of imports probably exceeds \$10B per year.

Others who are expert in national security matters are better able than I to put those numbers in perspective through a terrorism and counter-terrorism lens, but my sense is that they are large. E.g., shortly after the September 11<sup>th</sup> attacks, along with co-authors I wrote a paper

<sup>&</sup>lt;sup>8</sup> Data on import prices – as opposed to general wholesale prices – are scarce. The appendices to Kilmer et al. (2010) grappled with this issue and are the source for the guesses of roughly one-quarter and one-eighth. Kilmer, Beau, Jonathan P. Caulkins, Brittany M. Bond, and Peter Reuter (2010). Reducing Drug Trafficking Revenues and Violence in Mexico: Would Legalizing Marijuana in California Help? RAND OP-325-RC, Santa Monica, CA.

comparing the "war on terror" to the "war on drugs". <sup>9</sup> It was our understanding at the time that the direct financial cost to Al-Qaeda of launching the September 11<sup>th</sup> attacks was on the order half a *million* dollars, not something measured in the billions.

Law enforcement officials would be better able to characterize the mechanisms or tactics used to accomplish this smuggling, but they would certainly describe the method as diverse. Some are fairly low-tech, such as hiding the drugs within legitimate cargo or in secret compartments of vehicles that are crossing through ports of entry. Much also passes between ports of entry, whether by air, ground, sea, or even underground via tunnels.

#### III. The legalization option

When contemplating tactics for reducing this illegal flow it is useful to distinguish legalization from all other options, and within the discussion of legalization to distinguish legalizing marijuana on the one hand from legalizing cocaine/crack, heroin, and meth on the other. For better and for worse, it seems reasonably likely that the U.S. federal government will legalize marijuana within the next decade; that would largely eliminate marijuana's share of the cross-border drug smuggling problem. That share is the majority of the weight, but only a minority of the value of the illegal drugs smuggled across U.S. borders.

There are many varieties of legalization, <sup>10</sup> but as a general matter, one would expect that legalizing large-scale production of a drug to eliminate most illegal cross-border smuggling. Of course there are caveats. Legalizing only home-production might not drive out the black market, particularly for the hard drugs. The cannabis plant lends itself to home cultivation, e.g., because its yield per square foot is extraordinarily large. <sup>11</sup> That is why I made the statement concerning "large-scale" production. Likewise if taxes or other regulatory hurdles were too great, there could still be "grey market" smuggling to evade those taxes or regulation. E.g., there is quite a large illegal industry smuggling cigarettes from low-tax to high-tax states, and in other regions of

Mark A. R. Kleiman, Peter Reuter, and Jonathan P. Caulkins. 2002. "The War on Drugs and the War on Terror: A Comparison." *Public Interest Report*, Vol. 55, No. 2, pp.3-5.
 For a thorough discussion of the options for marijuana, see Caulkins, Jonathan P., Beau Kilmer, Mark A. R.

<sup>&</sup>lt;sup>10</sup> For a thorough discussion of the options for marijuana, see Caulkins, Jonathan P., Beau Kilmer, Mark A. R. Kleiman, Robert J. MacCoun, Gregory Midgette, Pat Oglesby, Rosalie Liccardo Pacula, and Peter H. Reuter (2015). Considering Marijuana Legalization: Insights for Vermont and Other Jurisdictions, Santa Monica, Calif.: RAND Corporation, RR-864, <a href="http://www.rand.org/pubs/research\_reports/RR864.html">http://www.rand.org/pubs/research\_reports/RR864.html</a>.
It takes more square feet of coca bushes or poppies to supply a heavy cocaine or heroin user than it does cannabis

It takes more square feet of coca bushes or poppies to supply a heavy cocaine or heroin user than it does cannabis plants to supply a heavy marijuana user.

the world smuggling for purposes of tax-evasion involves transport of large quantities of tobacco and many other products across international borders. But there is nothing special about a commodity being a dependence-inducing intoxicant that necessarily produces cross-border smuggling. There is not, as far as I know, much smuggling of alcohol into the U.S. today; tax differentials across states are not large enough to make that worthwhile, particularly given the bulkiness of alcohol per dollar. Rather, it is primarily the illegality that creates the criminal opportunities.

It is important to stress, though, that decriminalization or legalization of possession are absolutely not half-way to legalization from the perspective of border security. Quite the contrary. One would expect decriminalization and legalization of use in the United States to exacerbate, not help solve, the border security problem, and also the problems drug traffickers create in source and transshipment countries such as Mexico. <sup>12</sup> They reduce barriers and disincentives to use while leaving the production and distribution chains wholly in criminal hands.

The conventional wisdom in the academic literature is that decriminalizing marijuana has not led to much of an increase in use, <sup>13</sup> but that statement comes with four qualifications:

- Some studies do suggest notable increases in use.<sup>14</sup>
- Essentially no one argues that decriminalization or legalizing use reduces use.
- In my opinion, some of the academic literature tends to have a pro-marijuana slant.
- Decriminalizing marijuana usually comes after a period when marijuana enforcement was already ebbing. If the U.S. were to decriminalize hard drugs, that would be a bigger change from the status quo and so might have a noteworthy effect on use even if the academic literature is correct that marijuana decriminalization has not had such an effect in the past.<sup>15</sup>

<sup>&</sup>lt;sup>12</sup> Caulkins, Jonathan P. and Eric Sevigny (2013). The U.S. Causes but Cannot Solve Mexico's Drug Problems. In A War that Can't Be Won, eds. Tony Payan, Kathleen Staudt, and Z. Anthony Kruszewski. University of Arizona Press. pp.285-310.

Press, pp.285-310.

13 See, e.g., Thomas Babor, Jonathan Caulkins, Griffith Edwards, David Foxcroft, Keith Humphreys, Maria Medina Mora, Isidore Obot, Jurgen Rehm, Peter Reuter, Robin Room, Ingeborg Rossow, and John Strang. 2010. Drug Policy and the Public Good. Oxford University Press, or Room R., Fischer B., Hall W., Lenton S., and Reuter P. (2008) Cannabis policy: Moving beyond stalemate. Beckley Park, UK: Beckley Foundation

<sup>(2008)</sup> Cannabis policy: Moving beyond stalemate. Beckley Park, UK: Beckley Foundation.

14 E.g., Adda, Jérôme, Brendon McConnell, and Imran Rasul (2014). Crime and the Depenalization of Cannabis Possession: Evidence from a Policing Experiment. Journal of Political Economy, 122(5):1130-1202.

Possession: Evidence from a Policing Experiment. *Journal of Political Economy*, 122(5):1130-1202.

15 Evidence concerning the effects of Portugal's 2001 policy changes are often presented, and often mis-represented, concerning this point. I would be happy to elaborate if that were useful, but in a nutshell, what Portugal did in 2001

I will not discuss further legalization of hard drugs. Of course one can track down advocates for almost any idea, but legalizing hard drugs does not at present appear to be a viable option politically within the U.S. In my opinion that is a good thing. Everything about legalizing hard drugs is much higher stakes and much riskier than is legalizing only marijuana. Furthermore, legalization is essentially an irreversible act, not something a country can try out for a few years and then easily revoke if addiction rates soar.<sup>16</sup>

Legalizing hard drugs is a much more appealing option from the perspective of the primary production and transshipment countries, not from the perspective of final market countries such as the United States. So a scenario that deserves greater attention than it has received to date is one that involves one or more Latin American countries legalizing cocaine, or all drugs generally. It is not altogether clear how that would affect the United States. There are scenarios under which the mere fact that cocaine could be purchased legally in, say, Bolivia, might have very little effect on the Mexican drug trafficking organizations (DTOs) that carry those drugs "the last mile" across the border into the United States. But one can also spin scenarios in which legalization in even one country could alter the strategic landscape for all countries.<sup>17</sup>

#### IV. The effects of legalizing marijuana

The second edition of my book on marijuana legalization written with co-authors Mark Kleiman and Beau Kilmer came out this month. Here I will just state the key points, all of which are elaborated in that book.

Production of marijuana for domestic consumption has shifted back and forth between the United States and foreign sources – primarily Mexico, but also Canada, Jamaica, and other

was both less than and in other ways more than what is customarily meant by decriminalizing or legalizing amounts suitable for personal consumption. It is a very interesting policy innovation, but does not provide as strong a basis for projecting what outcomes might be in the United States as some observers claim it to be.

 <sup>&</sup>lt;sup>16</sup> Caulkins, Jonathan P. and Michael A.C. Lee. 2012. The Drug-Policy Roulette. National Affairs. 12, pp.35-51.
 <sup>17</sup> I attempt to take a first step toward exploring such scenarios in the following publication, but am very blunt that thinking about these scenarios is highly speculative: Caulkins, Jonathan P. 2015. After the Grand Fracture:
 Scenarios for the Collapse of the International Drug Control Regime. Journal of Drug Policy Analysis. 24(1):60-68.
 Published online: DOI: 10.1515/jdpa-2015-0008.
 <sup>18</sup> Caulkins, Jonathan P., Beau Kilmer and Mark A.R. Kleiman (2016). Marijuana Legalization: What Everyone

<sup>&</sup>lt;sup>10</sup> Caulkins, Jonathan P., Beau Kilmer and Mark A.R. Kleiman (2016). Marijuana Legalization: What Everyone Needs to Know, 2<sup>nd</sup> Edition. Oxford University Press.

countries. As recently as 2000 the vast majority of marijuana consumed in the United States was imported. By 2008, Mexico's market share might have fallen to somewhere between two-fifths and two-thirds. Domestic production has almost certainly increased further since then, but the exact share today is hard to establish.

This shift is bound up in a change in the types of cannabis consumed. To simplify, Mexico used to dominate production of "commercial grade" marijuana whose THC potency was typically below 5%, although that potency has been increasing and is now perhaps more typically 5-7%. By contrast, most of the higher potency sinsemilla (10-20% THC) was produced in the United States, or in Canada. U.S. production was an amalgam ranging from purely illegal production (e.g., in networks of grow houses operated by organized crime groups) to legal with respect to state medical marijuana laws, with quite a bit that operated in a gray area in between, e.g., excess production by people who were authorized to produce some under a medical regime, and also "medical" regimes that allowed essentially any user to obtain a "medical" recommendation.

There was in parallel a shift from traditional forms of consumption (mostly smoking) to a wider range of forms, including edibles (brownies, candy, etc.), "vaping" (which can be thought of as analogous to an e-cigarette), and "dabbing" (flash vaporizing highly concentrated THC matter). Many of these newer modalities involve THC and other cannabinoids that have been extracted (e.g., with solvents such as butane) and concentrated, not the cannabis plant material as was the norm in the past.

Also, and importantly, price per unit of THC has been declining. (The price per gram of sinsemilla today may be higher than the price per gram of commercial grade marijuana in the past, but since sinsemilla is so much more potent, the cost per hour of intoxication has fallen.)

There is little question that:

- These trends have expanded marijuana consumption greatly, and reduced imports' share
  of that consumption.
- These trends were facilitated if not driven by liberalization of policy.
- Legalization to date is still only partial, and more dramatic change is to be expected.
- Legalization to date is on a continuum that is perhaps best dated to the beginning of
  quasi-regulated medical marijuana production in California in the early 2000s, not the

<sup>19</sup> Kilmer et al. (2010), Appendix D.

November 2012 passage of the legalization propositions in Colorado and Washington State. 20

To give a sense of the scale of the increase in marijuana consumption, the number of days of marijuana use that Americans self-report to the national household surveys has increased from 2.2 billion in 2004 to 4.0 billion on the 2014 survey.

The increase comes in part from growth in the number of users, but even more from increases in the intensity of use. The number of Americans who self-report that they use marijuana daily or near-daily (defined as 21 or more days in the past month) has increased from 4.0 million in 2000 to 8.0 million in the 2014 survey. (Many people use less frequently, but those daily and near-daily users account for more than 80% of all marijuana consumption.)

There is generally a positive association between the amount used per day of use and the frequency of use (meaning days of use per month). That correlation exists in terms of raw weight, and probably also does in terms of THC consumption because frequent users may also gravitate toward more potent forms.

So although this cannot be measured directly, it is possible that on a THC-adjusted basis, the quantity of marijuana consumed may have increased between 2004 and 2014 to an even greater extent than is suggested by the increase from 2.2 to 4.0 billion days of self-reported use.

What does this mean for imports from abroad? Even if the share of marijuana that is imported has fallen, the total amount of use supplied by imports could have increased since total consumption has grown. In particular, even if imports' share of the market today is half of what it was back in 2004, the amount of use supplied by imports today could be nearly as large as it was ten years earlier.

Has the market share of imports fallen to 50% or less of its previous level? No one knows for sure. When Beau Kilmer and I, along with various colleagues, tried to look at this question in detail back in 2010, we found that imports were a substantially larger share of the market than most people thought based on the prices users reported paying.<sup>21</sup> My hunch is that

<sup>&</sup>lt;sup>20</sup> Among other reasons, Colorado and Washington State both already had "medical" regimes that were so permissive that the bigger change actually came with the Obama Administration's decision not to prosecute companies operating within those state regulatory regimes, not the changes in the state laws per se. <sup>21</sup> Kilmer, Beau, Jonathan P. Caulkins, Brittany M. Bond, and Peter Reuter (2010). Reducing Drug Trafficking Revenues and Violence in Mexico: Would Legalizing Marijuana in California Help? RAND OP-325-RC, Santa Monica, CA. In brief, much of the consumption was by people who reported paying prices for marijuana that were

this gap arose because most of the "conventional wisdom" about marijuana use patterns comes from people who participate in the "blogosphere" or the World Wide Web more generally. But it is important to remember that college graduates account for only about 15% of the market; more than half is consumed by people with a high school education or less. Those less educated, and presumably less affluent users, might be more likely to use less expensive, imported commercial grade marijuana and also less likely to write about it on the internet.

Furthermore, from a security perspective, what matters is not the amount of use supplied by imports, so much as the weight and value of those imports. The potency of marijuana imported from Mexico appears to have been increasing, so the weight imported per hour or day of intoxication supplied from abroad may have fallen somewhat. Also, wholesale prices in the U.S. have been falling on a THC-adjusted basis, so it is possible that import prices have also been falling although data on import prices are scarcer than data on wholesale prices.

Replicating the analysis done back in 2010 is possible, but it is more of a research project than something I could manage in time for this testimony. If I had to guess now, without having a chance to crunch the numbers, my best guess is that the growth in total marijuana consumption has offset an important part of the decline in imports' market share, so that the liberalization of marijuana policy to date has not yet greatly reduced exports to the United States. I am aware that there are journalistic accounts extrapolating from declines in seizures to presumptions about declines in exports, 22 but as Alejandro Hope has discussed, 33 other factors may explain the declines in seizures.

Still I want to stress that this is just my best guess based on professional judgment; the data systems are not adequate to answer the matter definitively.

However, if and when the federal government repeals its marijuana prohibition and/or the state legal marijuana industry has time to expand, innovate, and fully exploit the economies of scale that is now starting to achieve, domestic production under liberalized policy regimes ought to be able to out-compete imports.

This idea is discussed in detail in our book, but let me just cite two supporting facts. All of the THC consumed in the United States could be produced on less than 10,000 acres of

simply too low for that marijuana to be sinsemilla, and the conventional wisdom at the time was that most domestic production was of sinsemilla. 
<sup>22</sup> E.g., <a href="http://time.com/3801889/us-legalization-marijuana-trade/">http://time.com/3801889/us-legalization-marijuana-trade/</a>.

bttp://www.samefacts.com/2015/02/crime-incarceration/mexicos-missing-marijuana-mystery/.

farmland. Ten thousand acres sounds enormous to the typical homeowner, but a 1,000 acre farm is not unusual in the Mid-West. So quite literally, ten farms could supply all of the country's THC.

And production costs could become very low once production shifts to large-scale, professionally-run farms. Outdoor production can yield something on the order of 600 pounds of marijuana "flowers" per year, plus about 2,000 pounds of additional vegetable material from which THC can be extracted. Production costs for other crops that require transplanting is typically \$5,000 - \$20,000 per acre, suggesting production costs for flowers of around \$20 per pound. That is just 1% of current farm gate prices, which are roughly \$2,000 per pound, and less than 10% of the going wholesale price for (lower-quality) marijuana imported from Mexico just after it has crossed the border into the United States.

In short, even if the policy liberalizations to date have not yet greatly reduced marijuana imports, if the trend toward liberalizing policy continues it is entirely plausible that importing of illegal marijuana will be largely curtailed.

Again, that would represent a very large decline in the weight of illegal drugs imported, but a much more modest reduction in the amount drug traffickers earn from bringing drugs into the United States.

## V. Policy reforms short of legalization

Within a regime that prohibits legal supply, the most effective way to reduce imports is through enforcement. Prohibition backed by a baseline level of enforcement drives up the prices of illegal drugs far, far beyond what they would be if drugs were legal. <sup>24</sup> This point has been made elsewhere, but consider for example that it costs cocaine producers roughly \$15,000 per kilogram to get cocaine from Colombia into the United States, whereas any parcel delivery service would charge less than \$100 per kilogram to ship any legal commodity to the customer's door. That spectacular increase in the cost of doing business is attributable to prohibition, backed by some enforcement, and it translates directly into extremely high prices. Cocaine, heroin, and meth all cost user many times their weight in gold.

<sup>&</sup>lt;sup>24</sup> See, e.g., Caulkins, Jonathan P. (2014). Effects of Prohibition, Enforcement, and Interdiction on Drug Use. In *The Economics of International Drug Policy*, ed. John Collins (London: LSE IDEAS Special Report), pp.16-25 or Kleiman, M. A., Caulkins, J. P., & Hawken, A. (2011). *Drugs and Drug Policy: What Everyone Needs to Know*. Oxford University Press.

When drug prices are high, people use less. Indeed, the price responsiveness can be surprisingly large because most of the drugs are consumed by the minority of people for whom buying those drugs soaks up a very large share of their disposable income. So whereas people's first impulse is to think that those who are drug dependent may be unresponsive to changes in price, that is largely incorrect, as a now substantial body of economic literature now shows.<sup>25</sup>

However, the fact that prohibition plus some enforcement does a terrific job of holding down the quantity consumed – and hence the quantity imported – there appears to be no practical opportunity for reducing imports by further increasing enforcement intensity beyond their already very aggressive levels, and for two distinct reasons.

The first is simply that the mood of the country is sharply in favor of reducing not increasing enforcement "toughness".

The second is that it probably would not work well anyhow. Opportunities for investigating the question empirically are understandably limited, but the academic consensus is that further increases in enforcement beyond that needed to give the prohibition teeth and to impose the "structural consequences of product illegality" are extremely inefficient ways of driving down consumption of drugs with long-established markets. Peter Reuter and I made this point in our earlier testimony, referenced above, <sup>26</sup> and he has a recent article with Harold Pollack that further elaborates the argument by drawing on more recent literature. <sup>27</sup> Indeed, most drug policy scholars would argue that toughness could be reduced substantially with relatively few adverse effects, because policies in recent decades have gone so far past the point of diminishing returns.

As a result, most progressive discussions of improving American drug policy focus on so-called demand-side interventions. Here the analysis is at once promising and gloomy. There are of course many different types of demand-side interventions spanning a very broad range of modalities and target populations, but the generic finding is that they are often highly cost-effective but not very effective.

<sup>&</sup>lt;sup>25</sup> Gallet, Craig A. (2014). Can price get the monkey off our back? A meta-analysis of illicit drug demand. *Health Economics*, 23:55-68, published online in 2013 at DOI: 10.1002/hec.2902.
<sup>26</sup> Reuter, Peter, and Jonathan P. Caulkins 2009. "An Assessment of Drug Incarceration and Foreign Interventions."

<sup>&</sup>lt;sup>26</sup> Reuter, Peter, and Jonathan P. Caulkins 2009. "An Assessment of Drug Incarceration and Foreign Interventions." May 19<sup>th</sup> testimony to the Domestic Policy Subcommittee of the Oversight and Government Reform Committee.

<sup>26</sup> <a href="http://www.cdc.gov/drugoverdose/data/overdose.html">http://www.cdc.gov/drugoverdose/data/overdose.html</a>. See also Caulkins, J. and Reuter (2006) "Re-orienting Drug Policy" *Issues in Science and Technology* 23(1).

<sup>&</sup>lt;sup>27</sup> Pollack, H. A., & Reuter, P. (2014). Does tougher enforcement make drugs more expensive?. *Addiction*, 109(12), 1959-1966.

That is not a contradiction. Demand-side interventions can be cost-effective, even if they are not very effective in any absolute sense, because they are relatively cheap (certainly compared to imprisonment) and the thing they seek to reduce is so extraordinarily destructive.

The point is perhaps best made with some stylized numbers. Efforts to estimate the social cost of drug abuse face enormous challenges, and one should not imagine that the figures are terribly precise, but they give a sense that the scale of the problem is on the order of \$200 billion per year for illegal drugs. Most of those costs come from the 3 million or so heaviest users of the "expensive" illegal drugs (cocaine/crack, heroin, and meth). Dividing \$200 billion by 3 million suggests that such individuals impose costs on the rest of society that exceed \$50,000 per year. Since the residual length of the "drug using career" for such individuals is usually a decade or longer, that means that inducing such a person to give up drugs forever would be worth more than \$500,000. So taxpayers ought to be perfectly happy to pay for a \$3,000 treatment program even if it only had a 1% chance of causing the client to permanently cease use. A hypothetical \$3,000 treatment program that had a 5% "cure rate" would offer taxpayers a spectacular "return on investment" even if it had no impact whatsoever on 95% of its clients.

Treatment advocates hate any discussion couched in terms of probabilities of achieving permanent abstinence, let alone a "cure rate". The modern language for discussing treatment is as a way of managing a chronic relapsing condition, akin to the way insulin is used to manage diabetes.

But the very reason that treatment advocates insist on framing the discussion in that way is precisely because we do not have treatment approaches which, when offered to a population of users, greatly reduce that population's drug consumption over the long-run.

This means that while it could be a terrific policy to expand treatment funding and availability (as the Mental Health Parity and Addiction Equity Act and also the Affordable Care Act have begun to do<sup>29</sup>), doing so would not do much – and certainly not much quickly – to reduce the quantity of illegal drugs being imported, and the attendant security problems.

<sup>&</sup>lt;sup>28</sup> See, e.g., Harwood, H. *Updating Estimates of the Economic Costs of Alcohol Abuse in the United States:*Estimates, *Update Methods, and Data*. Report prepared by The Lewin Group for the National Institute on Alcohol Abuse and Alcoholism, 2000.

Abuse and Alcoholism, 2000.

<sup>29</sup> For more on this, see various writings by Keith Humphreys and Harold Pollack, e.g., Humphreys, K., & Frank, R. G. (2014). The Affordable Care Act will revolutionize care for substance use disorders in the United States.

\*Addiction, 109(12), 1957-1958 or Andrews, Christina, Colleen M. Grogan, Marianne Brennan, and Harold A.

When discussing drug treatment it is always important to distinguish the technology for treating opioid dependence – for which pharmacotherapies exist – and the much less successful technologies for treating other substances, including the stimulants. For opioids (including heroin), it is possible to "maintain" dependent users on a legally supplied substitute opioid. The best known such substance is methadone. Buprenorphine is another. The fact that some other countries use (legal, pharmaceutical grade) heroin itself in this manner, and that the class of interventions is called opiate *substitution* therapies, underscores the extent to which even for opioids we do not have very good methods of greatly reducing drug use. Rather, we just know how to get dependent individuals to substitute legal opioids for illegal ones.

The story with prevention is broadly similar. Even model-school based drug prevention programs tend not to be very effective in an absolute sense, <sup>30</sup> but they are inexpensive and preventing drug use is very valuable, so they can nonetheless be cost-effective. <sup>31</sup> Furthermore, many can produce diverse collateral benefits, ranging from reducing smoking and alcohol abuse to better academic outcomes. So again, a robust investment in drug prevention may be good policy, but it is not plausible that expanding those efforts will solve the border security issues created by drug imports.

Furthermore, with prevention – unlike treatment – there are inevitably quite long lags between when the program is implemented and when it affects the drug use that is of greatest concern. Many prevention programs target young teens; some work with much younger children. There are even evaluations of prenatal nurse home visitation programs from a drug control perspective. But the median age of initiation for hard drugs is 21, and even crack is not "instantly addicting". There is a lag between initiation and progression to dependence, and then that dependence can continue for many years. So there can a lag of a decade or more between implementation of a prevention program and the beginnings of its significant effects on hard drug use.

Pollack. "Lessons from Medicaid's Divergent Paths on Mental Health and Addiction Services." *Health Affairs* 34, no. 7 (2015): 1131-1138.

<sup>&</sup>lt;sup>30</sup> For a recent review, see Faggiano, F., Minozzi, S., Versino, E., & Buscemi, D. (2014). Universal school-based prevention for illicit drug use. *Cochrane Database of Systematic Reviews*, 12

prevention for illicit drug use. Cochrane Database of Systematic Reviews, 12.

1 C.f., Caulkins, Jonathan P., C. Peter Rydell, Susan S. Everingham, James Chiesa, and Shawn Bushway. 1999. An Ounce of Prevention, a Pound of Uncertainty: The Cost-Effectiveness of School-Based Drug Prevention Program, RAND, Santa Monica, CA and Caulkins, Jonathan P., Rosalie Pacula, Susan Paddock, and James Chiesa. 2002. School-Based Drug Prevention: What Kind of Drug Use Does it Prevent? RAND, Santa Monica, CA.

Worse, there are many well-meaning and seemingly sensible interventions that do not even work that well. Indeed, many when evaluated rigorously do not show any statistically significant effect on drug use (even if they perhaps affect attitudes toward or knowledge about drugs). The most popular school prevention program, DARE, is an example of such a victim of rigorous evaluation.32

Unfortunately mass media campaigns often fall into this category. Media campaigns are quite difficult to evaluate; it is often hard to know for sure exactly how big a "dose" any individual youth received. Nevertheless, it is really no longer tenable to think that these campaigns are effective but just not appreciated. Despite persistent attempts, the serious evaluations have produced rather disappointing findings. In particular, Hornik et al. (2008) reached pessimistic conclusions concerning the national youth anti-drug media campaigns in the United States,<sup>33</sup> and more comprehensive literature reviews suggest that the limitations are systemic, not due to any particular flaws with that campaign.34

In sum, while there may be abundant opportunities for improving U.S. drug policy, it would be naïve to think that doing more or better with any of the traditional drug control levers could close down or cut by more than half the flow of drugs across the border.

## VI. One ray of hope: Swift, certain and fair

There is one radically innovative approach to reducing drug use that stands outside the usual list of programs and which may offer a real opportunity to dramatically reduce drug use and, hence, drug imports. The name of that approach has evolved, originally sometimes being referred to as "coerced abstinence" but now is more often referred to as "swift, certain, and fair" (SCF).

<sup>&</sup>lt;sup>32</sup> E.g., West, S. L., & O'Neal, K. K. (2004). Project DARE outcome effectiveness revisited. *American Journal of* Public Health, 94(6), 1027-1029.

Hornik, R., Jacobsohn, L., Orwin, R., Piesse, A., & Kalton, G. (2008). Effects of the national youth anti-drug

media campaign on youths. *American Journal of Public Health*, 98(12), 2229-2236.

<sup>14</sup> See, e.g., Ferri, M., Allara, E., Bo, A., Gasparrini, A., & Faggiano, F. (2013). Media campaigns for the prevention of illicit drug use in young people. The Cochrane database of systematic reviews, 6 and Hawks D., Scott K., McBride N., Jones P., and Stockwell T. (2002) Prevention of Psychoactive Substance Use. Geneva, Switzerland: World Health Organisation.

Within the academic community the idea is most closely associated with New York University professor Mark Kleiman and his book *When Brute Force Fails*, <sup>35</sup> although Mark would be quick to point out that the best-known examples of its implementation were developed by practitioners who arrived at the key ideas independently. Those examples include the Hawaii's Opportunity Program with Enforcement (HOPE) <sup>36</sup> and the 24/7 Sobriety program launched first in South Dakota. <sup>37</sup> The Physician Health Programs (PHPs) operate on a similar behavioral principle, albeit with a very different population. <sup>38</sup>

That principle is that deterrence can work when the sanctions are swift, certain, and fair even in contexts where a lower likelihood of delayed but draconian sanctions fails to induce behavioral change.<sup>39</sup> For example, South Dakota's 24/7 Sobriety program required alcoholinvolved offenders to submit to *twice daily* breathalyzer tests or wear continuous alcohol monitoring (at their own expense), and imposed an automatic and instantaneous jail term for any positive test – but the duration of that term was typically just a day or two.

What is distinctive about all of these efforts is a focus on testing-with-consequences as a way of suppressing drug use. 40 It is not drug treatment as it is typically defined. If individuals in the program believe that conventional treatment will help them achieve abstinence, they are free to pursue it, but the program itself does not mandate or deliver drug treatment. To the extent that these programs fit within any of the conventional boxes it would be community supervision, including as an alternative to incarceration, 41 but they are not just that either.

<sup>35</sup> Kleiman, Mark A.R. (2009). When Brute Force Fails: How to Have Less Crime and Less Punishment. Princeton University Press, Princeton, NJ.

<sup>&</sup>lt;sup>36</sup> Hawken, A., & Kleiman, M. (2009). Managing Drug Involved Probationers with Swift and Certain Sanctions: Evaluating Hawaii's HOPE: Executive Summary. *Washington, DC: National Criminal Justice Reference Services* and Hawken, A. (2010). HOPE for probation: How Hawaii improved behavior with high-probability, low-severity sanctions. *Journal of Global Drug Policy and Practice*, 4(3), 1-5.

<sup>37</sup> Kilmer, B., Nicosia, N., Heaton, P., & Midgette, G. (2013). Efficacy of frequent monitoring with swift, certain,

<sup>&</sup>quot;Kilmer, B., Nicosia, N., Heaton, P., & Midgette, G. (2013). Efficacy of frequent monitoring with swift, certain, and modest sanctions for violations: insights from South Dakota's 24/7 sobriety project. American journal of public health, 103(1), e37-e43. Kilmer, B., & Humphreys, K. (2013). Losing Your License to Drink: The Radical South Dakota Approach to Heavy Drinkers Who Threaten Public Safety. Brown J. World Aff., 20, 267.

<sup>&</sup>lt;sup>38</sup> DuPont, R. L., McLellan, A. T., White, W. L., Merlo, L. J., & Gold, M. S. (2009). Setting the standard for recovery: Physicians' Health Programs. Journal of Substance Abuse Treatment, 36(2), 159-171.

recovery: Physicians' Health Programs. *Journal of Substance Abuse Treatment*, 36(2), 159-171.

<sup>39</sup> Durlauf, S. N., & Nagin, D. S. (2010). The deterrent effect of imprisonment. In *controlling crime: Strategies and Treadeoffs* (pp. 43-94). University of Chicago Press.

DuPont, R. L., & Humphreys, K. (2011). A new paradigm for long-term recovery. Substance abuse, 32(1), 1-6.
 Kleiman, M. A. (2011). Justice reinvestment in community supervision. Criminology & Public Policy, 10(3), 651-659.

What is also distinctive about these programs is their astonishingly high success rates. 42 In South Dakota well over 99% of breathalyzer tests come back clean (and that includes noshows in the denominator) and there is evidence that the program was associated with a reduction in all-cause mortality among adults for the state in its entirety, not just for offenders. 43 Much remains to be learned about such programs, but South Dakota has extended the program from DUI to other alcohol-involved offenders (there is also a drug testing component) and the program is being adopted in other states<sup>44</sup> and there are plans to extend a modified version of the program throughout London.45

For present purposes, the other key point is one Mark Kleiman made long ago, and that is that the majority of hard drugs used in the United States are consumed by people who are nominally under criminal justice supervision, either on probation, parole, or pre-trial release. 46 So if there were a way to force those individuals to stop using, that would have a much bigger impact on drug use than any other plausible program. (In some respects SCF has much in common with drug courts, but drug courts usually focus only on nonviolent offenders and so are necessarily somewhat limited in scope since much drug use is by repeat and/or violent offenders.47)

Nevertheless, the program has to swim upstream in several respects. First, to at least some, it is a stark challenge to the dominant paradigm of the "brain disease model of addiction" because it seems to produce bigger changes in drug use than does drug treatment. 48 (Note, though, that Angela Hawken argues that testing-with-consequences can be seen as the behavioral triage front end to an integrated system that focuses scarce treatment resources on the minority of

<sup>&</sup>lt;sup>42</sup> Kleiman, M. A., Kilmer, B., & Fisher, D. T. (2014). Theory and Evidence on the Swift-Certain-Fair Approach to Enforcing Conditions of Community Supervision. Fed. Probation, 78, 71.

A Nicosia, N., Kilmer, B., & Heaton, P. (2016). Can a criminal justice alcohol abstention programme with swift,

certain, and modest sanctions (24/7 Sobriety) reduce population mortality? A retrospective observational study, The Lancet Psychiatry, 3(3), 226-232.

Midgette, G. (2016). A New Approach to Reducing Heavy Drinking and Alcohol-Involved Crime? Insights from

RAND Research on 24/7 Sobriety Programs. Testimony presented before the California State Assembly, Committee on Public Safety on March 29, 2016. http://www.rand.org/pubs/testimonies/CT455.html 45 http://www.bbc.com/news/uk-england-london-35660946.

<sup>&</sup>lt;sup>46</sup> Kleiman, M 1997. "Coerced abstinence: A neopaternalist drug policy initiative," In *The New Paternalism*: Supervisory Approaches to Poverty, ed. Lawrence M. Mead, 182–219. Washington, DC: Brookings Institution and 47 Sevigny, E. L., Pollack, H. A., & Reuter, P. (2013). Can drug courts help to reduce prison and jail populations?. The ANNALS of the American Academy of Political and Social Science, 647(1), 190-212.

48 Satel, S., & Lilienfeld, S. O. (2012). Addiction and the brain-disease fallacy. Frontiers in psychiatry, 4, 141-141.

problem users who do not respect to a SCF regime. <sup>49</sup>) Second, there can be a reflexive response that punishing drug users is bad, or even a violation of their human rights, even if the evidence suggests that threatening occasional very short sentences can dramatically improve life outcomes for those same users, not just for the rest of society. Third, implementing SCF requires extraordinary cooperation across different components of the criminal justice system, and it remains to be seen whether it can be implemented in larger jurisdictions.

In sum, it seems very unlikely that any traditional drug control intervention, or combination of those interventions, has a plausible hope of reducing drug use by as much as 50% over ten years. SCF is one of the very few interventions that offers even a hope of achieving such reductions. <sup>50</sup> It is not that one should bet that SCF will deliver such large reductions within the next decade, but if anything will produce those gains, it seems more likely that it will be SCF than anything else we know of today.

#### VII. Another angle: Finding less awful drug traffickers

If the chances of dramatically reducing U.S. consumption of hard drugs are slim to none within the next decade or so, that begs the question of whether there is some way to mitigate the security risk created by cross-border drug trafficking other than by shrinking its size. I certainly do not know. But the question is reminiscent of a line of argument I and others have suggested for addressing the collateral damages created by drug markets more generally.

Oddly, perhaps, the origins of the idea lie in the so-called "harm reduction" movement. The term "harm reduction" is still highly controversial in some quarters, but as used here it should not be understood as a code word for legalization. Rather, it should be taken at face value as seeking to reduce the harms associated with drug use, even if there is no reduction in the

<sup>&</sup>lt;sup>49</sup> Hawken, A. (2010). Behavioral triage: A new model for identifying and treating substance-abusing offenders. Journal of Drug Policy Analysis, 3(1).

<sup>&</sup>lt;sup>36</sup> Five years ago I might have been even more decisively pessimistic, but it is now clear that US cocaine consumption fell by something like 50% between 2006 and 2010. (Caulkins, Jonathan P., Beau Kilmer, Peter H. Reuter, and Greg Midgette. (2015). Cocaine's Fall and Marijuana's Rise: Questions and Insights Based on New Estimates of Consumption and Expenditures in U.S. Drug Markets. *Addiction*. 110(5): 728-736.) That decline is extraordinary, all but unprecedented, and still largely not understood (Kilmer, B., 2016). Cunningham et al. argue the decline is associated with new controls on essential chemicals; if they are correct (and that is not yet widely accepted), then that could in theory offer another mechanism. Cunningham, J. K., Callaghan, R. C., & Liu, L. M. (2015). US federal cocaine essential ('precursor') chemical regulation impacts on US cocaine availability: an intervention time–series analysis with temporal replication. *Addiction*, 110(5), 805-820.

quantity of drugs used. Robert MacCoun has written some classic articles that explain the idea. <sup>51</sup> In thumbnail sketch, he notes that total harm can be thought of as the product of the amount of drug use times the harmfulness per unit of use, so in principle total harm can be reduced by cutting either drug use or by cutting harmfulness, two tactics that might usefully be labeled "use reduction" and "harm reduction".

The paradigmatic example of harm reduction for drug users is that if an intervention leaves an injection drug user (IDU) continuing to inject drugs, but now does so with a new syringe each time, that might reduce the spread of HIV/AIDS, hepatitis C, or other blood-borne diseases even if it has zero effect on drug use.

The literature of interest here tries to apply that sort of reasoning to the collateral damage caused by drug markets, rather than by drug use. In caricature, if last year drug dealers murdered 1,000 people in the course of distributing 200 metric tons of cocaine in the United States and next year they murder "only" 200 people while distributing 200 metric tons, that can be seen as progress in reducing the societal costs associated with illegal drugs even if there is no change in cocaine consumption.

More generally, the total harm caused by drug distribution can be expressed as the product of the amount of drugs distributed times the harmfulness of those markets per kilogram distributed. So one ought to be able to make the nation safer either by reducing the amount of drugs distributed or by reducing the threat per kilogram shipped.

The usual focus at least in the United States has been on drug market related violence, with the Boston Gun Project's Operation Ceasefire and the High-Point North Carolina drug market intervention being among the best known examples. 52 For more general discussions of

<sup>&</sup>lt;sup>51</sup> E.g., MacCoun, Robert J., "The Psychology of Harm Reduction: Comparing Alternative Strategies for Modifying High-Risk Behavior," Wellness Lecture Series, Volume VI, 1996 and MacCoun, Robert J., "Toward a Psychology of Harm Reduction," American Psychologist, 53(11):1199-1208, 1998.

<sup>&</sup>lt;sup>52</sup> See Kennedy, David M. "Pulling Levers: Chronic Offenders, High-Crime Settings, and a Theory of Prevention." Valparaiso University Law Review 31, no. 2, 449-484 (Spring 1997), Braga, Anthony A., David M. Kennedy, Anne M. Piehl, and Elin J. Waring. Reducing Gun Violence: The Boston Gun Project's Operation Ceasefire. National Institute of Justice Research Report (September 2001), Kidd, Don (2006). The High Point West End Initiative: A New Strategy to Reduce Drug-Related Crime. The Criminal Justice Institute's Management Quarterly, Fall, Little Rock, AR: University of Arkansas, and Saunders, J., Lundberg, R., Braga, A. A., Ridgeway, G., & Miles, J. (2015). A synthetic control approach to evaluating place-based crime interventions. Journal of Quantitative Criminology, 31(3), 413-434.

the principle see Caulkins (2002), Caulkins & Reuter (2009), Caulkins and Kleiman (2011), Greenfield and Paoli (2012), and Kleiman et al. (2015). 53

To the best of my knowledge, no one has tried to apply the principle specifically to the question of security threats created by cross-border drug trafficking. The closest analog of which I am aware is Mark Kleiman's argument that the principle could be used to address violence perpetrated by Mexican DTOs within Mexico.<sup>54</sup>

The reason to hope that such strategies might work is that at least in theory it ought to be much easier to get drug traffickers to change the way they smuggle drugs than to get them to stop smuggling drugs entirely. By and large drug traffickers are in it for the money; they are businesses, albeit illegal businesses. If trafficking route or strategy B offered lower risks, lower costs, or greater profits than strategy A, then the traffickers ought to be willing to switch to B. They are wedded to making money, not, by and large, to using a particular tactic. This is not to say there is no stability in drug trafficking patterns. There is. But that stability is perhaps better understood as contentment with current outcomes and nervousness about the unknown risks of a change, not any arbitrary or ideological commitment to any given tactic. 55

So the questions become, are there some smuggling routes, tactics, or organizations that pose noticeably greater security risks to the United States than do others and, if so, are there ways to differentially "penalize" the most noxious routes, tactics, and organizations to put them at a competitive disadvantage, so that over time the market naturally evolves away from them and toward less bad routes, tactics, and organizations?

I genuinely do not know the answer to those questions. So to be clear, I am definitely not suggesting that this sort of market jujutsu is an effective way of mitigating the security risks posted by cross-border drug trafficking. Rather, I am merely saying that, given how unlikely it is

<sup>&</sup>lt;sup>53</sup> Caulkins, Jonathan P. 2002. "Law Enforcement's Role in a Harm Reduction Regime." Crime and Justice Bulletin Number 64. New South Wales Bureau of Crime and Justice Research; Caulkins, Jonathan P. and Peter Reuter. 2009. Toward a Harm Reduction Approach to Enforcement. Safer Communities, Vol. 8, No. 1, pp.9-23; Caulkins, J. P., & Kleiman, M. A. (2011). Drugs and crime. The Oxford handbook of crime and criminal justice, 275; Greenfield, V. A., & Paoli, L. If supply-oriented drug policy is broken, can harm reduction help fix it? Melding disciplines and methods to advance international drug-control policy. International Journal of Drug Policy (2012), 23(1):6-15; Kleiman, M. A., Caulkins, J. P., Jacobson, T., & Rowe, B. (2015). Violence and drug control policy. Oxford Textbook of Violence Prevention: Epidemiology, Evidence, and Policy, 297.

Kleiman, M. (2011). Surgical strikes in the drug wars. Foreign Affairs, 90(5), 89-101. Note: sometimes the actual smuggling is carried out by what might best be thought of as independent contractors,

not by the owners of the drugs. Those independent contractors might perhaps be more locked into a single tactic. E.g., a light airplane pilot might not be able to alter business practices if suddenly became more economical to smuggle drugs through tunnels.

that the volume of hard drugs moving across U.S. borders will shrink appreciably in the next decade, it seems sensible to look toward outside the box tactics for addressing the security threat.

# **TESTIMONY**

# DR. CHERYL G. HEALTON, DEAN COLLEGE OF GLOBAL PUBLIC HEALTH NEW YORK UNIVERSITY BEFORE THE COMMITTEE ON HOMELAND SECURITY

**UNITED STATES SENATE** 

AND GOVERNMENTAL AFFAIRS

AMERICA'S INSATIABLE DEMAND FOR DRUGS

**APRIL 13, 2016** 

"Un-Marketing Illicit Drugs"

#### Mr. Chairman and Members of the Committee:

I'm privileged to appear before you this morning to testify about the hard-won successes to decrease use of legal addictive substances and how we might apply those "lessons learned" to illicit drugs here in the United States.

My name is Dr. Cheryl Healton and I am Dean of the College of Global Public Health at New York University (NYU). Prior to my appointment at NYU, I worked for 14 years at the American Legacy Foundation, a national 501 (c) (3) nonprofit public charity established out of the 1998 Master Settlement Agreement between 46 State Attorneys General and the U.S. tobacco industry. The organization has a respected history of producing game-changing public health initiatives proven to reduce tobacco use among young people and adults.

Best known for its bold counter-marketing campaign for youth, truth® - now in its 16th year - the campaign has been a major part of comprehensive national, state and local tobacco control strategies. Together, these measures have resulted in remarkable declines in youth tobacco prevalence rates from 23% in 2000 to a current rate of below 7% (Monitoring the Future 2016). Indeed, youth smoking has plummeted since its peak of 38 percent in 1996 to 7 percent today and is thus a true public health success story (Monitoring the Future 2015).

I have also served on the Board of Directors of the Betty Ford Institute and now serve on the board of Phoenix House, a nonprofit drug and alcohol rehabilitation organization operating in ten states with 150 programs. Phoenix House programs serve individuals, families and communities affected by substance abuse and dependency. Over the course of my career, I have also published over 100 peer-reviewed papers and special reports on a variety of public health related topics including HIV AIDS, public health education, health policy, substance abuse and tobacco.

My testimony today will examine how we might consider "un-marketing" illicit drugs to youth before they start using them and how we can work to curb adult demand for drugs.

If we are to use tobacco as a case study, it is important to understand what it took to prompt the dramatic social norm change that has occurred over the past several decades here in the U.S. that resulted in these remarkably positive shifts in knowledge, attitudes and behavior. Public health experts know that four factors figure prominently in prompting and maintaining dramatic declines in tobacco consumption:

- 1. Bold and highly targeted counter-marketing/public education campaigns;
- 2. Ever-increasing excise taxes on products at the state and federal levels to prompt cessation among price-sensitive youth and adults;
- Policy initiatives that restrict access to the drug and safeguarding the
  public from secondhand exposure to it and access to cessation services for
  those addicted to tobacco products. (The Health Consequences of
  Smoking 50 Years of Progress A Report of the Surgeon General, 2014).

While cumulatively, these measures combine to change social norms and save lives as a result, it is perhaps the unspoken fourth leg of this stool that is most critical: mustering the political will to enact what we know works even though it might ruffle feathers and annoy special interests (Healton 2001). The sad fact remains that public health all too often loses out to corporate profit motives and the associated political influence, so we fail to do what we know must be done to achieve the life-extending results we desire.

While today's discussion focuses on those who peddle illicit drugs to our vulnerable youth and the adults they soon become, the business models they employ are not that dissimilar. Those who are motivated to profit from drug sales to risk-seeking and troubled teens, do so to make long-term customers of them. They care very little about their health and more about highly lucrative sales. The strategy is the same: attract young customers when their developing

brains are most vulnerable to risk taking and addiction and then reap the profits as they age and remain addicted.

It has been said that the definition of insanity is doing the same thing over and over again and expecting a different outcome. Efforts at controlling the illicit drug trade in the U.S. have by many accounts failed to produce measurable positive change, but we continue the same failed policies, hoping for a different result. Naturally, there are vested interests that profit from these failed policies, blocking needed reforms that might spark real progress and save lives. These are the bold reforms I hope the Committee will consider today.

A case in point might be the small nation of Portugal, where 15 years ago "they decriminalized low-level possession and use of all illicit drugs." According to the February 2015 study, *Drug Decriminalization in Portugal: A Health-Centered Approach*, which I have submitted today for the record, "results of the Portuguese experience demonstrate that drug decriminalization – alongside a serious investment in treatment and harm-reduction services – can significantly improve public safety and health."

Drug use and possession in Portugal remain illegal, albeit no longer triggering criminal sanctions. Drug trafficking offenses also remain illegal and continue to be processed through the criminal justice system.

Independent research confirms dramatic results including no significant increases in drug use, reduced problematic and adolescent drug use, fewer people arrested and jailed for drugs, more people receiving treatment, reduced incidents of HIV AIDS, fewer drug-related deaths and reduced social costs of drug misuse. This program, and others like it, prompted the Global Commission on Drug Policy (2011) -- and such respected public health institutions as Johns Hopkins University and The Lancet just last month (Csete 2016) to conclude that decriminalization is a path to saving lives, reducing infectious diseases and increasing access to much-needed substance abuse treatment.

The U.S. cannot be safe from drug-related criminal activity without first reframing the relationship between drug use and crime, and secondly, identifying ways to sharply reduce our apparently insatiable appetite for illicit drugs. This can be accomplished through the prevention of youth initiation, deglamorizing use via disruptive and innovative mass media campaigns aimed at "unselling" use and inducing those addicted or teetering on the verge to seek prompt treatment. It goes without saying that drug treatment needs to be available and covered by insurance plans.

Sean Clarkin, Executive Vice President for Research and External Relations at the Partnership for Drug Free America (now the Partnership for Drug Free Kids), has summarized the most important factors in combatting youth demand as follows:

- "Educate parents on the vulnerability of teens (90% of addictions begin in adolescence), and on the risk factors that make some kids MUCH more vulnerable than others (mental health issues, family history, traumatic events);
- Focus youth prevention efforts not just on the risks of use, but on the importance of protective factors: positive adult relationships; positive peer relationships; supervised activities - especially after school; parental communication and monitoring;
- Help kids see drug and alcohol use as one of a number of negative
  influences that make them less than they could be (the essence of the
  "Above the Influence" program: peer pressure to fit in rather than be
  themselves, to sit back rather than try, to push others around rather than
  be kind and inclusive);
- Insist that parents, educators and clinicians pay much greater attention to early use -- understanding that it has to be taken seriously, especially when risk factors are present, and that interrupting progression to harmful use has to be built into our mainstream healthcare system."

For many complex reasons, the impact evaluations of the public education campaign on youth drug use by The Office of National Drug Control Policy (ONDCP) did not result in a strong positive effect (Hornik 2008).

The "Above the Influence" Campaign did find positive effects but they were weaker than a similar campaign executed as a randomized trial (Slater 2011). The drug of focus there was marijuana, one with fewer adverse health outcomes than most others. Researchers did find that among eighth grade girls, greater exposure to the campaign was associated with lower use of marijuana (Carpenter 2011).

I have provided the committee with a number of key studies which demonstrate that well-designed and executed paid mass media campaigns can change youth knowledge, attitudes and behavior with regard to smoking. In response to a well-funded, major public education campaign, knowledge, attitudes and behavior quickly shifted both in response to a statewide Florida campaign (Bauer 2000) and a subsequent larger national campaign. In the first four years alone of the national campaign, 450,000 youth did not initiate smoking as a direct result of the campaign. The campaign-attributable decline represented at least 22 percent of the over-all decline in youth smoking during the period evaluated. (Farrelly 2002; Farrelly 2005; Farrelly 2009).

Researchers at Johns Hopkins and Columbia Universities concluded that in four years alone, the campaign averted \$1.9 billion in future medical care costs. (Holtgrave, 2009).

These are key lessons for the primary prevention of illicit drug use, which is defined as stopping illicit substance abuse before it begins or becomes habitual and addictive. These lessons should be applied as a basis for new program efforts at the national level. The same impact on initiation may be achieved in large part by powerfully hard-hitting, youth-focused communications, especially designed for youth at the highest risk of drug use. Messages must be designed - as they were for the truth® campaign -- to reach those most likely to initiate

drug use with compelling reasons to avoid initiation, including the fact that those profiting from their potential drug use are using them even if that person is a low-level dealer they consider to be their "friend".

The nation's long-standing, ONDCP-supported, Partnership for a Drug-Free America campaign's paid advertising effort was sharply curtailed after a decade of persistent budget cuts. It is urgently important to bring it back, and in doing so, to restructure it so that it is truly independent of the kinds of oversight that can undermine a public education campaign's ability to succeed. This specifically means that the creative development must include:

- Paid advertising at market rates to ensure the work is done by the hardest hitting, best team possible;
- Youth market research, appropriately targeted and designed for sub-sets at high risk, which will likely result in the bold ads being exceptionally unpalatable to adults and government agency staff;
- A focus on the drugs associated with the greatest harm and free of "approval" processes which interfere with the potential for campaign success due to conflicts of interest and adult sensitivities with respect to content and taste;
- Vigorous evaluation, in real time, to decommission ads that are not resonating with intended audiences and being nimble enough to quickly replace them with those that do. This is especially critical given that ads can have boomerang effects that are difficult to predict with certainty. (Fishbein 2002).

If public education efforts are also intended to reach adults to curb their drug consumption, a similar, laser-like focus on the actual communication target population must also be employed. For example, the current adult target includes those addicted to or habitual users of alcohol, prescription medication, black market opioids, cocaine and heroin. Each represents a niche

communication market and a comprehensive public education campaign can speak to each group with well-designed messages and action steps.

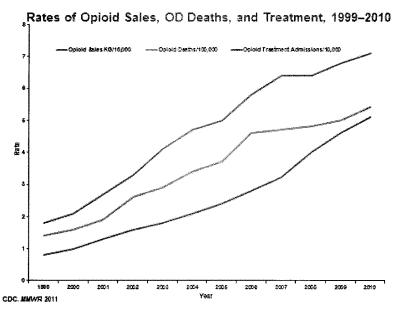
The current resurgent heroin epidemic sweeping our country is in substantial part the result of opioid addiction in young people (aged 20-34) who initially became addicted to prescription opioid medication used for pain or recreationally. Once unable to obtain the drugs through providers, many turned to lower cost street alternatives such as heroin.

According to Dr. Andrew Kolodny, the most important control approaches for the overall opioid epidemic include "preventing new cases of opioid addiction, treatment for people who are already addicted with safer alternatives and reducing the supply from pill mills and the black market."

Kolodny and colleagues have demonstrated that treatment with Buprenorphine saves lives from overdose and other opioid use complications. (Kolodny 2015). Buprenorphine was introduced in France in the mid 1990s, released without any of the limits imposed in the US and prescribed widely. Within six years, opioid overdose deaths decreased by a dramatic 79% (Auriacombe 2010).

Opioid addiction has increased 900 percent from 1997 to 2011. It is noteworthy that the bulk of the opioid epidemic is caused by too liberal use of painkillers which in turn leads to addiction. The solution rests in the hands of policy makers, the pharmaceutical industry and physicians.

The figure below depicts the surge in opioid sales, opioid deaths per 100,000 and opioid treatment admissions per 10,000. In addition to the opioid deaths included in these numbers, among those turning to heroin, an upswing in HIV and Hepatitis C infections is occurring. Public health secondary prevention strategies such as needle exchange programs, antiretroviral treatment and condom access are needed to control the spread of HIV.



CDC (Cent. Dis. Control Prev.). 2011. Vital signs: overdoses of prescription opioid pain relievers—United States, 1999–2008. MMWR 60: 1487–92.

Also urgently needed is the expansion of Naloxone and Narcan availability for law enforcement and others in close proximity of those at risk of overdose.

If we persist in using a "moralistic," criminal justice model for those addicted and at risk, we will miss a critical opportunity to turn the tide on an epidemic in which National Institutes of Health data suggest we have been achieving some success. Especially with regard to youth, "despite the ongoing opioid overdose epidemic, past year use of opioids other than heroin has decreased significantly each year over the past 5 years among the nation's teens and is at the lowest rate since the survey began." And for heroin use, 10th and 12th grade use "did have an annual prevalence above 1 percent at the beginning of the 2000s, so their rates of heroin use have now fallen by more than half." (Monitoring the Future 2015). We must continue this trend, inoculating today's teens against future opioid use.

In closing, there are proven ways to reach these young impressionable audiences with successful messaging. Thirty years ago, our nation's youth were challenged to "Just Say No" to drugs. In 2016, to truly stop the insatiable desire for illicit drugs in the US, it will take much more disruptive and innovative efforts, supported by the political will to "Just Do It."

This requires the abandonment of past failed policies for game-changing new ones.

Thank you.

- 1-Johnston LD, O'Malley PM, Miech RA, Bachman JG, Schulenberg JE. <u>Monitoring the Future</u>, <u>National Survey Results on Drug Use 1975-2015; 2015 Overview, Key Findings on Adolescent Drug Use</u>. 2016.
- 2-Johnston LD, O'Malley PM, Bachman JG, Schulenberg JE, & Miech RA. <u>Monitoring the Future national survey results on drug use, 1975-2014</u>: Volume II, college students and adults ages 19-55. 2015
- 3- U.S. Department of Health and Human Services. <u>The Health Consequences of Smoking 50 Years of Progress: A Report of the Surgeon General, 2014</u>. Atlanta, GA: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health, 2014.
- 4- Healton C. Who's Afraid of the Truth? American Journal of Public Health, April 2001; .91:828.
- 5- Drug Decriminalization in Portugal: A Health-Centered Approach, Drug Policy Alliance, February 2015.
- 6- Global Commission on Drug Policy (2011). War on Drugs: Rio de Janiero.
- 7- Csete, J et al. Public health and international drug policy. <u>The Lancet</u>, March 2016; 87(10026): 427–1480.
- 8- Hornik, R., Jacobsohn, L., Orwin, R., Piesse, A., & Kalton, G. (2008). Effects of the national youth anti-drug media campaign on youths. <u>American Journal of Public Health</u>, 98(12), 2229-2236.
- 9- Slater, M. D., Kelly, K. J., Lawrence, F. R., Stanley, L. R., & Comello, M. L. G. (2011). Assessing media campaigns linking marijuana non-use with autonomy and aspirations: "Be Under Your Own Influence" and ONDCP's "Above the Influence". <u>Prevention Science</u>, 12(1), 12-22.
- 10- Carpenter, C. S., & Pechmann, C. (2011). Exposure to the above the influence antidrug advertisements and adolescent marijuana use in the United States, 2006-2008. <u>American Journal of Public Health</u>, 101(5), 948-954.
- 11- Bauer UE, Johnson TM, Hopkins RS, Brooks RG. Changes in Youth Cigarette Use and Intentions Following Implementation of a Tobacco Control Program: Findings From the Florida Youth Tobacco Survery, 1998-2000. <u>JAMA</u>. August 2000, 284(6): 723-728.
- 12- Farrelly MC, Healton C, Davis KC, Messeri P, Hersey JC, Haviland ML. Getting to the Truth: Evaluation of National Countermarketing Campaigns. <u>American Journal of Public Health</u>, June, 2002; 92(6), 901-907.

- 13- Farrelly MC, Davis KC, Haviland ML, Messeri P, Healton C. Evidence of a Dose-Response Relationship Between truth\* Anti-Smoking Ads and Youth Smoking Prevalence. <u>American Journal of Public Health</u>, March 2005; Vol. 95(3), 425-431.
- 14- Farrelly MC, Nonnemaker J, Davis KC, Hussin A. The influence of the National truth campaign on smoking initiation. <u>American Journal of Preventive Medicine</u>. May 2009; 36(5): 379-84.
- 15-Holtgrave DR, Wunderink KA, Vallone DM, Healton C. Cost-utility Analysis of the national truth Campaign to Prevent Youth Smoking. <u>American Journal of Preventive Medicine</u>. May 2009; 36(5):385-8.
- 16- Fishbein M., Hall-Jamieson, K., Zimmer, E., von Haeften, I., Nabi., R. Avoiding the Boomerang: Testing the Relative Effectiveness of Antidrug Public Service Announcments Before a National Campaign. <u>American Journal of Public Health</u>, 2002, 92(2): 238-245.
- 17- Kolodny, A., Courtwright DT., Hwang CS., Kreiner, P., Eadie, JL., Clark TW., Alexander GC. The Prescription Opioid Heroin Crisis: A Public Health Approach to an Epidemic of Education. Annual Review of Public Health, January 2015 36: 559-74.
- 18- Auriacombe M, Fatseas M, Dubernet J, Daulouede J, Tignol J. French Field Experience with Buprenorphine. <u>American Journal on Addictions</u>, June 2004; 13(51): S17-S28.



## Homeland Security and Governmental Affairs Committee

## Peer-to-Peer: Preventing Substance Abuse

Development of a National Academic Partnership Campaign to Help Address America's Insatiable Demand for Drugs

Program Narrative and Technical Approach

April 13, 2016

Tony Sgro, CEO EdVenture Partners tony@edventurepartners.com 415.264.7666 www.edventurepartners.com

## **CURRENT SITUATION**

America needs to continue its search for innovative and creative strategies to reduce use, abuse, and demand for drugs. Growing substance abuse is crippling and destroying lives, families, and communities and has encouraged transnational criminal activity, which is a genuine threat to the homeland.

## SOLUTION

A Peer-To-Peer (P2P) methodology is an innovative and tested approach that can be adapted and utilized to help inform and empower youth to help curb America's insatiable demand for drugs. A P2P strategy enlists America's young people to engage in community-based problem solving and become part of the solution to curb substance abuse while enrolled in an appropriate university course and earning academic credit.

This approach is modeled after the successful "P2P: Challenging Extremism" (P2P:CE) global university initiative currently being implemented by EdVenture Partners at over 100 universities in 30 countries, with the goal to help make the world a safer place from hate speech, violence, terror, and extremism.

"P2P: Challenging Extremism", or P2P:CE as it is known, is a public-private sector partnership between the White House National Security Council, U.S. Department of Homeland Security, U.S. Department of State, the National Counterterrorism Center (NCTC), Facebook, and my organization EdVenture Partners (EVP). The support of this partnership allows EdVenture Partners to mobilize our academic partners to create and manage programs throughout the world.

"The P2P: Challenging Extremism initiative is now the forefront of counter messaging efforts for the U.S. Government."

National Counterterrorism Center (NCTC)

## **RATIONALE**

The premise of the P2P strategy is this: "Who better to educate, inform, and affect behaviors of young people through credible, authentic, and peer-appropriate social and digital media campaigns regarding drug use, abuse, and prevention than the very same audience who uses drugs?"

It makes perfect sense – empowering tech-savvy digital natives to mobilize the friends, neighbors, and communities they already know intimately. Consequently, they are in an ideal position to identify and enact effective community-based solutions that will be called on to push back on drug use and abuse through genuinely creative approaches in their communities.

The P2P model is currently being used effectively to challenge extremism domestically and around the world. Similarly, it is prudent to consider implementing a pilot P2P academic program on America's two- and four-year college and university campuses. P2P zeros in on the distributive power of the Millennial and Gen Z audience in

targeting and influencing their peers through various youthful campaigns, social and digital media strategies, and tactics focused on drug use, abuse, and prevention.

## **OVERALL OBJECTIVE**

Measurably engage large networks of America's youth through social and digital media initiatives, products, and tools to push back on drug use and abuse and promote drug awareness, abstinence, and prevention through the activation of peer-driven education and behavior changing campaigns on campuses and in their local communities.

## **PROGRAM OVERVIEW**

EdVenture Partners will develop, manage, and implement a customized "P2P: Challenging Substance Abuse" initiative leveraging our unique academic partnership model approach across the country.

Over the course of the spring 2017 academic term, EdVenture Partners will market the program and secure the participation of up to twenty (20) colleges and universities.

Sample coursework and classes for the program might include:

Addictions: Assessment, Intervention & Treatment Addictive Disorders Advertising Management

Community Tolerance & Social Engagement Contemporary Social Problems Designing Persuasive Communication

Drugs and Society

Entrepreneurship for Social Change

Family Dynamics of Addiction Influencing Public Opinion Integrated Marketing Communications

Marketing Communications
Public Interest Communications
Social Movements & Persuasion
Social and Digital Media
Youth, Drugs and Culture

Students at selected colleges and universities will form a student-run agency. Each university team will learn and discuss the challenges of America's insatiable demand for drugs through a "situation of interest" contained within an expertly written project brief which tasks students to develop and implement their own unique campaign that helps halt the pervasiveness of drug and substance abuse on their campus, community and/or state. (Note: EdVenture Partners will collaborate with leading SME's in the field to write the Project Brief.)

Students will begin the program by performing primary research on the defined target audience (example, persons under age 30). Their research is designed to determine current thoughts, perspectives and specific reference to the causes and effects of chemical abuse, addiction, and the process of recovery in their communities. Utilizing their research findings, student teams will design, implement, and measure the success of a social or digital initiative, product, or tool aimed at accomplishing the program objectives. These successes may include:

- Motivating or empowering youth to become involved in constructive dialogue about the cause, assessment, treatment, and recovery of adolescent substance abuse.
- Catalyzing other students to create their own initiative, products, or tools to that address the cause, assessment, treatment, and recovery of adolescent substance abuse.
- Building communities of interest/networks focused on living shared values that result in constructive dialogue about the cause, assessment, treatment, and recovery of adolescent substance abuse.

## **PROGRAM BENEFITS**

By participating in an EdVenture Partners program, HSGAC will receive the benefit of EVP's unique P2P approach that has been tested and validated over 2,000 times on over 800 colleges and universities since 1990. Some benefits to HSGAC for electing to support a customized social marketing program include:

- Proof of performance from over 25 years of model testing with private and public sector, trade association, and non-profit clients spanning several industry sectors;
- Access to EVP's faculty and administration proprietary database and established relationships;
- · Peer-developed strategies by Millennials and Gen Z;
- Campaigns in markets across the country that are activated and tested locally, providing program scalability of the best ideas;
- Measured advertising, marketing, online, and PR impressions;
- · Ownership of all creative and IP developed through the program;
- · Connection to specific majors and diverse student and community populations;
- · Create student, faculty, and academic influencers; and
- · Access to the campus environment during the academic term.

## **TECHNICAL APPROACH**

The "P2P: Preventing Substance Abuse" program will be broken into four phases: Program Planning; Program Period; Submission Review; and Program Closeout.

Below is a description of each program phase.

## Program Planning

## Program Development

EdVenture Partners will meet the HSGAC Project Manger (PM) to kick off the program. During this meeting HSGAC and EVP will collaborate to develop the program outline. Utilizing the project brief designed for the program, EVP will develop a timeline that outlines each phase of the program and a schedule for achieving the tasks described below:

EVP will develop a password protected project portal for faculty and student participation that will be used to implement the program. The project portal is an online third-party project management system and shall be administered by EVP. The project portal allows for online communication, collaboration, resource sharing, tracking of tasks, calendaring of milestones and events, and shall provide for the process by which student teams will upload their program submission for review. A separate and unique project page shall be developed for each participating school within the project portal.

## School Marketing and Selection

- EdVenture Partners will market the program to targeted universities that offer the appropriate courses in which to host the program. EVP will work with HSGAC to secure up to twenty schools for program participation. School selection criteria may include, and is not limited to:
  - Four-year college or university which offers either undergraduate and/or graduate level courses;
  - b. Community colleges;
  - HBCU, HACU, Native American and Pacific Islander school designation;
  - d. Rural, suburban, and urban schools;
  - e. Offer the appropriate course in which to host the Program;
  - f. Have the willingness and ability of faculty to participate based on the sensitive nature of the subject matter; and
  - g. Schools with proven results and relationships with EVP will be given priority.
- After schools are selected, EVP program marketing may include:

- Introductory email notification to Deans, Chairs, and faculty at selected schools about the program;
- b. EVP faculty email/phone call invitation to review the program;
- In-person meetings with faculty and administration to review Program objectives;
- d. EVP Facebook announcement; and
- e. Continual email blasts with updated announcements and program details throughout the program registration process.

## Program Period

## Program Launch

After selection of schools, EVP will work to perform the following tasks:

- a. Confirm participating schools;
- b. Send a roster of all participating schools to HSGAC PM;
- c. Post faculty and student supplemental resources on project portal;
- d. Conduct user test of the project portal and resolve any errors prior to live program launch;
- e. Communicate program objectives, timeline, rules and regulations, and deliverable requirements to each Student Team;
- f. Administer and distribute \$2,000.00 student budget funds per school to be utilized by program participants for research, creative, public relations, advertising, awareness building, and community engagement activities; and
- g. Answer questions from faculty throughout the program implementation period.

## Collect Program Submissions

As determined in the Program Planning phase, each student team must electronically submit their campaigns to EVP. Within five (5) business days, EVP shall:

Send each judge a link to download submissions for review and scoring;
 and

b. Provide access to all program submissions to HSGAC.

## Submission Scoring

EVP shall facilitate the judging of the program submissions by ensuring:

- For the first round of scoring, HSGAC shall use the program scoring rubric to review and rank each student team submission; and
- b. The top three (3) schools shall be identified.

## Final Presentation

The top three (3) schools are determined and faculty and students are notified;

- a. Top domestic schools will be identified;
- b. Travel arrangements (air, ground, hotel and meal per diem) for fifteen (15) students and three (3) faculty to present their campaign strategy and results in Washington, D.C. to the HSGAC, senior U.S. Government leaders, industry practitioners, and media in a competition for scholarship awards for the national competition presentation (included in the program budget estimate);
- c. The top three (3) schools will receive a five thousand dollar (\$5,000), three thousand dollar (\$3,000), and one thousand dollar (\$1,000) scholarship awarded to first place through third, respectively, on behalf of the U.S. government based upon final competition judging (included in the program budget estimate).

## Report of Findings

- a. EVP will notify the top student teams who will be invited to present their findings to HSGAC;
- EVP, with the approval of the HSGAC, will identify a panel of judges made up of senior officials, law enforcement, local community leaders, and substance abuse professionals to act as a review panel during the presentation;
- The review panel will interview and prep on expectations and timelines for critiquing and providing feedback on each school's campaign;

- d. Top teams will present their research, campaigns, results, and recommendations of the panel in a public forum. These presentations shall include a question and answer session;
- e. After the presentations, EVP will post the three (3) top submissions on their corporate website and Facebook page for student and faculty viewing; and
- f. EVP to recognize the top teams for their campaign results.

## Program Closeout

EdVenture Partners shall provide a final report that provides an overview of the program and outlines the problems, successes, and gaps of the program by July 31, 2017.

## **PROGRAM BUDGET ESTIMATE**

For a pilot "P2P: Preventing Substance Abuse" program, twenty universities will be invited to participate. HSGAC will have the opportunity to learn a tremendous amount during this pilot, and will see a significant variety of campaigns being tried and implemented on this scale. A 20-campus amount is also EVP's base requirement number of campuses for clients given the ramp-up and resource requirements and allocations of the organization.

Program Cost: \$260,000 firm fixed cost (does not include the student operating budget each university gets, as that is a variable budget amount each client decides upon.)

Suggested Student Operating Budget Additional Cost: \$2,000 per university (X 20 universities) = \$40,000

Company of Control of the Control of		
Item	Category	Budget Estimate
Α	School Roster & Database Development	\$23,660.00
В	Program & Resource Development	\$70,410.00
С	University Marketing & Outreach	\$27,470.00
D	Project Portal Development	\$15,720.00
E	Student Operation Budgets	\$40,000.00
F	Program Implementation	\$113,740.00
G	University Awards	\$9,000.00
Total Program Budget Estimate		\$300,000.00

"P2P is high impact, low cost and easy on U.S. taxpayer dollars."

House Committee on Homeland Security

For the pilot of "P2P: Challenging Extremism" initiative, EVP implemented 20 university programs. For the second tranche it expanded to 45 schools. For the current Spring 2016 semester, we have 55 campuses. Since P2P:CE's inception, we have implemented 128 P2P:CE programs on 98 different universities in 30 different countries.

For the Fall 2016 semester, we are funded for 150 universities in total, allocated as 50 domestic and 100 international.

## PROGRAM PERFORMANCE MEASURES

EdVenture Partners works with each participating school to establish benchmarks that can be used as an effective way to analyze results for each campaign. By establishing a benchmark of existing audience sentiment, identifying the attitude or behavior change that would show a message's impact, and then using a combination of tools to periodically examine progress, the measure of a campaign's effectiveness can be captured and reported to HSGAC. Measurement tools should be tailored to the knowledge, behavior, or attitude change the messaging campaign is intended to affect based on HSGAC's objectives and would to be used before, during, and following the campaign.

Intended outcomes can include: awareness building, knowledge creation, attitudinal shift, or behavior changes. Sample "P2P: Preventing Substance Abuse" program success measures for each team to capture might include:

- Number of people who access the web portal for the initiative, product, or tool.
- Number of people who "favorite" the web portal or digital platform or otherwise indicate their support for it.
- Number of people who join the initiative, participate in its activities, and/or download/use a product or tool. Teams should also measure the quality of involvement (participation in a single event vs. volunteering for ongoing activities, support for marketing a product or tool vs. simply downloading it once, etc.).
- Number of students on the team's university campus who are aware of the initiative, product, or tool.
- Number of social media references to the initiative, product, or tool.
- Number of organizational partners and/or sponsors for the initiative, product, or tool.
- The degree to which the project is self-sustaining. Examples of potential measures include financial base for continued operation; number of individuals

or organizations that have agreed to continue the initiative, product, or initiative; number of independent "spin-off" initiatives and their reach; and products or tools that members of the target audience have created and plan to continue using (this is not an exhaustive list of potential measures).

 Tracking of any opposition to the initiative, product, or tool, analyzing the response, and providing recommendations on how to navigate the challenge moving forward.

## WHAT STUDENTS DO

Students participating in the program will interact with EVP's representatives throughout the course of the program. EVP works with students and faculty to support the performance of the following activities as part of their program participation:

- Develop, activate, and assess the results of a marketing campaign designed to achieve the HSGAC objectives;
- Conduct research within the defined HSGAC target audience to obtain statistical evidence and analysis of the drivers of the audience's perception, attitudes, belief systems, and social concerns relating to substance abuse;
- Analyze primary and secondary research data as basis for validating strategies and tactics incorporated in a marketing campaign;
- Develop an initiative, product, or tool aimed at the defined target audience and accompanying advertising, social media, and public relations strategies necessary to gain awareness, engagement, and adoption for the initiative:
- Activate a marketing campaign on campus and in the local community utilizing \$2,000 marketing activity funds;
- Develop a system for tracking impact, audience education, and potential behavior change within the target audience; and
- Provide a detailed submission to EVP for the marketing campaign that includes: background and objectives, pre-campaign research, marketing strategies and outcomes, publicity strategies, post campaign research, measures of campaign effectiveness, and recommendations at the culmination of the program.

## WHAT FACULTY DO

The program is implemented in a classroom over the course of the Spring 2017

academic term. Therefore, the program becomes part of the curriculum and is guided by a faculty member throughout the term. The role of participating faculty includes:

- Review program materials in their entirety and receive all necessary department and administration approvals before fully accepting the invitation to host the program on campus;
- Incorporate the program elements into the course syllabus, allocating sufficient time for student participation and applying an acceptable percentage of the grade to the program;
- Provide open, friendly, and frequent communication with EVP representative assigned to assist in program implementation;
- Provide timely feedback to students on all strategies and tactics associated with the program;
- Ensure all strategies, tactics, and materials created by students are vetted for professionalism and acceptability by the university and the HSGAC; and
- Ensure completion of all required program elements in collaboration with EVP's representative.

END.

Submitted by EdVenture Partners

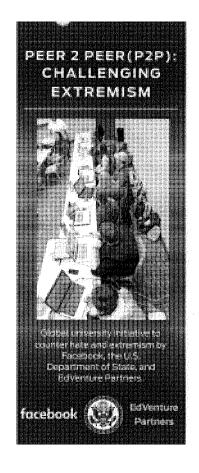
www.edventurepartners.com

116

## Appendix

The following two pages:

P2P: Challenging Extremism Tri Fold

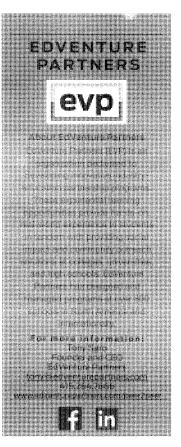


Social media and propaganda by extremist groups is often targeted directly at young, impressionable youth.

University students are in the best position to educate their peers about how to challenge this messaging and empower each other through the development of a social or digital initiative, product, or tool to counter violent extremism.



**#ChallengeExtremism** 





## PEER 2 PEER: CHALLENGING EXTREMISM

University students from around the world develop campaigns and social media strategies against extremism that are credible, authentic, and believable to their peers and resonate within their communities.

#### How it works



Student teams, working with their professor, review client objectives and program resources.



Teams research the target market and create a strategy designed to best reach o and influence their peers.



Each team receives \$2,000 (USD equivalency) to produce a real campaign that has measurable impact on their campus and in their community.



U.S. Department of State and the Facebook Global Digital Challenge will be recognizing the top six teams with scholarship awards ranging from \$5,000 to \$1,000. Top international team(s) also participate in a U.S. International Visitors Leadership Program (IVLP).



All campaign assets, resources, and results transferred to the client to be used as actionable ideas that can continue to be utilized in the effort to combat global extremism.



University Participants

## The Peer 2 Peer Initiative

Jan 2015 - June 2016

- 95+ Universities
- 30+ Countries
- 3,000+ Student participants
- · Mobile apps, cultural activities, videos, campus movements, social campaigns

#### Media coverage

The Wall Street Journal Time

PBS NewsHour Advertising Age Al-Arabiya Foreign Policy

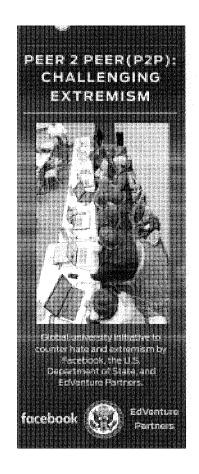
Daily Pakistan Yahoo News

National Public Radio allAfrica

"Those recruiting for ISIL aren't looking for people who are devout and knowledgeable about the tenets of Islam. They're looking for people who are gullible enough to believe that terrorists enjoy a glamorous lifestyle..."

- Secretary of State John Kerry

"Creating and promoting positive speech is an essential element to countering hate and extremism online - that's why Facebook is a strong supporter of P2P." - Monika Bickert, Head of Product Policy, Facebook

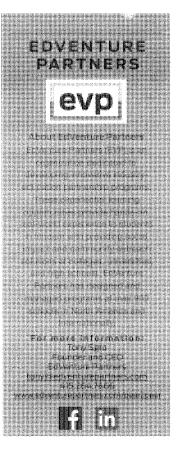


Social media and propaganda by extremist groups is often targeted directly at young, impressionable youth.

University students are in the best position to educate their peers about how to challenge this messaging and empower each other through the development of a social or digital initiative, product, or tool to counter violent extremism.



#ChallengeExtremism





## PEER 2 PEER: CHALLENGING EXTREMISM

University students from around the world develop campaigns and social media strategies against extremism that are credible, authentic, and believable to their peers and resonate within their communities.

#### How it works



Student teams, working with their professor, review client objectives and program resources.



Teams research the target market and create a strategy designed to best reach o and influence their peers.



Each team receives \$2,000 (USD) equivalency) to produce a real campaign that has measurable impact on their campus and in their community.



U.S. Department of State and the Facebook Global Digital Challenge will be recognizing the top six teams with scholarship awards ranging from \$5,000 to \$1,000. Top international team(s) also participate in a U.S. International Visitors Leadership Program (IVLP).



All campaign assets, resources, and results transferred to the client to be used as actionable ideas that can continue to be utilized in the effort to combat global extremism.



University Participants

## The Peer 2 Peer Initiative

Jan 2015 - June 2016

- 95+ Universities
- 30+ Countries
- 3,000+ Student participants
- Mobile apps, cultural activities, videos, campus movements, social campaigns

#### Media coverage

The Wall Street Journal Time

PBS NewsHour Advertising Age Al-Arabiya Foreign Policy

Daily Pakistan Yahoo News

National Public Radio allAfrica

"Those recruiting for ISIL aren't looking for people who are devout and knowledgeable about the tenets of Islam. They're looking for people who are gullible enough to believe that terrorists enjoy a glamorous lifestyle..."

- Secretary of State John Kerry

"Creating and promoting positive speech is an essential element to countering hate and extremism online - that's why Facebook is a strong supporter of P2P."

- Monika Bickert, Head of Product Policy, Facebook

Robert J. Budsock

April 13, 2016

Washington DC As Prepared for Delivery

Thank you, Mr. Chairman.

Chairman Johnson, Ranking Member Carper, Members of the Committee, it is a pleasure to join you and the other distinguished leaders here today. My name is Robert Budsock and I am the President and CEO of Integrity House, which is a nonprofit addiction treatment program providing services in the state of New Jersey. Integrity House was founded in 1968 and our mission is to provide comprehensive addiction treatment and recovery support to help individuals reclaim their lives.

Addressing the demand for illegal drugs is one of our nation's great challenges. The consequences of drug use for individuals include drug dependency and addiction, involvement with the criminal justice system, chronic health issues, overdose, and in many cases, death. Many of the challenges faced by this committee are linked to the demand for drugs. The consequences of the demand for drugs includes drug trafficking and violence, billions of dollars in costs to our criminal justice and public health systems, and compromises to our border security.

Through science and research, we know that drug addiction is a brain disease which can be treated effectively. A focus on addiction treatment will reduce the number of active drug users, resulting in a reduced demand for illegal drugs and a reduction in overdose deaths.

I would like to present some facts about the insatiable demand for illegal drugs that we are experiencing in America:

- Illicit drug use in the United States has been increasing at a frightening rate. The
  annual National Survey on Drug Use and Health (NSDUH) conducted by the
  Substance Abuse and Mental Health Services Administration(SAMHSA)
  estimated that 24.6 million Americans age 12 and older had used an illicit drug in
  the past month. That is 9.4% of the entire population. 1
- One of the factors that has led us to categorize the current crisis in the United States as an epidemic is the huge increase in the number of overdose deaths. Accidental death from the use of drugs recently surpassed motor vehicle accidents as the number one cause of death for young people in our nation. According to the Centers for Disease Control and Prevention (CDC) there were 47,055 overdose deaths in 2014 and approximately 129 Americans on average

died from a drug overdose every day.<sup>2</sup> Tragically, overdose deaths are increasing in every state, in rural areas, cities, and suburbs alike, and among all segments of our population.

Drug addiction is a complex disorder that can involve virtually every aspect of an individual's ability to function—in the family, at work and school, and in the community. Because of the complexity and pervasive consequences of addiction, treatment typically must involve many components. Some of those components focus directly on the individual's drug use; others, like employment training, focus on restoring the addicted individual to productive membership in the family and society, enabling him or her to experience the rewards associated with abstinence.

In addition to stopping an individual's drug abuse, the goal of treatment is to return that person to a productive, well-functioning part of their family, their workplace, and the community. According to research that tracks individuals in treatment over extended periods, most people who get into and remain in treatment stop using drugs, decrease their criminal activity, and improve their occupational, social, and psychological functioning. However, individual treatment outcomes depend on the extent and nature of the patient's problems, the appropriateness and duration of treatment, and related services used to address those problems, as well as the quality of interaction between the patient and his or her treatment providers.

Like other chronic diseases, addiction can be managed successfully. Treatment enables people to counteract addiction's powerful disruptive effects on the brain and behavior and to regain control of their lives. But the chronic nature of this disease means that relapsing back to drug abuse is not only possible but also likely, with symptom recurrence rates similar to those for other well-characterized chronic medical illnesses—such as diabetes, hypertension, and asthma —that also have both physiological and behavioral components.

Because drug abuse and addiction are major public health problems, a large portion of drug treatment is funded by local, State, and Federal governments. Private and employer-subsidized health plans also may provide coverage for treatment of addiction and its medical consequences. Unfortunately, managed care has resulted in shorter average stays, while a historical lack of coverage or insufficient coverage for substance abuse treatment has curtailed the number of operational programs.

The mandate of parity for insurance coverage of mental health and substance abuse problems will hopefully improve this state of affairs. Health Care Reform stands to increase the demand for drug abuse treatment services, and presents a concurrent opportunity to study how innovations in service delivery, organization, and financing can improve access to and use of these services.<sup>3</sup>

On the supply side, there has been extraordinary effort by the DEA, Federal Bureau of Investigation, Homeland Security Investigations, and Department of Justice's Organized Crime Drug Enforcement Task Forces (OCDETF) to target, disrupt, and

dismantle international drug trafficking organizations that manufacture, transport, and distribute illegal drugs destined for and distributed across the United States. We must recognize, however, that these efforts do not reduce the insatiable demand for these illegal substances. Clearly interdiction in and of itself is not enough.

We also have the support of local medical personnel and law enforcement agencies that are saving lives through the use of naloxone (also known as Narcan) which reverses the effects of an opioid overdose. Today, 46 states and the District of Columbia have enacted statutes that expand access to naloxone or provide "Good Samaritan" protections for possession of a controlled substance if emergency assistance is sought for a victim of an opioid overdose. It should be noted that the use of Narcan to reverse overdose is only a temporary lifesaving intervention. It is not treatment, and being administered naloxone doesn't in and of itself lead to treatment.

Based on scientific research conducted by the National Institute of Drug Abuse over the past 40 years, I would like to highlight five of the key principles which form the basis of any effective treatment program:

- Addiction is a complex but treatable disease that affects brain function and behavior.
- No single treatment is right for everyone.
- People need to have quick and ready access to treatment.
- Effective treatment addresses all of the patient's needs, not just his or her drug
  use.
- There is a correlation between length of stay and the effectiveness of treatment; staying in treatment long enough is critical; short-term programs and/or interventions are just not effective for everyone.

It has been known for many years that the "treatment gap" is massive—that is, despite the large and growing number of those who need treatment for a substance use disorder, few receive it. According to the Substance Abuse and Mental Health Services Administration (SAMHSA) only 2.6 million Americans-11.2 percent of those who needed treatment—received it at a specialty facility. 4

I can't name another disease or chronic health condition where this is tolerated or allowed to perpetuate. Can you imagine if only 11 percent of people with diabetes had access to diabetes treatment? How about cancer?

There was great hope with the launch of the Affordable Care Act and implementation of Federal Parity laws which were expected to extend access to mental health benefits and substance use disorder services for an estimated 62 million Americans. You would think that insurance coverage, even Medicaid coverage, would be the differentiator, providing access to the full continuum of care for SUD.

Regrettably, if you get your health insurance coverage through Medicaid, it is barred from paying for community-based residential treatment at a facility of 16 beds or

more. This happens under something called the Medicaid Institutions of Mental Diseases (IMD) Exclusion which originated in the 1960s as part of a national effort to de-institutionalize large psychiatric hospitals. Though community based residential treatment programs for Substance Use Disorders (SUD) didn't exist when the IMD Exclusion was established, addiction treatment programs are considered IMDs in the eyes of the Centers for Medicare and Medicaid Services, thus disqualifying reimbursement for care at a program like Integrity House and hundreds of similar programs around the country. Integrity House is a longtime and active member of Treatment Communities of America, a national association of nonprofit residential SUD treatment providers, which has advocated for years for expanding access to treatment by eliminating the IMD Exclusion.

This policy is unfair, and results in people on Medicaid being treated like secondclass citizens. In a health care system where the law of the land is to cover physical and behavior health at parity, the continued existence of the IMD is unreasonable.

Reducing the treatment gap requires a multipronged approach. Strategies include increasing access to effective treatment, achieving insurance parity, reducing the stigma associated with drug treatment, and raising awareness among Americans of the value of addiction treatment. In the midst of the current opioid abuse epidemic, there is a huge shortage of treatment beds, and far too many barriers to accessing treatment. We could effectively, and quickly, expand access by simply eliminating the IMD Exclusion for SUD treatment, making available thousands of new treatment beds to those covered by Medicaid across the country.

Senator Dick Durbin of Illinois earlier this year introduced S. 2605, the Medicaid Coverage for Addiction Recovery Expansion Act (Medicaid CARE) that would reform the IMD Exclusion as it applies to SUD treatment, allowing for Medicaid to pay for treatment for patients at facilities of up to 40 beds for 60 days. This is a good start toward reform, and I would respectfully urge the Senators here to support it as one of the solutions to our epidemic.

I understand that when the Senate HELP Committee recently marked up a series of bills to address the opioid epidemic and mental health reform, several Senators – on a bipartisan basis – called for reforming or eliminating the IMD Exclusion when the Senate considers those bills on the floor. That should give us new reason for optimism, and I hope Congress can take meaningful action on this front before the year is done.

Substance abuse costs our nation approximately \$600 billion annually, and effective treatment can help to greatly reduce these costs. Drug addiction treatment has been shown to reduce associated health and social costs by far more than the cost of the treatment itself. According to several conservative estimates, every dollar invested in addiction treatment programs yields a return of between \$4 and \$7 in reduced drug-related crime, criminal justice costs, and theft. When savings related to healthcare are included, total savings can exceed costs by a ratio of 12 to 1. Major

savings to the individual and to society also stem from fewer interpersonal conflicts; greater workplace productivity; and fewer drug-related accidents, including overdoses and deaths.

Thank you for the opportunity to testify here today. We are proud of the life-saving work that we have been doing at Integrity House for over 48 years, and I hope that my testimony has helped inform the deliberations of this committee. I look forward to answering your questions and working with you to develop and implement solutions.

## Sources

- 1. https://www.drugabuse.gov/publications/drugfacts/nationwide-trends
- Rudd, RA, Aleshire, N, Zibbell, JE, and Gladden, RM. Increases in Drug and Opioid Overdose Deaths – 2000-2014. Centers for Disease Control and Prevention: Mortality and Morbidity Weekly Report. Jan. 1, 2016. 64(50);1378-82. Available at: <a href="http://www.cdc.gov/mmwr/preview/mmwrhtml/mm6450a3.htm?s-cid=mm6450a3\_w/">http://www.cdc.gov/mmwr/preview/mmwrhtml/mm6450a3.htm?s-cid=mm6450a3\_w/</a>
- https://www.drugabuse.gov/publications/principles-drug-addictiontreatment-research-based-guide-third-edition/drug-addiction-treatment-inunited-states
- 4. https://www.drugabuse.gov/publications/drugfacts/treatment-statistics

## Post-Hearing Questions for the Record Submitted to General John Kelly, USMC (Ret.) From Senator Ron Johnson

## "America's Insatiable Demand for Drugs"

## April 13, 2016

 How much would it cost the U.S. government to interdict 90 percent of the estimated drug flow that we have visibility of?

Senator, when I was the commander of SOUTHCOM, we worked toward meeting a goal levied on us by the Office of National Drug Control Policy to remove 40% of the cocaine moving through the transit zone. If met, this 40% goal should put a significant dent in the huge profit margins of transnational criminal organizations. I can tell you that the professionals at Joint Interagency Task Force South (JIATF-South) in Key West, who execute this mission on our country's behalf, require 21 vessels to meet that 40% goal. Those 21 vessels would ideally be medium and long range ships equipped with a flight deck and law enforcement teams. The experts at JIATF-South often told me that this is a linear equation – for every complete force package that includes a ship and aircraft, they estimate they can interrupt an additional 20 metric tons of cocaine.

This is, however, complicated by what we expect will be an increase in the denominator—the amount of cocaine leaving Colombia. Colombia, our best ally in the region and a country with whom we have a special relationship both in the region and globally, is fighting our fight against cocaine and take annually nearly 200 metric tons out of the flow, destroy hundreds of labs, and eradicate thousands of acres of coca on the bush. But in spite of all this effort, and the lives of many of their military personnel, police and local officials, cocaine production is expected to increase in the coming years, as criminal networks adapt to a changing security environment and exploit the potential power vacuum created by the FARC's demobilization—which is why our continued support to Colombia remains essential.

During my time at SOUTHCOM, we had unmet and significantly under-resourced ISR requirements. We would normally receive a fraction of what we actually needed. This intelligence is critical to not just stopping the flow of drugs—it's critical to understanding and ultimately dismantling the powerful networks involved in moving those drugs, weapons, Special Interest Aliens (SIAs) and the like.

SOUTHCOM's efforts in the counterdrug realm are in direct support of US and partner nation law enforcement agencies. If we are serious about getting after the drug problem we must increase funding to our law enforcement agencies—DEA, FBI, DHS, CBP, HSI, and others—the heroes who are on the front lines of this effort. The US Coast Guard and Department of Homeland Security play especially critical roles in pursuing 'end game' interdictions. I continue to strongly support the Coast Guard and DHS' efforts to recapitalize their fleet of cutters, some of which are in the fifth decade of service.

Finally, I would be remiss if I did not reiterate the need to get after and significantly lower demand in our country. Demand is the beginning and the end of the drug trafficking industry and the reason why so many of our close partners in Central and South America, including Mexico, experience such high levels of violence, lack of economic development and investment, and in some cases are nearly failed states. As long as there is a demand for drugs in our country, for cocaine, heroin and methamphetamines, drug traffickers, motivated by the extraordinary profits involved in this business, will rise to the occasion.

2. What is the cost and success rate of treatment for drug addiction? Is it a cost effective solution?

According to the National Drug Intelligence Center, the economic cost of drug abuse in the United States was estimated at \$193 billion in 2007 (the last available estimate).in costs related to crime and the justice system, lost work productivity, and health care. Even with that level of investment, the National Institute on Drug Abuse has found that 40 to 60 percent of drugs addicts will relapse. Although I would point out that one of the witnesses at the same hearing, a lifelong expert in rehabilitation, indicated the overall rate was much less than these estimates would indicate. This is a telling statistic when weighing whether treatment and rehabilitation are cost effective. We spend an exorbitant amount of money, the same witness estimated \$36,000 a year, only to have at least half of those treated relapse.

Getting after the epidemic of drugs in this country is going to require a multi-faceted effort that includes both the supply and demand problems. We have to give our courageous law enforcement and military personnel the tools to address insecurity in the source countries and to interdict the illicit substances before they reach our shores. But we also need a comprehensive campaign within the American society that reaches young people before they begin to experiment which is the first step in a direct path to addiction and related violent crime, prostitution and human trafficking, burglaries, etc. We have been successful and many other behavior modification efforts since the 1980s as I mentioned in the hearing, and reinforced by others on the panels, campaigns against cigarette smoking, drunk driving, for seat belt and air bag use in automobiles, car seats for kids, and the list goes on.

We have never had such a comprehensive campaign against drugs. The last time we had anything approaching a demand reduction pitch of any kind was in the early 1980s. The key is to target teenagers by driving the cost up and availability down. This includes educating and if necessary penalizing medical professionals who over prescribe powerful and highly addictive pain killers which is the single biggest cause of the current opioid / heroin addiction crisis. We must focus information campaigns like the FBI's and DEA's "Chasing the Dragon" on teenagers, parents, teachers, Boy and Girl Scout leaders,

medical professionals and law enforcement—but particularly on middle and high school students.

The military and law enforcement role is best accomplished not on the SW border playing the game perpetually on the one-yard line, but on the high seas getting a ton+ at a time and by supporting our partners to the south especially Colombia, Peru, Honduras, Panama, Costa Rica, and the other Central American Republics and Mexico. This support should be in the form of counterdrug funding but also economic investment to reshape the economies and societies our drug demand has nearly destroyed. Rehabilitation and medical treatment is most certainly part of the equation, but demand reduction at home is the solution to everything else we do.

Senator, as I mentioned in my testimony, 47,000 Americans died of drug-related incidents last year up from a historical norm of  $\sim 40,000$ . Most, if not all, of these deaths are entirely preventable. That is the true cost of our inaction when it comes to drug abuse in our country.

## Post-Hearing Questions for the Record Submitted to General John F. Kelly, USMC (ret.) From Senator Rob Portman

## "America's Insatiable Demand for Drugs" April 13, 2016

1. You stated in your written testimony that you believe that transnational crime organizations (TCOs) could "unwittingly" transport terrorists and even weapons of mass destruction (WMDs) into the United States. You also underscored these organizations' profit motive. While you cautioned that no indications suggest such activity is taking place, are there any apparent factors or motivators that would discourage these organizations from actively and willingly transporting terrorists or WMDs?

Response: Transnational criminal organizations (TCOs) are motivated by profit. Some TCOs would avoid wittingly transporting terrorists or WMDs out of fear that doing so would invite greater law enforcement scrutiny on their operations, which in turn would likely have a negative effect on their operations and jeopardize their profits. However, other TCOs are less concerned with the potential for greater scrutiny by law enforcement. They don't check passports or run background checks on the people who enlist their services. These TCOs are willing to move anything or anyone if the profit outweighs the risk.

2. Based on your professional experience and judgment, if you were given the opportunity, what change would you make tomorrow to inhibit the operational effectiveness of the TCOs that you discussed in your prepared testimony?

Response: Transnational criminal organizations are extremely well resourced and efficient networks that operate with near impunity. At current levels of resourcing, the men and women tasked to counter these violent criminals are at a severe disadvantage. There are many intelligence gaps against these networks, as well as a lack of assets needed to disrupt the networks. Continued and strengthened whole-of-government collaboration is also necessary to disrupt the networks that operate with no stove-piping of authorities, capabilities, or territorial boundaries. I have come to believe that their greatest vulnerability are their bank accounts. The Department of the Treasury is already involved but I think we seriously need to consider upping our game and going after their billions in a multifaceted campaign that includes all the tools available to law enforcement and Treasury, but "cyber-withdrawal" as well and simply closing down their accounts after seizing their ill-gotten gains.

America's insatiable demand for drugs has blazed a trail of violence and corruption from the source zone in South America, through the transit zone of Central America. We owe it to our partner nations to support them as they work to eradicate corruption, strengthen citizen security and the rule of law, and create educational and economic opportunities for their people. This will also require a whole-of government effort from both the US and partner nations to build

their capacity to establish and maintain security and stability in the region – eliminating the ease with which the TCOs now operate.

3. Can you describe the trends you have seen in drug trafficking operations?

Response: As our operations target the flow of narcotics in the CENTAM region, traffickers look for more direct routes into the US and Mexico from source zones. Over the past year, DTO's have maximized profits and decreased their risk of interdiction by directly trafficking drugs to Guatemala and Mexico. Traffickers are also sending more cocaine to more profitable markets such as Europe, Asia, and Africa. Additionally, recent press reports indicate local consumption in Central and South America may be increasing as well; this offers DTOs limited profits from transit and source zone countries with minimal risk of interdiction.

a. Are there any aspects that make heroin unique?

Response: Heroin is a much more potent drug and its market value per kilo usually exceeds the value of cocaine. In some parts of the country, such as the Northeast, the value of heroin is twice that of cocaine. Heroin often times provides greater return and less risk when compared to cocaine. DTOs have to ship much larger volumes of cocaine to match the profits generated by heroin.

Mexico is the primary supplier of heroin to the United States. Opium poppy cultivation in Mexico has increased significantly in recent years. Much smaller amounts are also produced in Guatemala and Colombia.

Because heroin is often smuggled in small amounts to the United States overland across the Southwest Border or transported by couriers on commercial airlines, making it extremely difficult to intercept it once it is en route. For that reason, it would be more effective to focus our collective efforts on disrupting its production and processing operations as close to the point of origin as possible.

4. Ohio is facing a record number of fentanyl related drug overdoses. My understanding is that fentanyl often comes from China smuggled across the Southern border. From there, heroin is laced with fentanyl and brought into the U.S. by cartels. Is this an accurate assessment? Can you elaborate on the challenges of fentanyl interdiction?

**Response:** In China, the companies producing these chemicals are doing so legally, and the companies there claim that they only produce and ship it for research purposes. There is no real effort to identify what entities are purchasing these chemicals. It would take a concerted effort

between US and Chinese law enforcement to truly counter the shipment of illicit precursor chemicals. Drug traffickers continue to coordinate illegal shipments of fentanyl and its precursors from China. They are able to hide the shipments on mislabeled manifests in order to circumvent law enforcement or security forces. Law enforcement's limited interdiction capability only allows the search of approximately 1 to 3% of all commercial cargo containers.

Mexico-based cartels are not only lacing heroin with fentanyl but are also producing fentanyl masked as painkillers, such as oxycodone. Mexican cartels are producing a variant of fentanyl called acetyl fentanyl. While the majority of the fentanyl causing overdoses across the U.S. is from this illegal stockpile produced by Mexican cartels, a portion of it also comes in legally to pharmaceutical companies, according to the DEA. Many fentanyl shipments and the pill presses required to produce the final product are shipped directly from China to the US. Notably, one gram of pure fentanyl is equivalent to 100 g of high quality street heroin and has 80 to 100 times the potency of morphine.

Pharmaceutical grade fentanyl can also be acquired through doctors and insurance companies. Subsys is an example of a Pharmaceutical grade fentanyl prescribed to cancer patients for pain; from 2012 to 2015, only 2.4 percent of all Subsys prescriptions were prescribed by cancer doctors.

Precursor chemicals for Fentanyl are readily available on the internet, which makes it incredibly difficult to monitor and track each substance.

## Post-Hearing Questions for the Record Submitted to General John F. Kelly, USMC (Ret.) From Senator Claire McCaskill

# "America's Insatiable Demand for Drugs" April 13, 2016

In 2010 I chaired a hearing on our counter-narcotics efforts in Latin America. Through the Merida Initiative and Plan Colombia, we have spent billions of dollars on counter-narcotics activities in the region, with much, if not most of the money going to contractors.

But these contracts did not have effective performance management systems and lacked oversight in general, so it was impossible to determine the effectiveness of these contracts. In fact, it was like pulling teeth just getting basic contracting information from DOD and the State Department.

I know you became head of Southcom after this hearing.

1) As head of Southern Command in the years following my hearing what actions were taken to improve oversight of the counter-narcotics contracts money being spent?

Response: Where feasible SOUTHCOM consolidated contracts under a single Indefinite Delivery/Indefinite Quantity (IDIQ) Contract providing an indefinite quantity of supplies/services over a fixed period of time. This provides both flexibility and ease of execution for the contracts SOUTHCOM executes in support of the Counternarcotics Program. At the direction of the Deputy Assistant Secretary of Defense for Counter-narcotics and Global Threats (DASD CN-GT), SOUTHCOM primarily uses the U.S. Air Force Acquisition Management Integration Center (AMIC) for the majority of its contract services. This provides consistency and rigor to the SOUTHCOM contracting processes.

As you pointed out in your testimony, 100% of the heroin and cocaine and 90% of the methamphetamines coming into the U.S. are coming from Latin America, and seizures of drugs at the border have remained about constant overall, with only the mix of drugs coming in changing some. The network that supplies these drugs starts in Colombia, according to your testimony. Simply put, demand in this country is as high as ever and the supply of drugs from Latin America continues to meet our insatiable demand.

2) What are the metrics we've been using to measure the effectiveness of our multi-billion dollar investment, and are those the right metrics to use if both the supply of and demand for drugs are as high as ever?

Response: I can only speak to the funding executed by SOUTHCOM; the vast majority of funds spent on the Merida Initiative and Plan Colombia were actually executed by the Department of State. SOUTHCOM has metrics for all of its major programs and report them annually as part of its annual Program Objective Memorandum (POM) submission. The Command assesses each of

its three counternarcotics program mission areas – detection and monitoring (D&M), building partner capacity, and intelligence.

- Detection and Monitoring (D&M): It is DoD's statutory mission to detect and monitor
  all illicit air and maritime drug traffic headed toward the U.S. In FY15 we saw a 42%
  increase in disrupted/seized drug shipments. SOUTHCOM continues to take more and
  more drugs off the market, which is a positive metric.
- Building Partner Capacity: SOUTHCOM measures the ability of its partner nations to
  use, maintain, and sustain the capabilities it provides, which when integrated into the
  JIATF-S operational architecture provide synergy to our detection, monitor, interdiction,
  and apprehension efforts. Statistically the partner nations are directly involved in more
  than half of JIATF-S events using equipment/training/capabilities provided through
  SOUTHCOM's counternarcotics program. This mission area is particularly important as
  SOUTHCOM attempts to mitigate its significant asset shortfalls.
- Intelligence: With limited operational assets, SOUTHCOM relies more and more on technological advancements. A 44% increase in detected events in FY15 was directly attributed to "enhanced intelligence," which includes a variety of technological advancements providing better targeting through improved geospatial location and increased data analysis.

As I discussed at length in my testimony, however, all of the efforts of military and law enforcement officials cannot stop the drug flow into the U.S. as long as the demand in this country remains as high as it is. I would again refer you to public relations campaigns we have run as a country in the past that have been successful in decreasing smoking and increasing the use of seat belts. We know how to do this successfully but have chosen to ignore the drug problem for too long.

3) Have we changed tactics or strategies or developed better metrics to measure our success since our billions of dollars have not done much to reduce the supply of drugs coming in from Latin America?

Response: I would disagree that our efforts are not reducing the supply of drugs reaching cities in the United States. In FY15, the efforts of the men and women carrying out this mission yielded a 42% increase in disrupted/seized drug shipments. That translates into 193 metric tons that never reached our shores or the streets of St. Louis. Thus far in FY16, those men and women have already removed 163 metric tons from the market. However, the heroic efforts of our military and law enforcement professionals cannot solve this problem. If we, as a country, do not put serious effort into reducing the demand for drugs in the U.S., many more billions and the efforts of US and partner nation forces will not solve the problem on the supply side.

The tactics and strategies of our adversaries change often. They are well funded, adaptive, and committed. Those who would pilot a multi-million dollar semi-submersible from a launch in Ecuador to a rendezvous off the coast of Guatemala are tough and well-financed adversaries. To meet these challenges we must adapt and evolve as well, especially because we do function in a resource-constrained environment. SOUTHCOM has had to compensate for its lack of US military assets by building the capacity of willing partner nations to disrupt the drug flow as it

heads to the US to meet our great demand. The Command has expanded and strengthened partner nation maritime capabilities to include increased range and station time through use of "mother ships" and provision of interceptor boats. They are also streamlining intelligence sharing with partners to get ahead of traffickers. They are also expanding the targeting of broader transnational organized criminal networks.

According to DOD, in FY 2010, we had 188 contractors supporting our counter-narcotics efforts in Colombia. Part of the plan involved turning over these operations to the Colombians.

4) Do you have a sense of how many contractors were in Colombia when you left Southcom?

Response: I believe there were approximately 75 contractors in Colombia supporting operations at various sites throughout the country. I can also tell you that many major programs under Plan Colombia have already been turned over to the Colombians and others are on track to be turned over, meeting all milestones toward that goal. The Regional Helicopter Training Center (RHTC) in Melgar is scheduled to be nationalized by the Colombians in the first quarter of 2019 is on track to do so on time. The Colombians have greatly expanded a program of unmanned aircraft systems initially funded by the US from one hub-and-spoke program in a limited geographic area to a much larger portion of the country and the maritime environment. Similarly, the backbone defense communications system initially sourced and supported with counternarcotics funding is now supported almost completely by the Government of Colombia with a total expenditure 10 times greater than our initial investment. This is also true of Plan Colombia funding overall — the U.S. contribution to Plan Colombia was only about 5%. Colombians contributed the vast majority of the funding and all of the fighting to bring their country back from the brink of the abyss.

General Kelly, in your testimony, you discussed the importance of protecting the "southern approaches" to the U.S. It is interesting that you used the word "approaches" instead of specifically discussing the border itself, because, as you go on to say in your testimony "this cannot – should not – be attempted as an endless series of 'goal-line stands' on the one-foot line at the official ports-of-entry or along the thousands of miles of border between this country and Mexico."

Yet in 2013, the U.S. spent \$145 million on the Central America Regional Security Initiative, or CARSI. There were programs devoted to economic support, rule of law improvement, good governance, counternarcotics, efforts, education, trade and investment, and support for Central American militaries.

At the same time, we spent \$1 billion on a failed border technology program that ended up securing just 53 miles of the U.S.-Mexican border in Arizona. All told, according to one estimate, we've spent \$90 billion over the past decade on border security, or \$9 billion per year, on average.

5) Is anyone taking a 50 thousand foot view of our spending priorities to make sure we are not just trying to make goal-line stands forever?

Response: The Department of Defense believes in and implements a system of layered defense that aims to protect the homeland by taking a multi-faceted approach that includes building partner capacity to secure their own borders; intelligence sharing; transit zone detection and monitoring; close cooperation among law enforcement agencies, the intelligence community, and adjacent Combatant Commands.

SOUTHCOM implements this approach by supporting the interdiction of multi-ton drugs shipments in international waters that stops more drugs, more efficiently, with minimal violence. Our law enforcement partners are also able to gain valuable intelligence and understanding of how these criminal networks operate by prosecuting suspected drug traffickers in the US court system. Through our building partner capacity efforts, we build capable and willing partners who respond to cueing by JIATFS to support regional counterdrug operations and who are working toward interagency approaches to border security.

6) Does it make sense to focus so many of our resources directly on the border or should we be spending more to help these countries improve their own economies, judicial systems and police forces?

Response: I believe you have to address the root causes of any problem in order to actually solve it. Those root causes in Central America include astronomical levels of violence, corruption, and weak rule of law. However, given the extreme lack of citizen security and the high levels of corruption in the police forces in Central America, disciplined and professional militaries are critical to setting the necessary security environment in which the governments of those countries can chip away at those root causes. Like the people of Colombia, Central Americans will have to address all of these facets of their society before they can regain stability in their region.

In a prior hearing this committee had on the southern border, Lieutenant General Kenneth Tovo, the Military Deputy Commander of Southcom referenced the President's National Strategy to Combat Transnational Crime, which was released 5 years ago. The Administration also released the Strategy for U.S. Engagement in Central America.

5 years after I had my hearing looking at the lack of coordination and oversight of contractors in the region, Lieutenant General Tovo expressed frustration that interagency activities in the region were still poorly coordinated and minimally funded.

7) Who is in charge of seeing that these strategies are implemented well and that there is coordination between agencies?

Response: The President's National Strategy to Combat Transnational Crime was never followed up with an implementation plan, which would have outlined lead and support agencies/departments. The Interdiction Committee (TIC), a principals level interagency committee chaired by the US Coast Guard Commandant, provides the primary venue for the components of this strategy to be discussed.

The National Security Council has designated the State Department as the lead for implementation of the Strategy for US Engagement in Central America. Beginning in June, the Department of State Western Hemisphere Affairs Bureau will lead monthly interagency working group sessions. Each month the working group will focus on one pillar of the strategy (Prosperity, Governance, and Security).

8) Is anyone held accountable for the failure to coordinate efforts across federal agencies?

Response: Interagency coordination is of course a White House (National Security Staff) so your efforts should focus there. Since there is seemingly no lead agency or department at the strategic level for the President's CTOC Strategy, accountability ultimately falls to the operational/tactical levels where men and women with a bias for action and a willingness to take action and responsibility reside. I of course am most familiar with the efforts of SOUTHCOM and JIATF-S, whose coordination across federal agencies is imperative to success of this mission. However, this leaves a significant gap, as SOUTHCOM and JIATF-S are focused on a limited portion of this strategy by the nature of its authorities to operate. Other agencies are also executing programs in this region aimed at greater security and stability, however, a much greater coordinated interagency effort is required to address the complex issues facing Central America.

I believe accountability for interagency efforts under the Central American Strategy is primarily held by the Office of the Vice President, who has been personally involved in development of the strategy and coordination with our Central American Partners. The Department of State Bureau of Conflict and Stability Operations produces a quarterly report, which provides analysis on the impact of USG programs. Congress has also been active in conducting oversight and holding departments accountable for efforts in Central America.

9) How often are agencies meeting to discuss implementation and coordination?

Response: At the tactical/operational level, JIATF-S conducts interagency coordination on a daily basis. At the strategic level, the Interdiction Committee meets annually, providing opportunities for policy-level discussions that span across all domains. Primary interagency coordination at the tactical and operational level is completed on a case-by-case basis by each embassy and its country team. At the strategic levels, coordination is conducted via NSC sub-IPC meetings, which have proven inadequate as coordination has been only in terms of programmatic and budgetary requirements – the same approach that has left CARSI as an ineffective tool.

Given the complexity of the environment there is a need for a strong interagency collaborative process wherein authorities do not dictate who gets to do what but instead what capabilities they bring to a larger effort. In addition, this collaboration process must have central and iterative opportunities to reframe the problem.

While these partnerships are superb at the tactical level, I am frustrated by the lack of a comprehensive U.S. government effort to counter the TOC threat. Nearly five years after the release of the President's *National Strategy to Combat Transnational Organized Crime*,

interagency CTOC activities in the region—especially in Central America—remain poorly coordinated and minimally funded. Fortunately, there is growing recognition that the magnitude, scope, and complexity of this threat demand an integrated counternetwork approach

Under the current approach, there is no discussion on the problem at large nor how programs can work together in a synchronizing/complimentary perspective. The focus is specifically on stove-piped programmatics and budgetary impacts. Given the static nature of the US Strategy for CENTAM, there are only multiple single efforts for what each agency is doing – void of any unity of effort or effect.

The regularity of interagency implementation and coordination is conducted monthly by DOS WHA lcd CENTAM Strategy Working Group sessions. Previously, as the strategy was in its implementation development, the NSC hosted sub-IPCs on a bi-weekly process. Given we have entered into execution, NSC created an implementation plan that transferred interagency coordination to DOS WHA.

And compared to the rest of the world, what we spend to help improve the governance of Latin American countries is nothing. In 2012, just 8% of U.S. foreign assistance went to Latin America and the Caribbean. By comparison, 35% went to the Middle East, 30% went to Africa, and 21% went to South and Central Asia. As of 2009, the U.S. was spending just \$4.4 million on police training in Guatemala, Honduras and El Salvador, combined. By contrast, the U.S. was spending \$327 million in Mexico and \$390 million in Iraq. The U.S. spent as much on police training in Albania in 2009 as was spent in these three countries.

10) Are we guilty of ignoring some serious issues on our own doorstep?

Response: Yes, Scnator, I believe we are. We tend to focus on East-West relations and issues, all the while ignoring the great partners we have to the South. The countries share much more than a land mass with us. We share many common beliefs, histories, and cultures. Our partners in the Western Hemisphere are strong and willing and want to work closely with the United States. Many of them are just as capable and in some cases more capable than our European Allies and willing to take on leadership roles in the hemisphere and the world. And some of them need our help as they struggle to restore security and stability in our shared home. Central America is suffering from a scourge of violence and corruption, fueled by our insatiable demand for drugs. We owe it to them to stand shoulder-to-shoulder with them in this fig

#### Post-Hearing Questions for the Record Submitted to Mr. Jonathan Caulkins From Senator Ron Johnson

#### "America's Insatiable Demand for Drugs"

#### April 13, 2016

1. What is the cost and success rate of treatment for drug addiction? Is it a cost effective solution?

Answer: That is an excellent and important question, one that is better answered with a book than a few paragraphs. What I will try to do here is make a few general points and key distinctions.

Rigorous research strongly favors expanding treatment as a cost-effective use of taxpayer dollars overall, and 1 think it is safe to say it can also help reduce the flow of drugs across U.S. borders. However, that is because treatment is relatively inexpensive, and the problems it seeks to ameliorate are so terrible, not because treatment has a high success rate in the common sense notion of the term. Longitudinal studies in diverse countries that track opiate dependent individuals recruited from treatment programs often find long-run death rates elevated by a factor of ten or so relative to the general population, after controlling for age, and many of those deaths are from overdose. That is better than for opiate dependent individuals who do not receive treatment, but obviously is much worse than for people who never became dependent. After proper treatment, a broken arm can be just as strong as it was before the injury; by contrast, even with the best treatment, life prospects for those who are drug dependent remain bleak compared to their compatriots who never became dependent.

To elaborate on treatment not being terribly expensive – dependence is a true medical condition, but its treatment mostly does not look like modern, high-tech medicine. There are no operations using expensive machinery (or expensive surgeons). Relatively little of the care is provided by MDs. Hospitalization is the exception, and other than opiate substitution therapy, there are not even many medications involved. In short, drug treatment makes little use of the high-priced resources that make so much of American healthcare terribly expensive. It is thus far most cost-effective than other widely-used treatments in American medicine for example coronary artery bypass surgery and arthroscopic knee surgery.

To elaborate on the limited effectiveness – one common result of offering treatment to someone who is drug dependent is that they never even show up for treatment or if they do enroll, they nonetheless drop out fairly quickly. That is one reason why partnerships between law enforcement and treatment have a role; criminal justice supervision can increase retention in treatment.

Furthermore, while it is true that people who stick with treatment through its full course have much better life outcomes than those who drop out quickly, we can't take that as proof that

treatment helped those people. It is entirely possible that those who were the worst off before treatment will be the ones who tend to drop out quickly and also the ones who suffer the most in the long run, and that those whose life circumstances were less dire will be better able to remain in treatment and also to do better in the long run. The correlation between treatment retention and favorable long-run outcomes does not in and of itself prove the longer exposure to treatment created the more favorable long-run outcomes.

The better metaphor is that with or without treatment the dependent individual has a chronic relapsing condition that will persist for many years. The main question is whether they struggle with that disease aided by the support of government-funded or employer-funded services or whether the full burden of that disease falls entirely on the individual and their family.

Treatment does improve many measureable outcomes, such as life expectancy, access to other health and social service programs, and employment. And it does reduce substance use. But to put it bluntly in the context of the topic of this hearing, if in one way or another 1,000 dependent cocaine users were assembled who would have consumed an average of 150 grams a year for the next 10 years if they didn't receive treatment, and so account for a total flow of 1.5 metric tons of cocaine shipments crossing the U.S. border over that time, and those 1,000 were offered the standard treatment we are able to offer at present, those 1,000 individuals might well still consume as much as 1.0 metric tons of cocaine over the next decade despite having been given access to treatment.

I don't want to put too much emphasis on the 150 grams or the 1.5 metric tons or the 1.0 metric tons; they are merely meant to illustrate the idea that treatment reduces but far from eliminates consumption. The particular best estimates of treatment's effectiveness at reducing consumption of black market drugs depend on the particular characteristics of the clients, how well-funded the treatment programs are, the future trajectory of prices and availability in the illegal cocaine market, and many other factors. But in broad terms, treatment can help reduce flows of drugs across the border but one should not think of it capable of shutting off that flow of drugs the way that fixing leaky pipes can shut off the flow of dripping water.

One final point – different drugs are, as always, different. We have much better technologies for treating opiate and alcohol addiction than we do for treating addiction to stimulants such as crack, powder cocaine, or methamphetamine. And marijuana is also in a class by itself. The paragraphs above are written primarily with the hard drugs in mind.

For more on the cost-effectiveness of opiate treatment, see Report 3 of the American Society of Addiction Medicine's project on Advancing Access to Addiction Medications, available at <a href="http://www.asam.org/docs/default-source/advocacy/aaam\_implications-for-opioid-addiction-treatment\_final">http://www.asam.org/docs/default-source/advocacy/aaam\_implications-for-opioid-addiction-treatment\_final</a>. Unfortunately the evidence base concerning treatment of stimulants, like the treatment methods themselves, are much less advanced than they are for treating opiates.

#### Post-Hearing Questions for the Record Submitted to Dr. Jonathan P. Caulkins From Senator Rob Portman

# "America's Insatiable Demand for Drugs" April 13, 2016

1. I firmly believe in drug prevention. I've been working on prevention for more than 20 years and am the author of the Drug-Free Communities, which has funded thousands of coalitions through a federal investment of more than 1.3 billion dollars. You testified in your about the importance of evidence-based prevention, particularly as it relates to youth. We know that the perception of risk can be one of the greatest factors in whether or not young people choose to experiment with drugs. The Comprehensive Addition and Recovery Act (CARA) would provide additional resources to community coalitions so that they can broaden their work to focus on the challenges of heroin and opioids create. CARA includes drug take back initiatives and educating the community about the risks associated with prescription drug abuse. What are other ways we can prevent drug abuse and show our young people that this behavior possesses a high risk?

Answer: A dedicated community of scholars and practitioners has been working intensively for roughly 40 years trying to figure out how to dissuade youth from using dangerous drugs, including the legal drugs (alcohol and tobacco), the traditional illegal drugs (cocaine, heroin, meth, ecstasy, etc.), and now two important intermediate categories (diverted prescription drugs and marijuana in its current, odd, legal situation in Colorado, Washington, Oregon, Alaska and the District of Columbia). It is important also to recognize that these efforts share a great deal with efforts to prevent youth from making other poor choices (dropping out of school, engaging in unprotected precocious sexual activity, joining gangs, and so on).

By and large, the wisdom of this community is to recognize the commonalities across these various "temptations" and to stress general skills. For example, an intervention that evaluations found to have striking success at reducing drug use was the "Good Behavior Game", which is not in any overt sense about drugs. Rather, it is a set of strategies to induce better classroom behavior from elementary school children by tapping positive peer pressure.

The behaviors that lead to points being charged against a student team are not drinking, smoking or the like; the game is implemented with kids too young to yet be using drugs. Rather, the focus of the game is more typically on disturbing and disruptive behavior in the classroom. But improving those fundamental behaviors apparently produces benefits across an extremely wide range of outcomes, including but in no way limited to substance abuse.

These more general or comprehensive approaches to prevention emerged in part out of disappointment with the failures of traditional anti-drug messaging that might stress, for example, how dangerous drugs are.

That is not to say that more specific campaigns never work. The "Truth" campaign was specific to cigarettes and was surprisingly effective, arguably in part because of its unique strategy of demonizing the industry, and the tobacco industry's manipulation of the product for profit, rather than demonizing the product itself. A quip I've heard that does not come from a randomized controlled trial, but may nonetheless contain a germ of insight is that it is very hard to discourage teen-agers – with their over-confidence bias and sense of immortality – from using something because it is dangerous, but if you tell teens the purveyors of the product are trying to take away the their autonomy – by tricking them into becoming addicted – that is hitting teens in their sensitive spot.

Nevertheless, my sense is that diversion of prescription drugs (most notably opioid pain killers) and marijuana during this transition time may be such special cases that behavior-specific messaging could be valuable. One you mention—take back programs—seems appealing. Besides getting a certain number of bottles out of people's houses, where they could be diverted or used by kids, the take back programs send a message that those drugs are too dangerous to leave lying around. The fact that we also have take back programs for guns might have the additional benefit of getting people to lump prescription drugs and guns into a single mental category of things that are dangerous.

And they really are both quite dangerous. It is hard to get data on the number of guns in the U.S., but when I made a rough attempt to estimate the numbers of: (1) guns owned in the US, (2) gun-related deaths in the U.S., (3) opioid prescriptions, and (4) prescription opioid related deaths, it seemed to me that the number of deaths per opioid prescription could be

within a factor of three of the annual number of gun-deaths per gun (all causes including suicides and accidents, not just homicides).

Responsible gun owners know that guns should be stored in a locked safe, but I do not recall hearing a public education campaign that stressed the idea that prescription opioids should be stored in a locked medicine cabinet. To give a concrete example, last week my wife was prescribed oxycodone for her fractured leg (even though she reported no pain, and we will not fill the prescription), but the doctor never asked whether we have children in the house or otherwise gave safety instructions comparable to those we would have received if we'd bought a gun at Field & Stream.

So even though drug-prevention programs of the 1970s that stressed drugs' dangers were not found to prevent use, in part because they tended to exaggerate and sensationalize the dangers, I would not let such past failures discourage us from trying to communicate to the public the particular lethality of these prescription pain killers.

A second, distinct, type of public messaging relevant for prescription pain killers but not most other drugs is telling people about naloxone. Again there could be a double benefit: (1) Informing people about naloxone and (2) Associating in people's minds prescription drugs with overdose death.

Concerning prevention messaging for marijuana when states are legalizing it – I am sure that we do not know what to do, and so I am sure that it ought to be an active topic for innovation, evaluation, and research. There clearly needs to be some messaging to counter teen's mistaken inference that since marijuana can be used as medicine it must be safe. (It is ironic that teens hold such views when prescription opioids are killing so many tens of thousands of people, but they do.) And it is clear that we need better messaging about the dangers of driving after using marijuana use. Although the science suggests that driving under the influence of alcohol is more dangerous per mile driven, survey data suggest that marijuana users are much more likely to drive within two hours of using marijuana (and that most such episodes actually involve use of both marijuana and alcohol, not just alcohol). MADD and other organizations succeeded in changing social norms to make it unacceptable to drink and drive; we need a comparable effort to convince people it is irresponsible to drive

stoned. And that will be quite difficult since the government has such low credibility with regard to warning about marijuana's dangers.

There is also the enormous question of how to prevent the spread of marijuana vaping from spilling over into a spread of nicotine vaping, and that from progressing to smoking of tobacco. But the identification of a specific behavior one would like to prevent is only the first of many difficult steps that might eventually lead to an effective prevention program. The larger history of prevention science has two sobering lessons: (1) It is easy for adults to invent prevention messages that they think ought to work and (2) It is hard for adults to actually change teen-agers behavior. The changes are so valuable that of course it is worth trying, but we should do so with realistic expectations concerning their likely effectiveness.

2. You discussed the Swift, Certain, and Fair (SCF) program in South Dakota at the hearing. Would this be applicable to juvenile offenders, or should juvenile offenders receive treatment-centered care in contrast to being held accountable under a SCF program?

Answer: My sense is that swift, certain, and fair (SCF) may have potential to help criminally involved youth who have substance abuse problems, but that is not the best demographic to start with. Everything is more complicated and controversial when working with youth. I fear that a poor implementation of SCF with youth might sour the public to the overall concept. But we can think through what a good target for implementation might look like.

First, it is important to note the SCF applies to individuals who have committed serious enough crimes that they could be sentenced to incarceration – or in the case of juveniles to some juvenile detention facility. And the proper framing of the choice is not treatment vs. SCF but rather: (1) Detention, (2) Community release without SCF (and perhaps with treatment), or (3) Community release with SCF (meaning the clients are free to get treatment if they chose, but typically are not required to do so although there is no reason treatment could not also be mandated).

The potential target population would be youth who the criminal justice system would prefer not to detain, e.g., because the juvenile detention facility is over-crowded and unable

to deliver effective services, and whose parents do not believe they can control in the home environment. If the parents and the juvenile court concluded that substance abuse was an important part of the reason that the parents cannot control their child, then a SCF regimen might be worth trying before giving up and sentencing the youth to a long period of detention. Again, it is important to stress that being in SCF in no way interferes with also being in treatment. So the courts could mandate treatment attendance as well as SCF and could even construe SCF as the "stick" that gives the youth an extra incentive to stick with treatment.

The target population I just described is a pretty small group – far smaller than the number of youth who abuse, let alone simply use, substances. But it is a very important group and one for which current interventions do not always produce wholly satisfactory outcomes. So a well-designed study that evaluated whether the SCF concept can usefully be extended from adults to youth may be in order.

My fear, though, would be "net widening", a term that refers to an intermediate sanction being used not in place of detention but rather in place of a sentence or condition that involved no incarceration whatsoever. (And a related fear would be that even if the program were only used in lieu of detention, its critics might accuse it of increasing rather than decreasing the amount of detention.)

Interestingly, I was recently party to a conversation concerning use of SCF for perpetrators of domestic violence who (as is not uncommonly the case) are violent when they are drunk (or are on drugs). Ironically, in that case the fear was the opposite, namely that SCF would be used in place of pure incarceration, whereas the victims advocacy groups might only want it to be used as a way of being tougher on those who would not otherwise be incarcerated (and there was also fear that critics would portray it that way even if that portrayal were disingenuous).

In sum, I would rather see SCF directed first at criminally-involved, high-frequency adult users of stimulants (cocaine/crack and meth). There are a relatively modest number of such individuals (on the order of two million, or roughly 5% of Americans who have used an illegal drug in the last year), but they consume at such very high rates that they account for about half of the dollar value of illegal drugs flowing across U.S. borders. Furthermore, in

contrast with opiate dependence, we generally lack effective pharmacotherapies for treating people who are dependent on stimulants.

#### **Responses to Questions:**

TESTIMONY
DR. CHERYL G. HEALTON, DEAN
COLLEGE OF GLOBAL PUBLIC HEALTH
NEW YORK UNIVERSITY
BEFORE THE COMMITTEE ON HOMELAND SECURITY
AND GOVERNMENTAL AFFAIRS

## **UNITED STATES SENATE**

## AMERICA'S INSATIABLE DEMAND FOR DRUGS

#### APRIL 13, 2016

1. I firmly believe in drug prevention. I've been working on prevention for more than 20 years and am the author of Drug-Free Communities, which has funded thousands of coalitions through a federal investment of more than \$1.3 billion. You testified about the importance of evidence-based prevention, particularly as it relates to youth. We know that the perception of risk can be one of the greatest factors in whether or not young people choose to experiment with drugs. The Comprehensive Addiction and Recovery Act (CARA) would provide additional resources to community coalitions so that they can broaden their work to focus on the challenges that heroin and opioids create. CARA includes drug take-back initiatives and educates the community about the risks associated with prescription drug abuse. What are other ways we can prevent drug abuse and show our young people that this behavior possesses a high risk?

Those who are motivated to profit from drug sales to risk-seeking and troubled teens do so to make long-term customers of them. They care very little about their health and more about highly lucrative sales. They attract young customers when their developing brains are most vulnerable to risk taking and addiction, and then reap the profits as they age and remain addicted.

The U.S. cannot be safe from drug-related criminal activity without first reframing the relationship between drug use and crime and, secondly, identifying ways to sharply reduce our

apparently insatiable appetite for illicit drugs. This can be accomplished through the prevention of youth initiation, de-glamorizing use via disruptive and innovative mass media campaigns aimed at "unselling" use, and inducing those addicted or teetering on the verge to seek prompt treatment. It goes without saying that drug treatment needs to be available and covered by insurance plans.

Not all drugs (including tobacco and alcohol) in fact carry the same physical, psychological and social risk, and educating teens about drug use ought to include this fact. Access to prescription opioids in the home and those that spill over into the illicit drug market lay the foundation for addiction and future use of street heroin in lieu of pills. There is a crucial role for the FDA and others to change the prescription patterns for pain killers. Alcohol and opioids cause the greatest number of teen drug deaths. As the CDC has stated, it has no reported marijuana deaths, for example. There are other risks associated with marijuana use including entanglement with the legal system, reduced motivation etc. Substance control aimed at reducing access, and education and treatment should focus considerable attention on the drugs costing the most lives.

- 2. How would you craft a marketing campaign in 2016 that responds to the heroin, fentanyl, and opioid epidemic?
  - a. Would you even utilize broadcast television?
  - b. Do you think television shows like *Breaking Bad* may be counterproductive in efforts to discourage illicit drug use?

Primary prevention of illicit drug use is defined as stopping illicit substance abuse before it begins or becomes habitual and addictive. These lessons should be applied as a basis for new program efforts at the national level. The same impact on initiation may be achieved in large part by powerfully hard-hitting, youth-focused communications, especially designed for youth at the highest risk of drug use. Messages must be designed -- as they were for the truth® campaign -- to reach those most likely to initiate drug use with compelling reasons to avoid initiation, including the fact that those profiting from their potential drug use are using them even if that person is a low-level dealer they consider to be their "friend".

The nation's long-standing, ONDCP-supported, Partnership for a Drug-Free America campaign's paid advertising effort was sharply curtailed after a decade of persistent budget cuts. It is urgently important to bring it back and, in doing so, to restructure it so that it is truly independent of the kinds of oversight that can undermine a public education campaign's ability to succeed. This specifically means that the creative development must include:

 Paid advertising and ad development at market rates to ensure the work is done by the hardest-hitting, best team possible;

- Youth market research, appropriately targeted and designed for sub-sets at high risk, which will likely result in the bold ads being exceptionally unpalatable to adults and government agency staff;
- A focus on the drugs associated with the greatest harm and free of "approval" processes
  which interfere with the potential for campaign success due to conflicts of interest and
  adult sensitivities with respect to content and taste;
- Vigorous evaluation, in real time, to decommission ads that are not resonating with
  intended audiences and being nimble enough to quickly replace them with those that
  do. This is especially critical given that ads can have boomerang effects that are difficult
  to predict with certainty. (Fishbein 2002).

The media marketplace has changed but network and cable advertising can still drive web traffic and thus have a role. Social media-based communication also do and a contemporary campaign should also have a grass-roots component both on the web and in communities on the ground in areas of highest risk. The focus should be laser-like on those who have not yet used and those who are occasional users but "undecided."

If public education efforts are also intended to reach adults to curb their drug consumption, a similar, laserlike focus on the actual communication to target populations must also be employed. For example, the current adult target includes those addicted to or habitual users of alcohol, prescription medication, black market opioids, cocaine and heroin. Each represents a niche communication market, and a comprehensive public education campaign can speak to each group with well-designed messages and action steps.

Media of all kinds may influence drug use either up or down. Only a systematic study could determine the impact on knowledge, attitudes and behavior of a show like *Breaking Bad*. In the 70s at the peak of the heroin epidemic, efforts were undertaken to curtail explicit injection drug use in movies.

# 3. What is the cost and success rate of treatment for drug addiction? Is it a cost-effective solution?

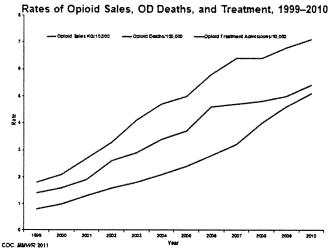
According to Dr. Andrew Kolodny, the most important control approaches for the overall opioid epidemic include "preventing new cases of opioid addiction, treatment with safer alternatives for people who are already addicted and reducing the supply from pill mills and the black market."

Kolodny and colleagues have demonstrated that treatment with Buprenorphine saves lives from overdose and other opioid use complications (Kolodny 2015). Buprenorphine was introduced in France in the mid-1990s, released without any of the limits imposed in the US and

prescribed widely. Within six years, opioid overdose deaths decreased by a dramatic 79% (Auriacombe 2010).

Opioid addiction has increased 900 percent from 1997 to 2011. It is noteworthy that the bulk of the opioid epidemic is caused by too liberal use or prescription of painkillers which in turn leads to addiction. The solution rests in the hands of policy makers, the pharmaceutical industry and physicians.

The figure below depicts the surge in opioid sales, opioid deaths per 100,000 and opioid treatment admissions per 10,000. In addition to the opioid deaths included in these numbers, among those turning to heroin, an upswing in HIV and Hepatitis C infections is occurring. Public health secondary prevention strategies such as needle exchange programs, antiretroviral treatment and condom access are needed to control the spread of HIV.



CDC (Cent. Dis. Control Prev.). 2011. Vital signs: overdoses of prescription opioid pain relievers—United States, 1999–2008. MMWR 60: 1487–92.

Also urgently needed is the expansion of Naloxone and Narcan availability for law enforcement and others in close proximity of those at risk of overdose.

Sadly the recently passed opioid bill has virtually no new money for prevention and treatment. The cost of prevention and treatment is cost effective and thus warranted to saves lives, reduce disability and keep people productive or return them to productivity through effective treatment.

NOTE: July 13, 2016

### Opioid bill passes, but there's little money to act on its wish list

Read more here: http://www.thenewstribune.com/news/politics-government/article89403007.html#storylink=cpy

#### WASHINGTON

With hold-your-nose support from most Democrats, the U.S. Senate overwhelmingly approved legislation on Wednesday to curb heroin and opioid abuse.

The vote all but assured that President Barack Obama will sign the measure into law despite concerns about its lack of assured funding to address the nation's growing drug problem.

The Comprehensive Addiction and Recovery Act advanced in the Senate by 90-2 after Democrats followed their colleagues in the House of Representatives and dropped calls for the legislation to include additional funding.

As with Prince, baby boomers' chronic pain means risk of opioid abuse

Senate Majority Leader Mitch McConnell, R-Ky., called for Senate Democrats to pass the measure, citing support for the legislation by the National Association of Counties, the National League of Cities, the Fraternal Order of Police and more than 200 other groups.

In a statement, Sen. Marco Rubio, R-Fla., praised the measure as a significant advance in the drug fight.

We have a major opioid addiction problem in Florida and throughout our nation, and this legislation is an important step to addressing this health crisis that is taking lives and destroying families. Sen. Marco Rubio, R-Fla.

"We have a major opioid addiction problem in Florida and throughout our nation, and this legislation is an important step to addressing this health crisis that is taking lives and destroying families," Rubio wrote.

The legislation, crafted by a House-Senate conference committee, allows the federal government to provide state grants to fund a variety of programs aimed at curbing prescription opioid and heroin abuse

Opioids are a class of narcotic pain medications that include prescription drugs like methadone, oxycodone, Percocet and codeine, along with the illegal drug heroin.

From 2000 to 2014, the rate of opioid overdose deaths increased 200 percent, sparking a nationwide crisis that has captured the attention of police and politicians alike.

Today, an estimated 2.1 million Americans are addicted to opioids, including about 467,000 addicted to illicit opioids like heroin, according to the National Institute on Drug Abuse, part of the National Institutes of Health.

The bill would expand opioid prevention and education activities, boost efforts to identify and treat incarcerated addicts and provide police and first responders with more naloxone, a drug that blocks or reverses opioid overdoses. The legislation also would strengthen state programs to monitor and track opioid prescription activity and allow nurse practitioners to prescribe buprenorphine, a drug that fights opioid addiction.

As opioid, heroin epidemic worsens, federal government takes action

But to fully fund those initiatives, Congress will have to appropriate much more money after it returns from the summer recess in September, because the measure authorizes only \$181 million in funding.

In February, Obama asked Congress for \$1.1 billion in emergency funding to assist Americans caught in the grip of heroin and prescription opioid abuse. But last week, Republicans on the conference committee blocked efforts by Democrats to add \$925 million in funding for the bill.

Republicans have called for providing \$581 million to the Substance Abuse and Mental Health Services Administration to address opioid abuse in their 2017 fiscal-year funding bill.

On Tuesday, Senate Minority Leader Harry Reid, D-Nev., called the opioid legislation "a missed opportunity to do something substantive."

"Authorizing legislation is a start," Reid said, "but without resources, it's very, very meaningless. . . . Without real funding this legislation is far from adequate."

Authorizing legislation is a start, but without resources, it's very, very meaningless. . . . Without real funding this legislation is far from adequate. Sen. Harry Reid, D-Nev., Senate minority leader But faced with the prospect of leaving for the summer with nothing to address the nation's growing drug problem, Reid joined other Democrats in voting for the measure despite their concerns.

Sen. Richard Blumenthal, D-Conn., who also voted for the measure, said it was "barely a symbolic step."

"The rhetoric on the floor today and throughout our consideration of this bill, unfortunately, is unmatched by real dollars," Blumenthal said Wednesday. "Until we commit resources, our words will be a glass half empty."

Medical and drug prevention experts were equally tepid in their support for the legislation.

In a statement on behalf of the Coalition to Stop Opioid Overdose, R. Corey Waller, an addiction specialist in Grand Rapids, Michigan, urged the Senate to pass the measure even though the group was "disappointed" that the bill lacked the funding to "meaningfully address the opioid crisis."

"The cost of the opioid epidemic is too high to continue without real legislative solutions: every day that we put this off we leave hundreds of thousands without treatment and put thousands of lives at risk," Waller's statement said.

Dr. Andrew Kolodny, executive director of Physicians for Responsible Opioid Prescribing, said the group also supported Senate passage and wants President Obama to sign the legislation; which he called "better than nothing." He said the measure "will have very little impact without real funding."

Kolodny also worries that Republicans seeking re-election will trumpet the bill on the campaign trail this summer and could return to work in September and not provide any additional funding.

"It does worry me," said Kolodny, who's also chief medical officer for Phoenix House, a national nonprofit addiction treatment agency. "There's a very big risk that after the election we will not see members of Congress coming back and appropriating the funding that's needed."

The legislation is important for Senate Republicans, like Rob Portman of Ohio and Kelly Ayotte of New Hampshire, who face tough re-election battles in states hit hard by the heroin and opioid problem.

On Tuesday, Ayotte called for passage of the conference bill, arguing that she would fight for more funding later. She said failure to pass the bill would be "doing a great disservice to the American people."

"It's time for us to rise above the politics and pass this legislation," Ayotte said.

Read more here: http://www.thenewstribune.com/news/politics-government/article89403007.html#storylink=cpy

IN THE JOURNALS

## Buprenorphine-naloxone underutilized by Medicare prescribers

Lembke A and Chen JH. JAMA Psychiatry. 2016;doi:10.1001/jamapsychiatry.2016.1390. July 20, 2016

Prescription of buprenorphine-naloxone was significantly lower than prescription of opioid painkillers among Medicare prescribers, according to recent findings.

"The population that uses Medicare has among the highest and most rapidly growing prevalence of opioid use disorder, with more than six of every 1,000 patients (more than 300,000 of 55 million) diagnosed and with hospitalizations increasing 10% per year. Data on patients with commercial insurance plans show just more than one of every 1,000 patients diagnosed," Anna Lembke, MD, and Jonathan H. Chen, MD, PhD, of Stanford University School of Medicine, California, wrote. "Prevention initiatives are essential for reducing the number of new patients with opioid use disorder, but treatment will be required for those already addicted to opioids."

To compare prescription of buprenorphine-naloxone with prescription of Schedule II opioid painkillers, researchers analyzed data from individual prescribers from the 2013 Medicare Part D claims data set, which covers approximately 68% of the estimated 55 million individuals receiving Medicare. Data represented 1,188,393,892 claims that cost \$80,941,763,731.

There were 6,707 prescribers with 486,099 claims for buprenorphine-naloxone, written for approximately 81,000 patients, compared with 381,575 prescribers with 56,516,854 claims for Schedule II opioids.

For every 40 family practice physicians who prescribed opioid painkillers, there was one family practice physician who prescribed buprenorphine-naloxone (71,718 vs. 1,793).

"Pain physicians averaged on the order of thousands of opioid painkiller prescriptions per prescriber compared with a negligible number of buprenorphine-naloxone prescriptions (mostly < 5)," according to researchers.

Buprenorphine-naloxone was prescribed most frequently by physicians whose primary specialty was addiction, with 98.8 claims per year. However, there were only 100 such Medicare prescribers in the United

The top six states by buprenorphine-naloxone claims ratio, defined by researchers as the number of claims in a drug subset divided by total number of claims for all drugs, included Vermont, Maine, Massachusetts, Rhode Island, Washington, D.C., and New Hampshire. These states had claims ratios more than 300 times higher than the national average.

#### Buprenorphine-naloxone underutilized by Medicare prescribers

"Buprenorphine-naloxone is underused by Medicare prescribers. Geographic differences in buprenorphinenaloxone prescribing should be explored to assess state-level variations in advocacy for and barriers to its use," the researchers wrote. "To combat the current prescription opioid epidemic, integration and promotion of [opioid agonist therapy] should be encouraged, and not just among addiction medicine specialists, who are far too few to meet the current and projected need. Physicians who prescribe high volumes of opioids and thus already have an established therapeutic alliance and prior experience with opioid prescribing are especially well-situated, with some additional training, to intervene when cases of prescription opioid misuse, overuse, and use disorders arise." - by Amanda Oldt

Disclosure: The researchers report no relevant financial disclosures.



Submitted By: Tony Sgro, CEO, and EdVenture Partners May 27, 2016

# How would you craft a marketing campaign in 2016 that responds to the heroin, fentanyl and opioid epidemic?

## I would do this:

Take a cue from the smoking campaign that had that woman who had a hole coming out of her trachea, and sounded like a squeezebox when she spoke. She even put her cigarette in the hole and puffed it. We all said, "Gross!!"

Take a cue from what is working in the countering violent extremism tool kit of effective techniques and that is to incorporate former extremist ("formers") into the messaging campaign.

In both cases, these spokespersons are "users of tobacco and doers of extremism." For a campaign focusing on America's Insatiable Demand for Drugs, I would suggests using former addicts, current users and even former dealers to be spokespersons. These people are the real deal and will get the attention of Americans.

The power of a first person narrative cannot be understated. By using spokespersons who have lived the hardship, pain, hopelessness, tragedy and horror of using drugs is going to be more believable, credible and authentic than crafting just a "message" educating about drug use, prevention and abuse. In this instance, it is the power of personal 'storytelling' that will get people's attention. Let these either former and current addicts speak from the heart about what it is like, the how, what, when, where and why. Real stories, real people from a wide swath of socio-economic backgrounds, ages, and geography.

## Would you even utilize broadcast television?

In my testimony I advised that TV does not have the viewership or penetration to reach Gen Z and Gen Y. However, I would advise using national television to kick-off the campaign with these first-person testimonial ads. It would be important to demo these spots with focus groups to determine the efficacy of each one.

Then, I would roll into the social and digital media campaign to narrow focus the campaign on various social media platforms. Start big on TV (cable) to create national awareness throughout American society and the move down the funnel to target the audience. If the P2P model is utilized on a national level, these advertising resources could be offered to university students to incorporate in their localized campaigns to complement their social and digital media campaigns that they create and implement on their college campuses and communities.

# Do you think television shows like Breaking Bad may be counterproductive in efforts to discourage illicit drug use?

I do not. I believe most people are smart enough to realize it is Hollywood, however as real-life as the actors and plots are, would not truly impact a potential drug user to start. Question: have you tested this hypothesis with the American public? What about with drug users?

The actors of Breaking Bad could be considered as spokespersons for this campaign and I believe would be highly effective. They could also tour high schools and college campuses on a speaking tour. P2P teams could use this "talent" and showcase them as part of their P2P campaigns.

During the hearing, General Kelly remarked that recreational drugs are not victimless, citing the threats against and murders of public officials and their families in Central and South America. He continued by saying that maybe people would view their recreational use differently if confronted with these facts. Do you think this would be the case?

No. I believe as long as the threats and murders are out of sight and out of mind, it will not impact behavior of the American public to reduce drug demand or use. However, once again, I think this would be a great research project for university market research and public health students to undertake across the nation. Has this suggestion or hypotheses by General Kelly been tested or researched?

I am sure there will be some Americans who have empathy for these victims. You bet. However, will it be an effective tool against the exploration and use of drugs? I believe not.

Additionally, if financial resources are going to be allocated to the development of a drug demand campaign, I don't think you get the most value and bang for the buck pursuing a "kind neighbor" narrative in a society where everything is always "about me".

#### Post-Hearing Questions for the Record Submitted to Mr. Robert Budsock From Senator Ron Johnson

#### "America's Insatiable Demand for Drugs"

#### April 13, 2016

1. What is the cost and success rate of treatment for drug addiction? Is it a cost effective solution?

The cost of addiction treatment varies based on the severity of an individual's substance use disorder and corollary issues that must be addressed during treatment. These corollary issues include physical health, mental health, housing, employment and environmental supports.

Treatment for an individual is based on a client centered treatment plan that is established at admission. At Integrity House the average length of stay for residential treatment is approximately three months. This initial intensive treatment regimen is then followed by three to six months of outpatient treatment. The cost for three months of residential treatment is approximately \$9,000. The cost for three months of outpatient treatment is approximately \$3,600.

I have attached several documents to illustrate components of success:

- The NIDA principles of addiction treatment (attached). On page 12 of the attached PDF Q: How long does drug addiction treatment usually last?
   A: Individuals progress through drug addiction treatment at various rates, so there is no predetermined length of treatment. However, research has shown unequivocally that good outcomes are contingent on adequate treatment length. Generally, for residential or outpatient treatment, participation for less than 90 days is of limited effectiveness, maintaining positive outcomes. For methadone maintenance, 12 months is considered the minimum, and some opioid-maintenance for many years.
- 2) The National Center on Addiction and Substance Abuse at Columbia University report from 2012 "Addiction Medicine: Closing the Gap between Science and Practice" (attached) Page 125 speaks to the effectiveness of residential therapeutic community treatment:
  - This large, national study found that patients enrolled for at least 90 days in a TC† were significantly less likely to have used cocaine (28percent vs. 55 percent), tested positive for drug use (19 percent vs. 53 percent), reported daily alcohol use (9 percent vs. 15 percent) or have spent time in jail (24 percent vs. 54 percent) a year after program participation than those who spent fewer than 90 days in the program. The year following successful TC completion showed lasting effects along several indicators compared to the year prior to TC entry: the rate of weekly cocaine use fell from 66.4 percent to 22.1 percent; weekly heroin use, from 17.2 percent to 5.8 percent; heavy alcohol use, from 40.2 percent to 18.8 percent; illegal activity, from 40.5 percent to 15.9 percent; less than

- full- time employment, from 87.6 percent to 77.0 percent; and reported suicidal thoughts, from 23.6 percent to 13.2 percent.
- 3) A CSAT study which highlights the correlation between length of stay and the effectiveness of treatment Effectiveness of long-term residential substance abuse treatment for women: findings from three national studies (attached). The effectiveness of residential substance abuse treatment for women was examined using data from the Center for Substance Abuse Treatment's Residential Women and Children/Pregnant and Postpartum Women (RWC/PPW) Cross-Site Study and two other recent national studies. Treatment success was defined as posttreatment abstinence from further drug or alcohol use, measured through in-person follow-up interviews conducted 6-12 months after each client's discharge. Despite differences in treatment programs, client profiles, follow-up intervals, data collection methods, and other factors, all three studies found high treatment success rates--ranging narrowly from 68% to 71% abstinent--among women who spent six months or more in treatment. Success rates were lower, and between-study differences were larger, for clients with shorter stays in treatment. Controlling for salient client and treatment project characteristics, strong associations between length of stay in treatment and posttreatment abstinence rate were found in all three studies, suggesting that women's length of stay in residential treatment is a major determinant of treatment effectiveness. In further analysis of RWC/PPW data, treatment completion was also found to be an important outcome factor. Among clients who remained in treatment for at least three months, those who achieved their treatment goals in three to five months abstinence outcomes were as good as those for clients who took more than six months to complete their treatment (76%-78% abstinent) and substantially better than those for clients who did not complete treatment (51%-52% abstinent). Notably, however, most of the RWC/PPW clients who successfully completed treatment (71%) required six months or more to do so.

I have also included a link on the cost of incarceration from The Vera Institute of Justice which I did not have available during the hearing.

 $\underline{\text{http://www.vera.org/sites/default/files/resources/downloads/price-of-prisons-updated-version-} \underline{021914.pdf}$ 

#### Post-Hearing Questions for the Record Submitted to Robert Budsock From Senator Rob Portman

#### "America's Insatiable Demand for Drugs" April 13, 2016

1. The Comprehensive Addiction and Recovery Act (CARA) would provide Medication Assisted Treatment (MAT). What are the benefits of using MAT as part of treatment?

Integrity House and members of Treatment Communities of America (TCA) are in full support of expanding MAT, but we must adjust our expectations and not expect MAT to be the quick fix, or "silver bullet" to end addiction. First, it is important to note that MAT is clinically indicated to include therapy and psychosocial supports as part of a comprehensive treatment regimen; medication alone is not treatment. For many people struggling to overcome addiction to opioids, intensive and extended therapy is a key part of recovery. Patients need the psychosocial supports and other therapeutic approaches to sustain recovery as part of the treatment process, and medication is only a part of the overall means of treating patients for addiction. Prescribing medications such as buprenorphine in the early stages of treatment are effective in reducing the intense cravings that patients experience when they first stop using opiates. The medication attaches to the opioid receptors in the brain and suppresses insatiable urges opiates during the early stages of recovery. Methadone and buprenorphine have been tested in scores of clinical trials. Researchers have found that when combined with counseling, they significantly reduce opioid use and patients are retained in treatment longer.

2. CARA focuses on the need for recovery and for support services for people who are struggling to overcome addiction. When someone leaves your treatment facility, what are the kinds of community support that are available? What are the most important things to help someone sustain recovery?

The Integrity House approach recognizes for pillars to recovery. The first is ensuring that an individual receives evidence based addiction treatment from licensed professionals. The second and third pillars are ensuring that the individual rejoins the workforce, and that they obtain safe, affordable and supportive housing. The fourth pillar of recovery is ensuring that individuals have established a social, emotional and spiritual support system. Addiction is a chronic disorder and we must provide care for our patients in the same way that we would work with a diabetes patient who needs to continue taking their medication, regularly visiting their physician, and avoiding self-destructive behaviors such as eating high glycemic foods.

At Integrity House, continuing care planning starts at admission and we ensure that each patient bas a detailed plan to connect with community resources when they leave of facility. Each

patient has a self-management plan upon discharge and they are encouraged to come back to our facility to visit.

- 3. Drug courts have decreased the number of non-violent offenders going to prison on drug charges. Are these programs effective?
  - a. Are there any changes structural changes that make some drug courts better than others?
  - b. Are there any alternatives that are either underutilized or not utilized?

Drug Courts have proven to be highly effective at lowering recidivism rates and for providing access to necessary treatment. Suggestions to improve these programs include: lower offender to probation officer ratios (50:1 is optimal); mandatory monthly face-to-face visits with the judge; the tracking and use of metrics to ensure continuous quality improvement; and, increased use of incentives to recognize the progress of participants. Many Drug Courts have been resistant to the use of Medication Assisted Treatment. New Jersey now has legislation that ensures the option of MAT for Drug Court participants. There still is a lingering bias against the use of MAT in the criminal justice system, but we are seeing a gradual change in New Jersey.

### Post-Hearing Questions for the Record Submitted to Mr. Robert Budsock From Senator Kelly Ayotte

# "America's Insatiable Demand for Drugs" April 13, 2016

(1) Is it possible to adequately address the complex issue of opioid abuse through one approach—whether that be prevention, interdiction, law enforcement, treatment, recovery? Or do you believe that all these different factors play an integral role in ensuring that we are able to stem the nation's rising tide of substance abuse?

Prevention, interdiction, law enforcement, treatment and recovery support are all important factors in stemming the tide of substance abuse in the United States. From a treatment provider's perspective, there is a clear intersection between prevention, treatment and law enforcement. At Integrity House, almost 85% of the individuals admitted to our programs for opiate use disorders have prior or current involvement with the criminal justice system. In many cases, addiction to opiates results in the possession of an illegal substance and a breakdown in societal norms to sustain the use of this highly addictive substance. Law enforcement alone won't curb our nation's insatiable demand for drugs. The coordination of law enforcement efforts and treatment programs, such as the local efforts in Gloucester, Massachusetts 1 and the soon to be launched program in West Orange, New Jersey 2 provide hope for many communities and individuals who are caught in the scourge of drug addiction.

- (2) Prevention is a key component in addressing the demand side of this crisis and can make a difference in combatting substance abuse. What do we need to do to address a different kind of demand—the demand for treatment?
- (3) Individuals are struggling and many in my home state of New Hampshire, as well as across the country, who want help are unable to receive it. Prevention—as important as it is—won't help those who are already grappling with a substance use disorder.

When it comes to treatment for substance use disorders, a huge gap exists for individuals who don't have the resources for medical insurance. These individuals rely on treatment programs that are publically funded through the Substance Abuse and Mental Health Services Administration (SAMHSA) Block Grant and Medicaid. While there should be an increase in the funding for treatment to battle the opiate epidemic through the SAMHSA Block Grant, the Medicaid Institutions Mental Diseases (IMD) exclusion, prevents individuals with Medicaid coverage from accessing residential addiction treatment. Most individuals who are in the grips of addiction need to be immersed into residential treatment as the first phase of treatment while they are experiencing intense cravings for opiates. Repeal of the IMD exclusion would expand the resources available to individuals who are in the grips of addiction.3

(4) Can you expand on the demand for treatment as well as some ways that the federal, state, and local levels can work together to help better meet this demand?

At Integrity House we find the demand for addiction treatment continues to exceed the available resources. At local levels, partnerships between law enforcement and treatment programs such as those in Gloucester, Massachusetts and West Orange, New Jersey are promising. In many cases, a brush with the law is the first opportunity for an individual struggling with addiction to connect with treatment resources. As opposed to arresting and releasing an individual, a referral to an addiction treatment program as a condition of release would introduce treatment as a way out of a life of addiction. At the state and federal level, we must ensure that resources are available for these individuals. This requires full utilization of existing resources, increase allocation for treatment resources in the SAMHSA Block Grant, and repeal of the IMD exclusion.

- (5) In your testimony, you allude to the promise that the parity law is supposed to hold for individuals with insurance who are seeking treatment for a substance use disorder. Can you expand on what you are seeing at Integrity House related to the parity law?
- (6) Are there circumstances where individuals seeking treatment are being denied by their insurer when you believe they should be approved for substance use disorder treatment coverage?
- (7) What are some common insurance-related obstacles that may be preventing some of the individuals seeking treatment at Integrity House from receiving it?

At Integrity House, we see the full implementation of parity for those who qualify for funding through the SAMHSA Block grant. We don't see parity for individuals who have Medicaid coverage because of the IMD exclusion which denies reimbursement for residential addiction treatment. A small percentage of individuals who we see at Integrity House have commercial insurance coverage. While we don't see violations of the parity law, we do see insurance companies refusing to approve services that are deemed appropriate by our medical personnel. Most insurance companies will only approve services based on their preset criteria and frequently rule against the recommendations of medical personnel who are working closely with the patient. In some cases insurance companies will establish an arbitrary limit on length of treatment, such as 28 days, rather than utilizing a clinical diagnosis to determine length of stay. Insurance companies are also deferring to a "fail first" approach which is very dangerous considering the deadly nature of opiate addiction.

(8) In your testimony, you explicitly mention the Institutions of Mental Disease, or IMD, exclusion as a barrier to treatment. Could you describe in more detail how the IMD exclusion impacts Integrity House?

At Integrity House, we serve Medicaid eligible clients who can't receive residential treatment due to the Medicaid IMD. Medicaid will cover outpatient treatment, but not residential. We have a subset of patients who need the more intensive level of treatment for a longer duration and when they can't get it leads to fewer clients with positive outcomes.

Integrity House is a member of Treatment Communities of America (TCA), which continues to advocate for the repeal of the IMD exclusion. Below is a detailed explanation of the IMD exclusion and the consequences to individuals who need a full continuum of care which in many cases includes residential treatment.

Medicaid funds are not available to certain alcohol and drug addiction community-based residential treatment facilities for services provided to individuals between the ages of 22 and 64 for facilities of 17 beds or more. Specifically, Title XIX of the Social Security Act restricts Medicaid reimbursements to Institutions for Mental Diseases (IMD) [42USC 1396d].

Residential treatment facilities are unintentionally impacted by the 1965 IMD Exclusion because substance abuse treatment services are not distinguished from mental health services in statute or regulation. The Centers for Medicaid and Medicare Services (CMS) has linked substance abuse with mental health, categorizing addictive disorders as mental disorders under the International Classification of Diseases, 9th Edition (ICD-9). CMS also interprets "institution" within the IMD statute to include community-based substance abuse non-hospital residential treatment facilities. This rule originated in 1965 during the move to de-institutionalize mental health patients. Instead, it encourages resources to be directed instead towards community-based treatments. Residential treatment facilities are located mostly in the neighborhoods and communities in which their clients live and work. TCA does not believe the Congressional intent was to adversely impact the treatment of those with drug and alcohol addictions, yet the IMD Exclusion jeopardizes these essential services.3

(9) Do you have an estimate as to how many people who wanted help you had to turn away from treatment because of this outdated policy?

Integrity House has 420 licensed residential addiction treatment beds. As of May 20, 2016 we have a waiting list of 150 individuals who are in need residential addiction treatment. The average wait time to get into residential treatment is 8-12 weeks.

- 1. http://gloucesterpd.com/addicts/
- 2. Operation Hope West Orange Police Department(attached)
- 3. <a href="http://www.treatmentcommunitiesofamerica.org/index.php?option=com">http://www.treatmentcommunitiesofamerica.org/index.php?option=com</a> content&vie w=article&id=11&ltemid=22



# WEST ORANGE POLICE DEPARTMENT WRITTEN DIRECTIVE SYSTEM

7:46

Operation Hope (Heroin - Opiate Prevention Effort)

**Effective Date:** 

Supersedes:

#### 7:46-1 PURPOSE

The purpose of this directive is to codify this agency's policy and procedures concerning Operation Hope (the Heroin – Opiate Prevention Effort).

#### 7:46-2 POLICY

It is the policy of this agency to the West Orange Police Department's Operation HOPE shall seek to reduce the impact of heroin and opiate abuse on our community while encouraging those who suffer from addiction to seek help and experience recovery. We will treat those suffering from addiction with compassion, care and concern — while fairly enforcing the law.

All agency supervisors are responsible for ensuring this policy is followed.

#### 7:46-3 GENERAL

It is the philosophy of the West Orange Police Department that:

- We will support a three-prong approach to combatting illegal drugs -Enforcement, Education, and Treatment.
- We will recognize that addiction is a disease which can benefit from medical intervention and treatment.
- Officers responding to any call for service or performing any police action will be cognizant for the potential that the involved parties may be suffering from heroin and/or opiate addiction.
- Officers interacting with persons suffering from addiction will be professional, compassionate and understanding at all times. Often times, people suffering from addiction ask for help only as a "last resort" and may be considering self-harm or suicide. Your interaction with them can help make a difference.
- In all instances, officers will continue to take enforcement action within their discretion and normal scope of duties to address criminal activity. At the same time, officers will recognize the fact that such criminal activity may result from a medical condition (addiction).
- In addition to any police action taken in such circumstances involving known or suspected heroin – opiate addiction (i.e. citizen contacts, warnings, summons, arrest etc.), the officer will provide the involved parties an Operation HOPE flyer advising them of the program and related services.

 The department will make use of its social media presence (i.e. Facebook, Twitter etc.) to market Operation HOPE using the same messages communicated in the flyer.

#### 7:46-4 GENERAL PROCEDURES

It shall be the policy of the West Orange Police Department that:

- Any person who enters the police station and requests help with their addiction to heroin or opiates will immediately be screened for potential participation in Operation HOPE.
- If the initial contact is made on the street, officers will use the discretion that is exercised on a daily basis. This program *specifically* and *exclusively* applies to persons who present for help at the police station.
- All department personnel having contact with anyone entering the West Orange Police Department and requesting help with their addiction will be professional, compassionate and understanding at all times.
- If such a person who has requested help with their addiction is in possession of drugs or drug paraphernalia (needles, etc.), they will not be criminally charged.
   The materials will be collected and secured as per evidence procedures for later destruction.
- There shall be no questioning of the person requesting help in an attempt to
  collect drug intelligence, determine the origins of any drugs relinquished by the
  person, or any other effort which may undermine the intended purpose of this
  program which is primarily to encourage persons to seek police assistance in
  getting help for their addiction without fear of arrest or police action.
- The officer or other agency personnel having initial contact with the program participant will immediately notify the desk supervisor that a potential Operation HOPE participant is requesting help with their addiction.

NOTE: The Operation HOPE "Angel Kit", containing program guidance and supporting materials, will be stored in in the Victim/Witness Room with extra copies located in Central Communications.

## 7:46-5 Specific Program Implementation

The patrol supervisor, dispatcher and/or assigned officer will take the following steps:

- Upon entering the West Orange Police Department, an officer will be assigned to monitor any person requesting assistance under Operation HOPE until such time Operation HOPE intake is initiated.
- The participant will be treated with respect, care and compassion and reassured that assistance will be provided.
- The program participant may stay in the front lobby until the assigned officer arrives.
   They will be kept under visual observation to ensure they are not ill or in distress.

7:46 OPERATION HOPE 3/22/16 Page 2 of 5

- If at any time the participant is noted to be in medical distress, appears to be physically
  ill or requests medical assistance, EMS personnel will be assigned to respond as in any
  medical emergency.
- Participation in Operation HOPE is voluntary. If a potential program participant subsequently elects not to request assistance or continue with program screening, they will be allowed to depart and no force will be used to detain them or prevent them from doing so.
- Central Communications will generate a CAD entry under the Operation HOPE call type, an officer will be assigned to the call and an incident number generated.

<u>NOTE:</u> The shift supervisor may exercise discretion in which officer is assigned to the call based upon call volume, conflicting calls-for-service, and other factors.

- Upon arrival of the assigned officer, the officer will ascertain and verify if the program
  participant possesses any contraband they wish to relinquish or possesses any weapons
  (i.e. prudent officer safety measures). As part of the Program Participation Agreement,
  the participant signs and agrees to allow the law enforcement officer to perform a safety
  frisk for weapons, contrabands, needles or paraphernalia. The intent of the frisk is
  provide a safe environment for the officer, angel and participant as well.
- . The officer will bring the program participant to the interview room.
- The officer will assure the participant that it is our goal to assist them in partaking in the treatment options and the program hosted by The Integrity House. The participant will be treated with respect, care, and compassion.
- The assigned officer will ensure that West Orange Police Department Operation HOPE Program Participant Agreement and West Orange Police Department Operation HOPE Intake Form are completed.
- The assigned officer will take steps to positively identify the program participant through a photo driver's license, photo identification card, or other means.
- Upon completion of the Operation HOPE Intake Form and Program Participant Agreement:

≪The assigned officer will again inquire if the program participant has any drugs and/or drug paraphernalia to relinquish. If so:

- The items will be inventoried. The receiving officer will enter a brief description of the items in the QED Property Tabs. The property should be classified as "Found Property" for evidence intake and destruction purposes.
- The items will be packaged in an appropriate manner (to include the use of "sharps containers" if appropriate) and marked with the Incident case number, officer name, date, time and item description only. There is no need to mention the participant's name on the evidence.
- The items will be placed in a storage locker in the Booking Room for later retrieval by Central Record Bureau personnel.

7:46 OPERATION HOPE 3/22/16 Page 3 of 5

- If at any point a subject who has relinquished drugs and/or drug equipment under Operation HOPE subsequently withdraws their request for assistance or elects to discontinue program screening, they will not be charged with possessing the items they have already relinquished.
- The assigned officer will ensure that Central Communications conducts an NCIC/SCIC and any other applicable checks on the participant.
- The officer processing the Operation HOPE intake will review the NCIC/SCIC results to determine if any of the following Operation HOPE disgualifying factors exist.

# Persons in the following categories ARE NOT ELIGIBLE TO PARTICIPATE IN OPERATION HOPE –

≺The subject has an outstanding arrest warrant.

NOTE: Should the subject have an <u>actionable</u> New Jersey or other jurisdiction arrest warrant, he/she will be deemed ineligible to participate in the program, will be taken into custody as routinely done. They should be informed that upon completion of their legal obligations associated with the warrant, they may again seek help under Operation HOPE.

The subject is a registered sex offender and/or has previously been convicted of a felony sex offense.

NOTE: Should the subject be a registered sex offender and/or has previously been convicted of a felony sex offense, he/she will be deemed ineligible to participate in the program and there is no referral information we can provide.

- ≺The officer or patrol supervisor expresses the reasonable belief that the ANGEL volunteer or others could be seriously harmed by the subject.
- ∢The subject is under age 18 and does not have parent or guardian consent.
- If at any time the participant is noted to be in medical distress or appears to be physically ill or requests medical assistance, EMS personnel will be assigned to respond as in any medical emergency.

NOTE: Should EMS personnel deem it medically necessary, the program participant may be transported to a medical facility. In such an instance, the responding Operation HOPE Angel(s) will be informed of the participant's status and location.

# FOLLOWING INITIAL SCREENING AND CONFIRMATION THAT THE SUBJECT IS ELIGIBLE TO PARTICIPATE IN OPERATION HOPE:

 Dispatch will contact an Operation HOPE "Angel" from the Angel call-out list. The Angel will be informed that an Operation HOPE intake is occurring and be requested to respond to the West Orange Police Department. Dispatch will ascertain an approximate estimated time of arrival of the Angel and inform the officer.

7:46 OPERATION HOPE 3/22/16 Page 4 of 5

- Upon arrival of the Angel, the officer will brief the Angel on the situation. The officer will
  provide the Angel a copy of the participant's completed Operation HOPE Program
  Participant Agreement and West Orange Police Department Operation HOPE Intake
  Form. The officer will also provide the Angel with the "Angel Kit", stored in the
  Victim/Witness Room.
- The officer will introduce the Angel (by first name only) and transition the program
  participant to the care of the Angel. The officer shall remain in close proximity to the
  Victim/Witness Room at all times. The safety of the volunteer Angel and the well-being
  of the participant is an integral part of the officer's responsibility.
- The officer will accomplish a brief Incident Report. An Operation HOPE (Non-Criminal report) category has been created in QED. Original copies of the participant's Operation HOPE Program Participant Agreement and West Orange Police Department Operation HOPE Intake Form will be forwarded up the chain of command and then forwarded to Records as per usual record keeping protocol.
- If the Angel subsequently advises that the participant is unable to be placed after exhausting all possible methods, the participant is not to leave without being given a plan to continue with help. The participant shall be afforded every courtesy to find them a safe place upon departure.

#### For Additional Assistance

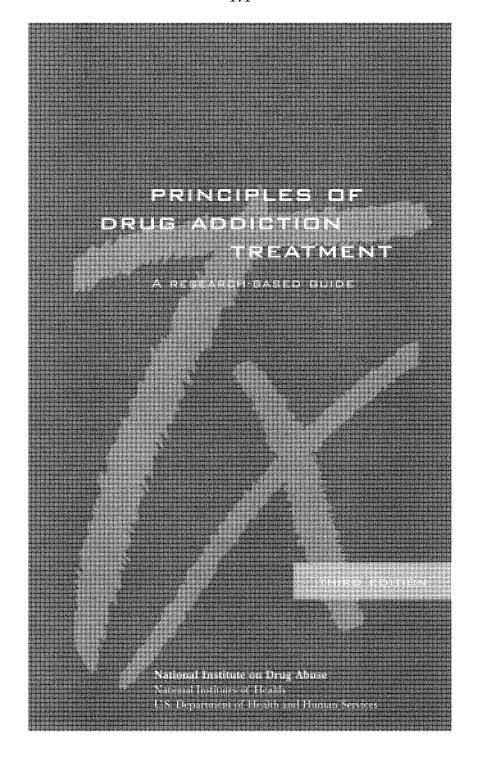
In the event the Angel(s) have questions or require additional assistance, please contact one of the following:

Angel Coordinator: Patricia Duffy 973-325-4105

Placement Coordinator: Mark Ackerman 973-558-2648

Law Enforcement Liaison: Captain Thomas Montesion 973-325-4174 Lieutenant Richard McDonald 973-325-4036

NOTE: DO NOT RELEASE THE ABOVE CONTACT INFORMATION TO ANGELS, PROGRAM PARTICIPANTS, OR NON-LAW ENFORCEMENT PERSONNEL. IF REQUIRED, DISPATCH SHOULD CONTACT THE ABOVE PERSONNEL.



TREATMENT

A RESEARCH-BASED GUIDE

National Institute on Drug Abuse
National Institutes of Health
U.S. Department of Health and Human Services

### ACKNOWLEDGMENTS

The National Institute on Drug Abuse wishes to thank the following individuals for reviewing this publication.

Martin W. Adler, Ph.D.	Nancy K. Mello, Ph.D.
Temple University School of Medicine	Harvard Medical School
Kathleen Brady, M.D., Ph.D.	William R. Miller, Ph.D.
Medical University of South Carolina	University of New Mexico
Greg Brigham, Ph.D.	Charles P. O'Brien, M.D., Ph.D
Maryhaven, Inc.	University of Pennsylvania
Kathleen M. Carroll, Ph.D.	Jeffrey Selzer, M.D.
Yale University School of Medicine	Zucker Hillside Hospital
Richard R. Clayton, Ph.D. University of Kentucky.	Eric J. Simon, Ph.D. New York University Langone Medical Center
Linda B. Cottler, Ph.D. Washington University School of Medicine	Jose Szapocznik, Ph.D. University of Miami
David P. Friedman, Ph.D.	Miller School of Medicine
Wake Forest University	George Woody, M.D:
Bowman Gray School of Medicine	University of Pennsylvania
Riese T. Jones, M.D. University of California at San Francisco	

All materials in this volume are in the public domain and may be used or reproduced without permission from the fusitute or the authors. Citation of the source is appreciated.

The U.S. Government does not endorse or favor any specific communical product or company. Trade, proprietary, or company names appearing in this publication are used only because they are considered essential in the context of the studies described.

NIH Publication No. 12~4180 Printed 1999; Reprinted July 2000, February 2008; Revised April 2009; December 2012

### CONTENTS

ii Acknowledgments

¥	Preface
2	Principles of Effective Treatment
7	Frequently Asked Questions
7	Why do drug-addicted persons keep using drugs?
8	What is drug addiction treatment?
11	How effective is drug addiction treatment?
12	Is drug addiction treatment worth its cost?
14	How long does drug addiction treatment usually last?
14	What helps people stay in treatment?
15	How do we get more substance- abusing people into treatment?
16	How can family and friends make a difference in the life of someone needing treatment?
16	Where can family members go for information on treatment options?
18	How can the workplace play a role in substance abuse treatment?
19	What role can the criminal justice system play in addressing drug addiction?
20	What are the unique needs of women with substance use disorders?
21	What are the unique needs of pregnant women with substance use disorders?

22 What are the unique needs of adolescents with substance use disorders?

173

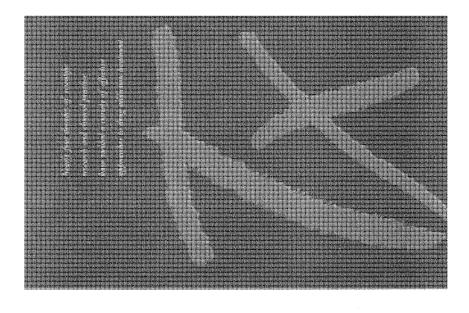
- 23 Are there specific drug addiction treatments for older adults?
- 24 Can a person become addicted to medications prescribed by a doctor?
- 24 Is there a difference between physical dependence and addiction?
- 25 How do other mental disorders coexisting with drug addiction affect drug addiction treatment?
- 26 Is the use of medications like methadone and buprenorphine simply replacing one drug addiction with another?
- 27 Where do 12-step or self-help programs fit into drug addiction treatment?
- 28 Can exercise play a role in the treatment process?
- 28 How does drug addiction treatment help reduce the spread of HIV/AIDS, hepatitis C (HCV), and other infectious diseases?
- 31 Drug Addiction Treatment in the United States
- 32 Types of Treatment Programs
- 37 Treating Criminal Justice-Involved Drug Abusers and Addicted Individuals
- 39 Evidence-Based Approaches to Drug Addiction Treatment
- 39 Pharmacotherapies
- 48 Behavioral Therapies
- 60 Behavioral Therapies Primarily for Adolescents
- 69 Resources

RUG ADDICTION IS A COMPLEX ILLNESS. It is characterized by intense and, at times, uncontrollable drug craxing, along with compelsive drug seeking and use that persist even in the face of devastating consequences. This update of the National Institute on Drug Abuse's Principles of Drug Addiction Treatment is intended to address addiction to a wide variety of drugs, including nicotine, alcohol, and illicit and prescription drugs. It is designed to serve as a resource for healthcare providers, family members, and other stakeholders trying to address the myriad problems faced by patients in need of treatment for drug abuse or addiction.

Addiction affects multiple brain circuits, including those involved in reward and motivation, learning and memory, and inhibitory control over behavior. That is why addiction is a brain disease. Some individuals are more vulnerable than others to becoming addicted, depending on the interplay between genetic makeup, age of exposure to drugs, and other environmental influences. While a person initially chooses to take drugs, over time the effects of prolonged exposure on brain functioning compromise that ability to choose, and seeking and consuming the drug become compulsive, often chiding a person's self-control or willpower.

But addiction is more than just compulsive drug taking it can also produce far-reaching health and solid consequences. For example, drug abuse and addiction increase a person's risk for a variety of other mental and physical illnesses related to a drug-abusing lifestyle or the toxic effects of the drugs themselves. Additionally, the dysfunctional behaviors that result from drug abuse can interfere with a person's normal functioning in the family, the workplace, and the broader community.

Because drug abuse and addiction have so many dimensions and disrupt so many aspects of an individual's life, treatment is not simple. Effective treatment programs



typically incorporate many components, each directed to a particular aspect of the littlenss and its consequences. Addiction treatment must help the individual stopusing drugs, maintain a drug-free lifestyle, and achieve proclucive functioning in the family, at work, and in society, Because addiction is a disease, most people cannot simply stop using drugs for a few days and because addiction is a disease, most people cannot simply stop using drugs for a few days and because Absents typically require long-term or repeated episodes of cure to achieve the ultimate goal of sustained abstincate and recovery of their lives, Indeed, scientific research and clinical practice demonstrate the value of continuing term in treating addiction, with a variety of approaches baving been tested and integrated in residential and community settings.

As we look roward the future, we will harness new research results on the influence of genetics and environment on gene futurous and expression (i.e., spegrancies), which are herading the development of personalized treatment interventions. These findings will be integrated with current evidence supporting the most effective drug abuse and addiction treatments and ether implementation, which are reflected in this guide.

Nora D, Volkow, M.D. Director National Institute on Drug Abuse

### PRINCIPLES OF EFFECTIVE TREATMENT

ADDICTION IS A COMPLEX BUT TREATABLE
DISEASE THAT AFFECTS BRAIN FUNCTION AND
BEHAVIGH. Drugs of abuse alter the brain's structure
and function, resulting in changes that persist long after
drug use has eeased. This may explain why drug abusers
are at risk for relapse even after long periods of abstinence
and despite the potentially devastating consequences.

FOR EVERYCINE. Treatment is APPROPRIATE
FOR EVERYCINE. Treatment varies depending on
the type of drug and the characteristics of the patients.
Matching treatment settings, interventions, and services
to an individual's particular problems and needs is critical
to his or her ultimate success in returning to productive
functioning in the family, workplace, and society.

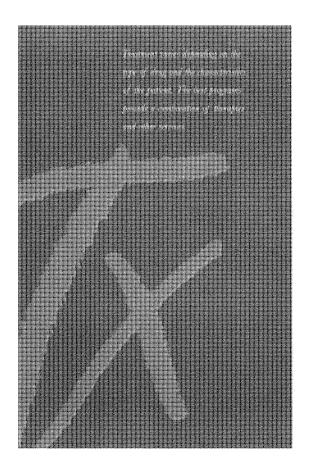
- 3. TREATMENT NEEDS TO BE READLY AVAILABLE. Because drug-addicted individuals may be uncertain about entering treatment, taking advantage of available services the moment people are ready for treatment is critical. Potential patients can be lost if treatment is not immediately available or readily accessible. As with other chronic diseases, the earlier treatment is offered in the disease process, the greater the likelihood of positive outcomes.
- 4. EFFECTIVE TREATMENT ATTENDS TO MULTIPLE NEEDS OF THE INDIVIDUAL, NOT JUST HIS OR HER DRUG ABUSE. To be effective, treatment must address the individual's drug abuse and any associated medical, psychological, social, vocational, and legal problems. It is also important that treatment be appropriate to the individual's age, gender, ethnicity, and culture.
- 5. REMAINING IN TREATMENT FOR AN ADEQUATE PERIOD OF TIME IS CRITICAL. The appropriate duration for an individual depends on the type and degree of the patient's problems and needs. Research indicates that most addicted individuals need at least 3 months in

treatment to significantly reduce or stop their drug use and that the best outcomes occur with longer durations of treatment. Recovery from drug addiction is a long-term process and frequently requires multiple episodes of treatment. As with other chronic illnesses, relapses to drug abuse can occur and should signal a need for treatment to be reinstated or adjusted. Because individuals often leave treatment prematurely, programs should include strategies to engage and keep patients in treatment.

- BEHAVIORAL THERAPIES—INCLUDING
  INDIVIDUAL, FAMILY, OR BROUP COUNSELING—
  ARE THE MOST COMMONLY USED FORMS OF
  ORUG ABUSE TREATMENT. Behavioral therapies
  vary in their focus and may involve addressing a patient's
  motivation to change, providing incentives for abstinence,
  building skills to resist drug use, replacing drug-using
  activities with constructive and rewarding activities,
  improving probleme-solving skills, and facilitating better
  interpersonal relationships. Also, participation in group
  therapy and other peer support programs during and
  following treatment can help maintain abstinence.
- 7. MEDICATIONS ARE AN IMPORTANT ELEMENT OF TREATMENT FOR MANY PATIENTS, ESPECIALLY WHEN COMBINEO WITH GUINSELINIS AND OTHER BEHAVIORAL THERAPIES. For example, methadone, buprenorphine, and naltrexone (including a new long-acting formulation) are effective in helping individuals addicted to heroin or other opioids stabilize their lives and reduce their illicit drug use. Acamprosate, disulfiram, and naltrexone are medications approved for treating alcohol dependence. For persons addicted to nicotine, a nicotine replacement product (available as patches, gum, lozenges, or nasal spray) or an oral medication (such as bupropion or varenicline) can be an effective component of treatment when part of a comprehensive behavioral treatment program.

- B. AN INDIVIDUAL'S TREATMENT AND SERVICES PLAN MUST BE ASSESSED CONTINUALLY AND MODIFIED AS NECESSARY TO ENSURE THAT IT MEETS HIS OR HER CHANGING NEEDS. A patient may require varying combinations of services and treatment components during the course of treatment and recovery. In addition to counseling or psychotherapy, a patient may require medication, medical services, family therapy, parenting instruction, vocational rehabilitation, and/or social and legal services. For many patients, a continuing care approach provides the best results, with the treatment intensity varying according to a person's changing needs.
- 9. MANY DRUB-ADDICTED INDIVIDUALS ALSO
  HAVE OTHER MENTAL DISCREERS. Because
  drug abuse and addiction—both of which are mental
  disorders—often co-occur with other mental illnesses,
  patients presenting with one condition should be assessed
  for the other(s). And when these problems co-occur,
  treatment should address both (or all), including the use of
  medications as appropriate.
- 10. MEDIGALLY ASSISTED DETAMFICATION
  IS ONLY THE FIRST STAGE OF ADDICTION
  TREATMENT AND BY ITSELF DOES LITTLE TO
  CHANGE LONG-TERM DRUG ABUSE. Although
  medically assisted detoxification can safely manage the
  acute physical symptoms of widhtrawal and can, for
  some, pave the way for effective long-term addiction
  treatment, detoxification alone is rarely sufficient to help
  addicted individuals achieve long-term abstinence. Thus,
  patients should be encouraged to continue drug treatment
  following detoxification. Motivational enhancement and
  incentive strategies, begun at initial patient intake, can
  improve treatment engagement.

- . TREATMENT DOES NOT NEED TO BE
  VOLUNTARY TO BE EFFECTIVE. Sanctions or
  enticements from family, employment settings, and/or the
  criminal justice system can significantly increase treatment
  entry, retention rates, and the ultimate success of drugtreatment interventions.
- 12. DRUG USE DURING TREATMENT MUST BE MONITORED CONTINUOUSLY, AS LAPSES DURING TREATMENT DO DOCUR. Knowing their drug use is being monitored can be a powerful incentive for patients and can help them withstand urges to use drugs. Monitoring also provides an early indication of a return to drug use, signaling a possible need to adjust an individual's treatment plan to better meet his or her needs.
- TREATMENT PROGRAMS SHOULD TEST PATIENTS FOR THE PRESENCE OF HIV/AIDS, HEPATITIS B AND C. TUBERCULOSIS, AND OTHER INFECTIOUS DISEASES, AS WELL AS PROVIDE TARGETED RISK-REDUCTION COUNSELING, LINKING PATIENTS TO TREATMENT IF NECESBARY. Typically, drug abuse treatment addresses some of the drug-related behaviors that put people at risk of infectious diseases. Targeted counseling focused on reducing infectious disease risk can help patients further reduce or avoid substancerelated and other high-risk behaviors. Counseling can also help those who are already infected to manage their illness. Moreover, engaging in substance abuse treatment can facilitate adherence to other medical treatments. Substance abuse treatment facilities should provide onsite, rapid HIV testing rather than referrals to offsite testing research shows that doing so increases the likelihood that patients will be tested and receive their test results. Treatment providers should also inform patients that highly active antiretroviral therapy (HAART) has proven effective in combating HIV, including among drugabusing populations, and help link them to HIV treatment if they test positive.



# FREQUENTLY ASKED QUESTIONS

### 1. WHY DO DRUG-ADDICTED PERSONS KEEP USING DRUGS?

Nearly all addicted individuals believe at the outset that they can stop using drugs on their own, and most try to stop without treatment. Although some people are successful, many attempts result in failure to achieve long-term abstinence. Research has shown that long-term drug abuse results in changes in the brain that persist long after a person stops using drugs. These drug-induced changes in brain function can have many behavioral consequences, including an inability to exert control over the impulse to use drugs despite adverse consequences—the defining characteristic of addiction.

LONG-TERM DRUG USE RESULTS IN SIGNIFICANT CHANCES IN BRAIN FUNCTION THAT CAN PERSIST LONG AFTER THE INDIVIDUAL STOPS USING DRUGS.

Understanding that addiction has such a fundamental biological component may help explain the difficulty of achieving and maintaining abstinence without treatment. Psychological stress from work, family problems, psychiatric illness, pain associated with medical problems, psychiatric illness, pain associated with medical problems, social cues (such as meeting individuals from one's druguising past), or environmental cues (such as encountering streets, objects, or even smells associated with drug abuse) can trigger intense cravings without the individual even being consciously aware of the triggering event. Any one of these factors can hinder attainment of sustained abstinence and make relapse more likely. Nevertheless, research indicates that active participation in treatment is an essential component for good outcomes and can benefit even the most severely addicted individuals.

# FAMILY SERVICES FAMILY SERVICES FAMILY SERVICES PARTICULAR SERVICES PARTICULAR SERVICES PARTICULAR PARTICULAR SERVICES PARTICULAR PARTICULAR SERVICES FORCES PARTICULAR SERVICES FINANDE SERVICES SERVICES FINANDE SERVICES SERVICES

Components of Comprehensive Drug Abuse Treatment

The best trentment programs provide a combination of therapies and after services to meet the needs of the individual patient.

### WHAT IS DRUG ADDICTION TREATMENT?

Drug treatment is intended to help addicted individuals stop compulsive drug seeking and use. Treatment can occur in a variety of settings, take many different forms, and last for different lengths of time. Because drug addiction is typically a chronic disorder characterized by occasional relapses, a short-term, one-time treatment is usually not sufficient. For many, treatment is a long-term process that involves multiple interventions and regular monitoring.

There are a variety of evidence-based approaches to treating addiction. Drug treatment can include behavioral therapy (such as cognitive-behavioral therapy or contingency management), medications, or their combination. The specific type of treatment or

combination of treatments will vary depending on the patient's individual needs and, often, on the types of drugs they use.

DRUG ADDICTION TREATMENT CAN INCLUDE MEDICATIONS, BEHAVIORAL THERAPIES, OR THEIR COMBINATION.

Treatment medications, such as methadone, buprenorphine, and naftrexone (including a new long-acting formulation), are available for individuals addicted to opioids, while nicotine preparations (patches, gum, lozenges, and nasal spray) and the medications varenicine and bupropion are available for individuals addicted to tobacco. Disulfiram, acamprosate, and naturexone are medications available for treating alcohol dependence, which commonly co-occurs with other drug addictions, including addiction to prescription medications.

Treatments for prescription drug abuse tend to be similar to those for illicit drugs that affect the same brain systems. For example, buprenorphine, used to treat heroin addiction, can also be used to treat addiction to opioid pain medications. Addiction to prescription stimulants, which affect the same brain systems as illicit stimulants like cocaine, can be treated with behavioral therapies, as there are not yet medications for treating addiction to these types of drugs.

Behavioral therapies can help motivate people to participate in drug treatment, offer strategies for coping with drug cravings, teach ways to avoid drugs and prevent relapse, and help individuals deal with relapse if it occurs. Behavioral therapies can also help people improve communication, relationship, and parenting skills, as well as family dynamics.

Another drug, topiramate, has also shown promise in studies and is sometimes prescribed [off-label] for this purpose although it has not received FDA approval as a treatment for alcohol dependence.

Many treatment programs employ both individual and group therapies. Group theraps can provide social reinforcement and help enforce behavioral contingencies that promote abstinence and a non-drug-using lifestyle. Some of the more established behavioral treatments, such as contingency management and cognitive-behavioral therapy, are also being adapted for group settings to improve efficiency and cost-effectiveness. However, particularly in adolescents, there can also be a danger of unintended harmful (or introgenic) effects of group treatment—sometimes group members (especially groups of highly definquent youth) can reinforce drug use and thereby derail the purpose of the therapy. Thus, trained counselors should be aware of and monitor for such effects.

Because they work on different aspects of addiction, combinations of behavioral therapies and medications (when available) generally appear to be more effective than either approach used alone.

Finally, people who are addicted to drugs often suffer from other health (e.g., depression, HIV), occupational, legal, familial, and social problems that should be addressed concurrently. The best programs provide a combination of therapies and other services to meet an individual patient's needs. Bsychoactive medications, such as antidepressants, anti-anxiety agents, mood stabilizers, and antipsychotic medications, may be critical for treatment success when patients have co-occurring mental disorders such as depression, anxiety disorders (including post-traumatic stress disorder), bipolar disorder, or schizophrenia. In addition, most people with severe addiction abuse multiple drugs and require treatment for all substances abused.

TREATMENT FOR DRUG ABUSE AND ADDICTION IS DELIVERED IN MANY DIFFERENT SETTINGS USING A VARIETY OF BEHAVIORAL AND PHARMACOLOGICAL APPROACHES.

### 3. How effective is drug addiction treatment?

In addition to stopping drug abuse, the goal of treatment is to return people to productive functioning in the family, workplace, and community. According to research that tracks individuals in treatment over extended periods, most people who get into and remain in treatment stop using drugs, decrease their criminal activity, and improve their occupational, social, and psychological functioning. For example, methadone treatment has been shown to increase participation in behavioral therapy and decrease both drug use and criminal behavior. However, individual treatment outcomes depend on the extent and nature of the patient's problems, the appropriateness of treatment and related services used to address those problems, and the quality of interaction between the patient and his or her treatment providers.

### RELAPSE RATES FOR ADDICTION RESEMBLE THOSE OF OTHER CHRONIC DISEASES SUCH AS DIABETES, HYPERTENSION, AND ASTHMA.

Like other chronic diseases, addiction can be managed successfully. Treatment enables people to counteract addiction's powerful disruptive effects on the brain and behavior and to regain control of their lives. The chronic nature of the disease means that relapsing to drug abase inot only possible but also likely, with symptom recurrence rates similar to those for other well-characterized chronic medical illnesses such as diabetes, hypertension, and asthma (see figure, "Comparison of Relapse Rates Between Drug Addiction and Other Chronic Illnesses") that also have both physiological and behavioral components.

COMPARISON OF RELAPSE RATES BETWEEN DRUG ADDICTION AND OTHER CHRONIC ILLNESSES

Percentage of Patients Who Relapse

TYPE I DIABETES

30 TO SUK

DRUG ADDICTION

40 19 60%

HYPERTENSION

SG TO 70%

ASTHMA

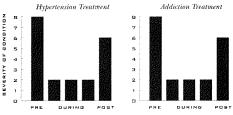
SG TO 70%

Unfortunately, when relapse occurs many deem treatment a failure. This is not the case: Successful treatment for addiction typically requires continual evaluation and modification as appropriate, similar to the approach taken for other chronic diseases. For example, when a patient is receiving active treatment for hypertension and symptoms decrease, treatment is deemed successful, even though symptoms may recur when treatment is discontinued. For the addicted individual, lapses to drug abuse do not indicate failure—rather, they signify that treatment needs to be reinstated or adjusted, or that alternate treatment is needed (see figure, "Why is Addiction Treatment Evaluated Differently?").

### 4. IS DRUG ADDICTION TREATMENT WORTH ITS COST?

Substance abuse costs our Nation over \$600 billion annually and treatment can help reduce these costs, Drug addiction treatment has been shown to reduce associated

## WHY IS ADDICTION TREATMENT EVALUATED DIFFERENTLY? BOTH REQUIRE ONGOING DARE



STAGE OF TREATMENT

health and social costs by far more than the cost of the treatment itself. Treatment is also much less expensive than its alternatives, such as incarcerating addicted persons. For example, the average cost for 1 full year of methadone maintenance treatment is approximately \$4,700 per patient, whereas 1 full year of imprisonment costs approximately \$24,000 per person.

DRUG ADDICTION TREATMENT REDUCES DRUG USE AND ITS ASSOCIATED HEALTH AND SOCIAL COSTS.

According to several conservative estimates, every dollar invested in addiction treatment programs yields a return of between \$4 and \$7 in reduced drug-related crime, criminal justice costs, and theft. When savings related to healthcare are included, total savings can exceed costs by a ratio of 12 to 1. Major savings to the individual and to society also stem from fewer interpersonal conflicts; greater workplace productivity; and fewer drug-related accidents, including overdoses and deaths.

### 5. How Land Does Drug Addiction TREATMENT USUALLY LAST?

Individuals progress through drug addiction treatment at various rates, so there is no predetermined length of treatment. However, research has shown unequivocally that good outcomes are contingent on adequate treatment length. Generally, for residential or outpatient treatment, participation for less than 90 days is of limited effectiveness, and treatment lasting significantly longer is recommended for maintaining positive outcomes. For methadone maintenance, 12 months is considered the minimum, and some opioidaddicted individuals continue to benefit from methadone maintenance for many years.

# GOOD OUTCOMES ARE CONTINGENT ON ADEQUATE TREATMENT LENGTH.

Treatment dropout is one of the major problems encountered by treatment programs; therefore, motivational techniques that can keep patients engaged will also improve outcomes. By viewing addiction as a chronic disease and offering continuing care and monitoring, programs can succeed, but this will often require multiple episodes of treatment and readily readmitting patients that have relapsed.

### 6. WHAT HELPS PEOPLE STAY IN TREATMENT?

Because successful outcomes often depend on a person's staying in treatment long enough to reap its full benefits, strategies for keeping people in treatment are critical. Whether a patient stays in treatment depends on factors associated with both the individual and the program. Individual factors related to engagement and retention typically include motivation to change drug-using behavior; degree of support from family and friends; and, frequently.

pressure from the criminal justice system, child protection services, employers, or family. Within a treatment program, successful clinicians can establish a positive, therapeutic relationship with their patients. The clinician should ensure that a treatment plan is developed cooperatively with the person secking treatment, that the plan is followed, and that treatment expectations are clearly understood. Medical, psychiatric, and social services should also be available.

### WHETHER A PATIENT STAYS IN TREATMENT DEPENDS ON FACTORS ASSOCIATED WITH BOTH THE INDIVIDUAL AND THE PROGRAM.

Because some problems (such as serious medical or mental illness or criminal involvement) increase the likelihood of patients dropping out of treatment, intensive interventions may be required to retain them. After a course of intensive treatment, the provider should ensure a transition to less intensive continuing care to support and monitor individuals in their ongoing recovery.

### 7. HOW DO WE GET MORE SUBSTANCE-ABUSING PEOPLE INTO TREATMENT?

It has been known for many years that the "treatment gap" is massive a that is, among those who need treatment for a substance use disorder, few treetive it. In 2011, 21.6 million persons aged 12 or older needed treatment for an illicit drug or alcohol use problem, but only 2.3 million received treatment at a specialty substance abuse facility.

Reducing this gap requires a multipronged approach. Strategies include increasing access to effective treatment, achieving insurance parity (now in its earliest phase of implementation), reducing stigma, and raising awareness among both patients and healthcare professionals of the value of addiction treatment. To assist physicians in identifying treatment need in their patients and making appropriate referrals, NIDA is eucouraging widespread use of screening, brief intervention, and referral to treatment (SBIRT) tools for use in primary care settings through its NIDAMED initiative. SBIRT, which evidence shows to be effective against tobacco and alcohol use—and, increasingly, against abuse of illicit and prescription drugs—has the potential not only to eatch people before serious drug problems develop but also to identify people in need of treatment and connect them with appropriate treatment providers.

### 8. How can family and friends make a DIFFERENCE IN THE LIFE OF SOMEONE NEEDING TREATMENT?

Family and friends can play critical roles in motivating individuals with drug problems to enter and stay in treatment. Family therapy can also be important, especially for adolescents. Involvement of a family member or significant other in an individual's treatment program can strengthen and extend treatment benefits.

## 9. WHERE CAN FAMILY MEMBERS GO FOR INFORMATION ON TREATMENT OPTIONS?

Trying to locate appropriate treatment for a loved one, especially finding a program tailored to an individual's particular needs, can be a difficult process. However, there are some resources to help with this process. For example, NIDA's handbook Seeking Drug Abuse Treatment: Know What to Ash offers guidance in finding the right treatment program. Numerous online resources can help locate a local program or provide other information, including:

- The Substance Abuse and Mental Health Services Administration (SAMH5A) maintains a Web site findtreatment.samhsa.gov) that shows the location of residential, outpatient, and hospital inpatient treatment programs for drug addiction and alcoholism throughout the country. This information is also accessible by calling 1-800-602-HELP.
- The National Suicide Prevention Lifeline (1-800-273-TALK) offers more than just suicide prevention—it can also help with a host of issues, including drug and alcohol abuse, and can connect individuals with a nearby professional.
- The National Alliance on Mental Illness (nami.org) and Mental Health America (nuentalhealthamerica.net) are alliances of nonprofits, self-help support organizations for patients and families dealing with a variety of mental disorders. Both have State and local affiliates throughout the United States and may be especially helpful for patients with comorbid conditions.
- The American Academy of Addiction Psychiatry and the American Academy of Child and Adolescent Psychiatry each have physician locator tools posted on their Web sites at auap.mg and auaap.mg, respectively.
- Faces & Voices of Recovery ffacesandvoicesofracovery, org), founded in 2001, is an advocacy organization for individuals in long-term recovery that strategizes on ways to reach out to the medical, public health, cruninal justice, and other communities to promote and celebrate recovery from addiction to alcohol and other drugs.
- The Partnership at Drugfire.org (drugfire.org) is an
  organization that provides information and resources
  on teen drug use and addiction for parents, to help
  them prevent and intervene in their children's drug use
  or find treatment for a child who needs it. They offer a
  toll-free helpline for parents (1-855-378-4373).

- The American Society of Addiction Medicine (asam. org) is a society of physicians aimed at increasing access to addiction treatment. Their Web site has a nationwide directory of addiction medicine professionals.
- NIDA's National Drug Abuse Treatment Clinical Trials Network (drugabuse.gov/about-nida/organization/ cetn/ctn) provides information for those interested in participating in a clinical trial testing a promising substance abuse intervention; or visit clinicaltrials.gov.
- NIDA's DrugPubs Research Dissemination Center (thrugpubs.drugalnuse.gov) provides booklets, pamphlets, fact sheets, and other informational resources on drugs, drug abuse, and treatment.
- The National Institute on Alcohol Abuse and Alcoholism (niaaa.nih.gov) provides information on alcohol, alcohol use, and treatment of alcohol-related problems (niaaa.nih.gov/search/node/treatment).

## 10. How can the workplace play a role in substance abuse treatment?

Many workplaces sponsor Employee Assistance Programs (EAPs) that offer short-term counseling and/or assistance in linking employees with drug or alcohol problems to local treatment resources, including peer support/recovery groups. In addition, therapeutic work environments that provide employment for drug-abusing individuals who can demonstrate abstinence have been shown not only to promote a continued drug-free lifestyle but also to improve job skills, punctuality, and other behaviors necessary for active employment throughout life. Urine testing facilities, trained personnel, and workplace monitors are needed to implement this type of treatment.

# 11. WHAT ROLE CAN THE CRIMINAL JUSTICE SYSTEM PLAY IN ADDRESSING DRUG ADDICTION?

It is estimated that about one-half of State and Federal prisoners abuse or are addicted to drugs, but relatively few receive treatment while incarcerated. Initiating drug abuse treatment in prison and continuing it upon release is vital to both individual recovery and to public health and safety. Various studies have shown that combining prison- and community-based treatment for addicted offenders reduces the risk of both recidivism to drugrelated criminal behavior and relapse to drug use which, in turn, nets huge savings in societal costs. A 2009 study in Baltimore, Maryland, for example, found that opioidaddicted prisoners who started methadone treatment (along with counseling) in prison and then continued it after release had better outcomes (reduced drug use and criminal activity) than those who only received counseling while in prison or those who only started methadone treatment after their release.

# INDIVIDUALS WHO ENTER TREATMENT UNDER LEGAL PRESSURE HAVE DUTCOMES AS FAVORABLE AS THOSE WHO ENTER TREATMENT VOLUNTARILY.

The majority of offenders involved with the criminal justice system are not in prison but are under community supervision. For those with known drug problems, drug addiction treatment may be recommended or mandated as a condition of probation. Research has demonstrated that individuals who enter treatment under legal pressure have outcomes as favorable as those who enter treatment voluntarily.

The criminal justice system refers drug offenders into treatment through a variety of mechanisms, such as

diverting nonviolent offenders to treatment; stipulatingtreatment as a condition of incarcration, probation, or provial release; and convening specialized courts, or drug courts, that handle drug offense cases. These courts mandate and arrange for treatment as an alternative to incarcreation, actively monitor progress in treatment, and arrange for other services for drug-involved offenders.

The most effective models integrate criminal justice and drug treatment systems and services. Treatment and criminal justice personnel work together on treatment planning including implementation of screening; placement, testing, monitoring, and supervision—as well as on the systematic use of sanctions and rewards. Treatment for incarcerated drug abusers should include continuing care, monitoring, and supervision after incarceration and during parole. Methods to achieve better coordination between parole/probation officers and health, providers are being studied to improve offender outcomes. For more information, please see NIDAs Principles of Drug Abuse Treatment for Criminal Justice Populations: A Research-Bused Guide [revised 2012].

# 12. WHAT ARE THE UNIQUE NEEDS OF WOMEN WITH SUBSTANCE USE DISORDERS?

Gender-related drug abuse treatment should attend not only to biological differences but also to social and environmental factors, all of which can influence the motivations for drug use, the reasons for seeking treatment, the types of environments where treatment is obtained, the treatments that are most effective, and the consequences of not receiving treatment. Many life circumstances predominate in women as a group, which may require a specialized treatment approach. For example, research has shown that physical and sexual trauma followed by post-traumatic stress disorder (PTSD) is more common

in drug-abusing women than in men secking treatment. Other factors unique to women that can influence the treatment process include issues around how they come into treatment as women are more likely than men to seek the assistance of a general or mental health practitioner), financial independence, and pregnancy and child care.

# 13. WHAT ARE THE UNIQUE NEEDS OF PREGNANT WOMEN WITH SUBSTANCE USE DISORDERS?

Using drugs, alcohol, or tobacco during pregnancy exposes not just the woman but also her developing fetus to the substance and can have potentially deleterious and even long-term effects on exposed children. Smoking during pregnancy can increase risk of stillbirth, infant mortality, sudden infant death syndrome, preterm birth, respiratory problems, slowed fetal growth, and low birth weight. Drinking during pregnancy can lead to the child developing fetal alcohol spectrum disorders, characterized by low birth weight and enduring cognitive and behavioral problems.

Prenatal use of some drugs, including opioids, may cause a withdrawal syndrome in newborns called neonatal abstinence syndrome (NAS). Babies with NAS are at greater risk of seizures, respiratory problems, feeding difficulties, low birth weight, and even death.

Research has established the value of evidence-based treatments for pregnant women (and their babies), including medications. For example, although no medications have been FDA-approved to treat opioid dependence in pregnant women, methadone maintenance combined with prenatal care and a comprehensive drug treatment program can improve many of the detrimental outcomes associated with untreated heroin abuse. However, newborns exposed to methadone

during pregnancy still require treatment for withdrawal symptoms. Recently, another medication option for opioid dependence, buprenorphine, has been shown to produce fewer NAS symptoms in babies than methadone, resulting in shorter infant hospital stays. In general, it is important to closely monitor women who are trying to quit drug use, during pregnancy and to provide treatment as needed.

# 14. WHAT ARE THE UNIQUE NEEDS OF ADOLESCENTS WITH SUBSTANCE USE DISORDERS?

Adolescent drug abusers have unique needs stemming from their immature neurocognitive and psychosocial stage of development. Research has demonstrated that the brain undergoes a prolonged process of development and refinement from birth through early adulthood. Over the course of this developmental period, a young person's actions go from being more impulsive to being more reasoned and reflective. In fact, the brain areas most closely associated with aspects of behavior such as decision-making, judgment, planning, and self-control undergo a period of rapid development during adolescence and young adulthood.

Adolescent drug abuse is also often associated with other co-occurring mental health problems. These include attention-deficit hyperactivity disorder (ADHD), oppositional defiant disorder, and conduct problems, as well as depressive and anxiety disorders.

Adolescents are also especially sensitive to social cues, with peer groups and families being highly influential during this time. Therefore, treatments that facilitate positive parental involvement, integrate other systems in which the adolescent participates (such as school and athletics), and recognize the importance of prosocial peer relationships are among the most effective. Access to comprehensive

assessment, treatment, case management, and familysupport services that are developmentally, culturally, and gender-appropriate is also integral when addressing adolescent addiction.

Medications for substance abuse among adolescents may in certain cases be helpful. Currently, the only addiction medications approved by FDA for people under 18 are over-the-counter transdermal nicotine skin patches, chewing gum, and lozenges (physician advice should be sought first). Buprenorphine, a medication for treating opioid addiction that must be prescribed by specially trained physicians, has not been approved for adolescents, but recent research suggests it could be effective for those as young as 16. Studies are under way to determine the safety and efficacy of this and other medications for opioid-, nicotine-, and alcohol-dependent adolescents and for adolescents with co-occurring disorders.

### 15. ARE THERE SPECIFIC DRUG ADDICTION TREATMENTS FOR OLDER ADULTS?

With the aging of the baby boomer generation, the composition of the general population is changing dramatically with respect to the number of older adults. Such a change, coupled with a greater history of lifetime drug use (than previous older generations), different cultural norms and general attitudes about drug use, and increases in the availability of psychotherapeutic medications, is already leading to greater drug use by older adults and may increase substance use problems in this population. While substance abuse in older adults often goes unrecognized and therefore untreated, research indicates that currently available addiction treatment programs can be as effective for them as for younger adults.

# 16. CAN A PERSON BECOME ADDICTED TO MEDICATIONS PRESCRIBED BY A DOCTOR?

Yes. People who abuse prescription drugs - that is, taking them in a manuer or a dose other than prescribed, or taking medications prescribed for another person-risk addiction and other serious health consequences. Such drugs include opioid pain relievers, stimulants used to treat ADHD, and benzodiazepines to treat anxiety or sleep disorders. Indeed, in 2010, an estimated 2.4 million people 12 or older met criteria for abuse of or dependence on prescription drugs, the second most common illicit drug use after marijuana. To minimize these risks, a physician (or other prescribing health provider) should screen patients for prior or current substance abuse problems and assess their family history of substance abuse or addiction before prescribing a psychoactive medication and monitor patients who are prescribed such drugs. Physicians also need to educate patients about the potential risks so that they will follow their physician's instructions faithfully, safeguard their medications, and dispose of them appropriately:

## 17. IS THERE A DIFFERENCE BETWEEN PHYSICAL DEPENDENCE AND ADDICTION?

Yes. Addiction—or compulsive drug use despite harmful consequences—is characterized by an inability to stop using a drug; failure to meet work, social, or family obligations; and, sometimes (depending on the drug), tolerance and withdrawal. The latter reflect physical dependence in which the body adapts to the drug, requiring more of it to achieve a certain effect (tolerance) and elicting drug-specific physical or mental symptoms if drug use is abruptly ceased (withdrawal). Physical

dependence can happen with the chronic use of many drugs including many prescription drugs, even if taken as instructed. Thus, physical dependence in and of itself does not constitute addiction, but it often accompanies addiction. This distinction can be difficult to discern, particularly with prescribed pain medications, for which the need for increasing dosages can represent tolerance or a worsening underlying problem, as opposed to the beginning of abuse or addiction.

# 18. How do other mental disorders coexisting with drug addiction affect drug addiction treatment?

Drug addiction is a disease of the brain that frequently occurs with other mental disorders. In fact, as many as 6 in 10 people with an illicit substance use disorder also suffer from another mental illness; and rates are similar for users of licit drugs—i.e., tobacco and alcohol. For these individuals, one condition becomes more difficult to treat successfully as an additional condition is intertwined. Thus, people entering treatment either for a substance use disorder or for another mental disorder should be assessed for the co-occurrence of the other condition. Research indicates that treating both (or multiple) illnesses simultaneously in an integrated fashion is generally the best treatment approach for these patients.

### 19. IS THE USE OF MEDICATIONS LIKE METHADONE AND BUPRENORPHINE SIMPLY REPLACING ONE ADDICTION WITH ANOTHER?

No. Buprenorphine and methadone are prescribed or administered under monitored, controlled conditions and are safe and effective for treating opioid addiction when used as directed. They are administered orally or sublingually (i.e., under the tongue) in specified doses, and their effects differ from those of heroin and other abused opioids.

Heroin, for example, is often injected, snorted, or smoked, causing an almost immediate "rush," or brief period of intense cuphoria, that wears off quickly and ends in a "crash." The individual then experiences an intense craving to use the drug again to stop the crash and reinstate the euphoria.

The cycle of euphoria, crash, and craving—sometimes repeated several times a day—is a hallmark of addiction and results in severe behavioral disruption. These characteristics result from heroin's rapid onset and short duration of action in the brain.

AS USED IN MAINTENANCE TREATMENT,
METHADONE AND BUPRENDRPHINE ARE
NOT HEROIN/DPIOID SUBSTITUTES.

In contrast, methadone and buprenorphine have gradual onsets of action and produce stable levels of the drug in the brain. As a result, patients maintained on these medications do not experience a rush, while they also markedly reduce their desire to use opioids.

If an individual treated with these medications tries to take an opioid such as heroin, the cuphoric effects are usually dampened or suppressed. Patients undergoing maintenance treatment do not experience the physiological or behavioral abnormalities from rapid fluctuations in drug levels associated with heroin use. Maintenance treatments save fives—they help to stabilize individuals, allowing treatment of their medical, psychological, and other problems so they can contribute effectively as members of families and of society.

# 20. WHERE DO 12-STEP OR SELF-HELP PROGRAMS FIT INTO DRUG ADDICTION TREATMENT?

Self-help groups can complement and extend the effects of professional treatment. The most prominent self-help groups are those affiliated with Alcoholics Anonymous (AA), Natrotics Anonymous (NA), and Cocaine Anonymous (CA); all of which are based on the 12-step model. Most drug addiction treatment programs encourage patients to participate in self-help group therapy during and after formal treatment. These groups can be particularly helpful during recovery, offering an added layer of community-level social support to help people achieve and maintain abstinence and other healthy lifestyle behaviors over the course of a lifetime.

# 21. CAN EXERCISE PLAY A ROLE IN THE TREATMENT PROCESS?

Yes. Exercise is increasingly becoming a component of many treatment programs and has proven effective, when combined with cognitive-behavioral therapy, at helping people quit smoking. Exercise may exert beneficial effects by addressing psychosocial and physiological needs that nicotine replacement alone does not, by reducing negative feelings and stress, and by helping prevent weight gain following cessation. Research to determine if and how exercise programs can play a similar role in the treatment of other forms of drug abuse is under way.

### 22. How does drug addiction treatment help reduce the spread of HIV/ AIDS, hepatitis C (HCV), and other infectious diseases?

Drug-abusing individuals, including injecting and non-injecting drug users, are at increased risk of human immunodeficiency virus (HIV), hepatitis C virus (HCV), and other infectious diseases. These diseases are transmitted by sharing contaminated drug injection equipment and by engaging in risky sexual behavior sometimes associated with drug use. Effective drug abuse treatment is HIV/HCV prevention because it reduces activities that can spread disease, such as sharing injection equipment and engaging in unprotected sexual activity. Counseling that targets a range of HIV/HCV risk behaviors provides an added level of disease prevention.

ORUG ABUSE TREATMENT IS HIV AND HCV PREVENTION.

Injection drug users who do not enter treatment are up to six times more likely to become infected with HIV than those who enter and remain in treatment. Participation in treatment also presents opportunities for HIV screening and referral to early HIV treatment. In fact, recent research from NIDAs National Drug Abuse Treatment Clinical Trials Network showed that providing rapid onsite HIV testing in substance abuse treatment facilities increased patients' likelihood of being tested and of receiving their test results. HIV counseling and testing are key aspects of superior drug abuse treatment programs and should be offered to all individuals entering treatment. Greater availability of inexpensive and unobtrusive rapid HIV tests should increase access to these important aspects of HIV prevention and treatment.



# DRUG ADDICTION TREATMENT IN THE UNITED STATES

DRUG ADDICTION IS A COMPLEX DISCIRCER THAT CAN INVOLVE VIRTUALLY EVERY ASPECT OF AN INDIVIDUAL'S FUNCTIONING—IN THE FAMILY, AT WORK AND SCHOOL, AND IN THE COMMUNITY. Because of addiction's complexity and pervasive consequences, drug addiction treatment typically most involve many components. Some of those components focus directly on the individual's drug use; others, like employment training, focus on restoring the addicted individual to productive membership in the family and society (see diagram on page 8), enabling him or her to experience the rewards associated with abstinence.

Treatment for drug abuse and addiction is delivered in many different settings using a variety of behavioral and pharmacological approaches. In the United States, more than 14,500 specialized drug treatment facilities provide counseling, behavioral therapy, medication, case management, and other types of services to persons with substance use disorders.

Along with specialized drug treatment facilities, drug abuse and addiction are treated in physicians' offices and mental health clinics by a variety of providers, including counselors, physicians, psychiatrists, psychologists, nurses, and social workers. Treatment is delivered in outpatient, inpatient, and residential settings. Although specific treatment approaches often are associated with particular treatment settings, a variety of therapeutic interventions or services can be included in any given setting.

Because drug abuse and addiction are major public health problems, a large portion of drug treatment is funded by local, State, and Federal governments. Private and employer-subsidized health plans also may provide coverage for treatment of addiction and its medical consequences. Unfortunately, managed care has resulted in shorter average stays, while a historical lack of or insufficient coverage for substance abuse treatment has curtailed the number of operational programs. The recent passage of parity for insurance coverage of mental health and substance abuse problems will hopefully improve this state of affairs. Health Care Reform (i.e., the Patient Protection and Affordable Care Act of 2010, "ACA") also stands to increase the demand for drug abuse treatment services and presents an opportunity to study how innovations in service delivery, organization, and financing can improve access to and use of them.

#### TYPES OF TREATMENT PROGRAMS

Research studies on addiction treatment typically have classified programs into several general types or modalities. Treatment approaches and individual programs continue to evolve and diversify, and many programs today do not fit neatly into traditional drug addiction treatment classifications. Examples of specific research-based treatment components are described on pages 30–35.

Most, however, start with detoxification and medically managed withdrawal, often considered the first stage of treatment. Detoxification, the process by which the body clears itself of drugs, is designed to manage the acute and potentially dangerous physiological effects of stopping drug use. As stated previously, detoxification alone does not address the psychological, social, and behavioral problems associated with addiction and therefore does not typically produce lasting behavioral changes necessary for recovery. Detoxification should thus be followed by a formal assessment and referral to drug addiction treatment.

Because it is often accompanied by unpleasant and potentially fatal side effects stemming from withdrawal, detoxification is often managed with medications administered by a physician in an inpatient or outpatient setting; therefore, it is referred to as "medically managed withdrawal." Medications are available to assist in the withdrawal from opioids, benzodiazepines, alcohol, nicotine, barbiturates, and other sedatives.

Further Reading:

Kleber, H.D. Outpatient detoxification from opiates. Primary Psychiatry 1:42-52, 1996.

#### LONG-TERM RESIDENTIAL TREATMENT

Long-term residential treatment provides care 24 hours a day, generally in nonhospital settings. The best-known residential treatment model is the therapeutic community (TC), with planned lengths of stay of between 6 and 12 months. TCs focus on the "resocialization" of the individual and use the program's entire community including other residents, staff, and the social context - as active components of treatment. Addiction is viewed in the context of an individual's social and psychological deficits, and treatment focuses on developing personal accountability and responsibility as well as socially productive lives. Treatment is highly structured and can be confrontational at times, with activities designed to help residents examine damaging beliefs, self-concepts, and destructive patterns of behavior and adopt new, more harmonious and constructive ways to interact with others. Many TCs offer comprehensive services, which can include employment training and other support services, onsite. Research shows that TCs can be modified to treat individuals with special needs, including adolescents, women, homeless individuals, people with severe mental disorders, and individuals in the criminal justice system (see page 37).

### Further Reading:

Lewis, B.E.; McCusker, J.; Hindin, R.; Frost, R.; and Garfield, F. Four residential drug treatment programs: Project IMPACT In: J.A. Inciardi, F.M. Tins, and B.W. Fletcher (eds.), Iunavative Approaches in the Treatment of Drug Abuse, Westport, CT: Greenwood Press, pp. 45–60, 1993. Sacks, S.; Sacks, J.; DeLeon, G.; Bernhardt, A.; and Staines, G. Modified therapeutic community for mentally ill chemical "abusers": Background: influences: program description; preliminary findings. Substance Use and Misuse 32(9):1217-1259, 1997.

Stevens, S.J.; and Glider, P.J. Therapeutic communities: Substance abuse treatment for women. In: E.M. Tirns, G. DeLeon, and N. Jainchill (eds.), Therapeutic Community: Advances in Research and Application, National Institute on Drug Abuse Research Monograph 144, NIH Pub. No. 94–3633, U.S. Government Printing Office, pp. 162–180, 1004.

Sullivan, C.J.; McKendrick, K.; Sacks, S.; and Banks, S.M. Modified therapeutic community for offenders with MICA disorders: Substance use outcomes. American Journal of Drug and Alcohol Abuse 33(6):823–832, 2007.

### SHORT-TERM RESIDENTIAL TREATMENT

Short-term residential programs provide intensive but relatively brief treatment based on a modified 12-step approach. These programs were originally designed to treat alcohol problems, but during the cocaine epidentic of the mid-1980s, many began to treat other types of substance use disorders. The original residential treatment model consisted of a 3- to 6-week hospital-based inpatient treatment phase followed by extended outpatient therapy and participation in a self-help group, such as AA. Following stays in residential treatment programs, it is important for individuals to remain engaged in outpatient treatment programs and/or afference programs. These programs help to reduce the risk of relapse once a patient leaves the residential setting.

### Further Reading:

Hubbard, R.L.; Craddock, S.G.; Flynn, P.M.; Anderson, J.; and Etheridge, R.M. Overview of 1-year follow-up outcomes in the Drug Abuse Treatment Outcome Study (DATOS). Psychology of Addictive Behaviors 11(4):291-298, 1993.

Miller, M.M. Traditional approaches to the treatment of addiction. In: A.W. Graham and T.K. Schultz (eds.), Principles of Addiction Medicine (2nd ed.), Washington, D.C.: American Society of Addiction Medicine, 1998.

### OUTPATIENT TREATMENT PROGRAMS

Outpatient treatment varies in the types and intensity of services offered. Such treatment costs less than residential or inpatient treatment and often is more suitable for people with jobs or extensive social supports. It should be noted, however, that low-intensity programs may offer little more than drug education. Other outpatient models, such as intensive day treatment, can be comparable to residential programs in services and effectiveness, depending on the individual patient's characteristics and needs. In many outpatient programs, group counseling can be a major component. Some outpatient programs are also designed to treat patients with medical or other mental health problems in addition to their drug disorders.

### Further Reading:

Hubbard, R.L.; Craddock, S.G.; Flynn, P.M.; Anderson, J.; and Etheridge, R.M. Overview of 1-year follow-up outcomes in the Drug Abuse Treatment Outcome Study (DATOS). Psychology of Addictive Behaviors 11(4):291-298, 1998.

Institute of Medicine. Treating Drug Problems. Washington, D.C.: National Academy Press, 1990. McLellan, A.T.; Grisson, G.; Durell, J.; Alterman, A.L.; Brill, P.; and O'Brien, C.P. Substance abuse treatment in the private setting: Are some programs more effective than others? Journal of Substance Abuse Treatment 10:243–254, 1993.

Simpson, D.D.; and Brown, B.S. Treatment retention and follow-up outcomes in the Drug Abuse Treatment Outcome Study (DATOS). Psychology of Addictive Behaviors 11(4):294–307, 1998.

### Individualized Drug Counseling

Individualized drug counseling not only focuses on reducing or stopping illicit drug or alcohol use; it also addresses related areas of impaired functioning—such as employment status, illegal activity, and family/social relations—as well as the content and structure of the patient's recovery program. Through its emphasis on short-term behavioral goals, individualized counseling helps the patient develop coping strategies and tools to abstain from drug use and maintain abstinence. The addiction counselor encourages 12-step participation (at least one or two times per week) and makes referrals for needed supplemental medical, psychiatric, employment, and other services.

### Group Counseling

Many therapeutic settings use group therapy to capitalize on the social reinforcement offered by peer discussion and to help promote drug-free filtestyles. Research has shown that when group therapy either is offered in conjunction with individualized drug counseling or is formatted to reflect the principles of cognitive-behavioral therapy or contingency management, positive outcomes are achieved. Currently, researchers are testing conditions in which group therapy can be standardized and made more community-friendly.

### TREATING CRIMINAL JUSTICE-INVOLVED DRUG ABUSERS AND ADDICTED INDIVIDUALS

Often, drug abusers come into contact with the criminal justice system earlier than other health or social systems, presenting opportunities for intervention and treatment prior to, during, after, or in lieu of incarceration, Research has shown that combining criminal justice sanctions with drug treatment can be effective in decreasing drug abuse and related crime. Individuals under legal coercion tend to stay in treatment longer and do as well as or better than those not under legal pressure. Studies show that for incarcerated individuals with drug problems, starting drug abuse treatment in prison and continuing the same treatment upon release in other words, a seamless continuum of services - results in better outcomes: less drug use and less criminal behavior. More information on how the criminal justice system can address the problem of drug addiction can be found in Principles of Drug Abuse Treatment for Criminal Justice Populations: A Research-Bused Guide (National Institute on Drug Abuse, revised 2012).



### EVIDENCE-BASED APPROACHES TO DRUG ADDICTION TREATMENT

This section presents examples of treatment approaches and components that have an evidence base supporting their use. Each approach is designed to address certain aspects of drug addiction and its consequences for the individual, family, and society. Some of the approaches are intended to supplement or enhance existing treatment programs, and others are fairly comprehensive in and of themselves.

The following section is broken down into Pharmacotherapies, Behavioral Therapies, and Behavioral Therapies Primarily for Adolescents. They are further subdivided according to particular substance use disorders. This list is not exhaustive, and new treatments are continually under development.

### PHARMACOTHERAPIES

### Opioid Addiction

### Methadone

Methadone is a long-acting synthetic opioid agonist medication that can prevent withdrawal symptoms and reduce craving in opioid-addicted individuals. It can also block the effects of illicit opioids. It has a long history of use in treatment of opioid dependence in adults and is taken orally. Methadone maintenance treatment is available in all but three States through specially licensed opioid treatment programs or methadone maintenance programs.

### COMBINED WITH BEHAVIORAL TREATMENT

Research has shown that methadone maintenance is more effective when it includes individual and/or group counseling, with even better outcomes when patients are provided with, or referred to, other needed medical/ psychiatric, psychological, and social services (e.g., employment or family services).

Further Reading:

Dole, VP, Myswander, M.; and Kreek, M.J. Marcotic-blockade, Archives of Internal Medicine 118:304: 309, 1986.

MrLellan, A.T.; Arndt, I.O.; Metager, D.; Woody, G.E.; and O. Bren, C.J. The effects of psychosocial services in substance about treatment. The Journal of the American Medical, Association 2045 153:1553-1953, 1993.

The Rockefeller University. The first pharmacological treatment for narrotic addictions. Melladome maintenance. The Rockefeller University Hospital Centennial, 2010. Natlable at contennual, pracres, orgànidex, phfy?page=Mediadome\_Manitemane.

php?page=Methadone\_Maintenance.
Woody, G.E.; Luborsky, L.; McGellan, A.T.; O'Brien,
C.F.; Beck, A.T.; Blaine, J.; Herman, I.; and Hole, A.
Psychotherapy for opine addies. Does it help? Archives of
General Psychiatry 40:639–645, 1983.

# Buprenorphine

Bupermorphine is a synthetic opioid medication that acts as a partial agonist at opioid receptors—it does not produce the exploria and sedution caused by heroin or other opioids but is able to reduce or eliminate withdrawal symptoms associated with opioid dependence and earries a low risk of overdose.

Buprenorphine is currently available in two formulations that are taken sublinguelly; (1) a pure form of the drung and (2) a more commonly prescribed formulation called Sub-worne, an autugents for blocker) at opiniod receptors, padoxoner, an autugents for blocker) at opiniod receptors. Nothowner has no effect when Sub-worne is untern as prescribed, but if an addicted individual attemps to inject Sub-worner, the unknown with authorium will produce severe withdrawal symptoms. Thus, this formulation lessors the likelihood that the drug will be abused or diverted to others.

Boprenorphine treument for detexification and/or maintenance can be provided to office-based settings by qualified physicians who have received a waiver from the Drug Endorcement Administration (DEA, allowing them to prescribe it. The availability of office-based reatment for opioid addiction is a cost-effective approach that increases the reach of treatment and the options available to patients.

Further Reading:

Fielin, D.A.; Pantahan, M.V.; Chavarski, M.C.; Moore, B.A.; Sullivan, L.E.; O'Connor, P.G.; and Schottenfeld, R.S. Counseling hils abpertarophine chalcoon maintenance therapy for opioid dependent. The New England, Journal of Medicine 2354; 5363–5374, 2006.

Furthal P.J. Bridge, T.P. Herbert, S.; Williford, W.O.; Chiang, C.N.; Jones, K.; Collins, J.; Raisch, D.; Casadoun, C., Goldsenth, R.J.; Ling, W.; Malkerneker, U.; McWicholas, L.; Renner, J.; Stine, S.; and Tued, D. for the Bupenorphine-Naloxone Collaborative Surdy Group, Office-based treatment of opiate addiction with a sublingual-table formulation of bupercoupline and naloxone. The New England Journal of Medicine 349(10):349–368, 2003.

Kosten, T.R.; and Fellin, D.A. U.S. National Buprenorphine Implementation Program: Buprenorphine for office-based practice: Consensus conference overview. McCance-Katz, E.F. Office-based bupernorphine treatment for opioid-dependent patients. Harvard Review of Psychiatry 12(6):321-338, 2004.

### TREATMENT, NOT SUBSTITUTION

Because methadone and buprenorphine are themselves opioids, some people view these treatments for opioid dependence as just substitutions of one addictive drug for another (see Question 19 above). But taking these medications as prescribed allows patients to hold jobs, avoid street crime and violence, and reduce their exposure to HIV by stopping or decreasing injection drug use and drug-related high-risk sexual behavior. Patients stabilized on these medications can also engage more readily in counseling and other behavioral interventions essential to recovery.

### Naltrexone

Nattrexone is a synthetic opioid antagonist—it blocks opioids from binding to their receptors and thereby prevents their euphoric and other effects. It has been used for many years to reverse opioid overdose and is also approved for treating opioid addiction. The theory behind this treatment is that the repeated absence of the desired effects and the perceived futility of alxising opioids will gradually diminish craving and addiction. Naturexone itself has no subjective effects following detoxification (that is, a person does not perceive any particular drug effect), it has no potential for abuse, and it is not addictive.

Naltrexone as a treatment for opioid addiction is usually prescribed in outpatient medical settings, although the treatment should begin *after* medical detoxification in a residential setting in order to prevent withdrawal symptoms.

Natirexone must be taken orally - either daily or three times a week—but noncompliance with treatment is a common problem. Many experienced clinicians have found natirexone best suited for highly motivated, recently detoxified patients who desire total abstinence because of external circumstances, for instance, professionals

or parolees. Recently, a long-acting injectable version of naturesone, called Vivitrol, was approved to treat opioid addiction. Because it only needs to be delivered once a month, this version of the drug can facilitate compliance and offers an alternative for those who do not wish to be placed on agonist/partial agonist medications.

### Further Reading:

Cornish, J.W.: Metzger, D.; Woody, G.E.; Wilson, D.; McClellan, A.T.; and Vandergrift, B. Naltrexone pharmacotherapy for opioid dependent federal probationers. Journal of Substance Abuse Treatment 14(5):529–534, 1997.

Gastfriend, D.R. Intramuscular extended-release naltrexone: current evidence. Annals of the New York Academy of Sciences 1216:144–166, 2011.

Krupitsky, E.; Illerperuma, A.; Gastfriend, D.R.; and Silverman, B.L. Efficacy and safety of extended-release injectable naltresone (XR-NTN) for the treatment of opioid dependence. Paper presented at the 2010 annual meeting of the American Psychiatric Association, New Orleans, LA.

### **Tobacco Addiction**

### Nicotine Replacement Therapy (NRT)

A variety of formulations of nicotine replacement therapies (NRTs) now exist, including the transdermal nicotine patch, nicotine spray, nicotine gunt, and nicotine lozenges. Because nicotine is the main addictive ingredient in tobacco, the rationale for NRT is that stable low levels of nicotine will prevent withdrawal symptoms: which often drive continued tobacco use—and help keep people motivated to quit. Research shows that combining the patch with another replacement therapy is more effective than a single therapy alone.

### Bupropion (Zyban\*)

Bupropion was originally marketed as an antidepressant Wellbutnin. It produces mild stimulant effects by blocking the reuptake of certain neurotransmitters, especially norepinephrine and dopamine. A screndipitous observation among depressed patients was that the medication was also effective in suppressing tobacco craving, helping them quit smoking without also gaining weight. Although bupropion's exact mechanisms of action in facilitating smoking cessation are unclear, it has FDA, approval as a smoking cessation treatment.

### Varenicline (Chantix\*)

Varenicline is the most recently FDA-approved medication for smoking cessation. It acts on a subset of nicotinic receptors in the brain thought to be involved in the rewarding effects of nicotine. Varenicline acts as a partial agonist/annagonist at these receptors: this means that it mildly stimulates the nicotine receptor but not sufficiently to trigger the release of dopamine, which is important for the rewarding effects of nicotine. As an antagonist, varenicline also blocks the ability of nicotine to activate dopamine, interfering with the reinforcing effects of smoking, thereby reducing cravings and supporting abstinence from smoking.

### COMBINED WITH BEHAVIORAL TREATMENT,

Each of the above pharmacotherapies is recommended for use in combination with behavioral interventions, including group and individual therapies, as well as telephone quitlines. Behavioral approaches complement most tobacco addiction treatment programs. They can amplify the effects of medications by teaching people how to manage stress, recognize and avoid high-risk situations for smoking relapse, and develop alternative coping strategies (e.g., cigarette refusal skills, assertiveness, and time management skills) that they can practice in

treatment, social, and work settings. Combined treatment is urged because behavioral and pharmacological treatments are thought to operate by different yet complementary mechanisms that can have additive effects.

### Further Reading:

Alterman, A.I.; Gariti, P.; and Mulvaney, F. Short- and long-term smoking cessation for three levels of intensity of behavioral treatment. *Psychology of Addictive Behaviors* 15:261–264, 2001.

Hall, S.M.: Humfleet, G.L.; Muñoz, R.F.; Reus, V.L.; Prochaska, J.J.; and Robbins, J.A. Using extended cognitive behavioral treatment and medication to treat dependent smokers. American Journal of Public Health 101:2349 2356, 2011.

Jorenby, D.E.; Hays, J.T.; Rigotti, N.A.; Azoulay, S.; Watsky, E.J.; Williams, K.E.; Billing, C.B.; Gong, J.; and Reeves, K.R. Varenicline Phase 3 Study Group. Efficacy of varenicline, an 0-492 nicotinic acetylcholine receptor partial agonist vs. placebo or sustained-release bupropion for smoking cessation: A randomized controlled trial. The Journal of the American Medical Association 296(1):56–63, 2006.

King, D.P.; Paciqa, S.; Pickering, E.; Benowitz, N.L.; Bierut, L.J.; Conti, D.V.; Kaprio, J.; Lerman, C.; and Park, P.W. Smoking cessation pharmacogenetics: Analysis of varenicline and bupropion in placebo-controlled clinical trials. Neuropsychopharmacology 37:641–650, 2012.

Raupach, T.; and van Schayck, C.P. Pharmacotherapy for smoking cessation: Current advances and research topics. CNS Drugs 25:371–382, 2011.

Shah, S.D.; Wilken, L.A.; Winkler, S.R.; and Lin, S.J. Systematic review and meta-analysis of combination therapy for smoking cessation. *Journal of the American Pharmaceutical Association* 48(5):659-665, 2008. Smith, S.S. McCarthy, D.E.; Japannich S.J.; Christiansen, B. Piper, M.E.; Jorenby, D.E.; Fraser, D.L.; Froe, M.C.; Baker, T.B.; and Jackson, T.C. Comparative effectiveness of 3 smoking cossation pharmacotherapies in primary control of the control of the control of the control of the principles of pharmacotherapies in primary principles. Archives of Internal Medicine, 169:21-88-2155, 2000

Stützer. M. Combined behavioral and pharmacological treatments for smoking cessation. Nicoline & Tohaco Research 1,5181–5187, 1999.

# Alcohol Addiction

# Nattrexone

Nattresome blocks opioid receptors that are involved in the reveating effects of durking and the craving for alcohol. It has been shown to reduce relapse to problem drinking in some patients. An extended relasse version, Vivitor - administered ource a month by injection - is also FDA-approved for treating alcoholism, and may offer, benefits regarding compliance.

# Acamprosate

Acamprosate (Camprad\*) acts on the gamma-aminobatvic acid (GMA) and glummane neutroturacitier systems and is thought to reduce symptoms of portraved withdrawal, such as insomnia, anxiety, realessuess, and dysphoria, Azamprosate thas been shown to help dependent ethinkers maintain abstincture for several weeks to months, and if may be more effective in patients with severe dependence.

# Disulfiram

Disulfinan (Antabuse\*) interfers with degradation of alcohol, resulting in the accumulation of acetaldehyde, which, in turn, produces a very umpleasant reaction, that includes flushing nausea, and papinations if a person drinks alcohol. The tulity and effectiveness of disulfinan are considered limited because compliance.

is generally poor. However, among patients who are highly motivated, distillerant can be effective, and some patients are trajsoideally but high-risk situations, such as social occasions where aleohof is present. It can also be administered in a monitored flashous, such as in a clinic or by a spouse, improving its efficacy.

# Topiramate

Topinmune is thought to work by increasing inhibitory (CARA) neuronransmission and reducing stimulatory iglutamate; incunorransmission, although in precise merchanism of action is not known. Albuoght opinamate has not yet received FDA approval for treating alcohol addiction, it is sometimes used off-label for this purpose. Topinamate has been shown in studies to significantly improve multiple drinking outcomes, compared with a placebo.

# Combined With Behavioral Treatment

While a number of behavioral treatments bave been shown to be feeting the treatment of alcohol addiction, it does not appear that an additive effect exist between behavioral treatments and pharmacohercapy. Studies have shown that just ageting help is one of the most important factors in reasing alcohol addiction; the precise type of treatment received is not as important.

# Further Reading:

Anton, R.E.; O'Malley, S.S.; Giranlo, D.M.; Gisler, R.M.;
Couper, D.; Danovan, D.M.; Gastliend, D.R.; Hosbing,
J.D.; Johrson, B.A.; LoCastro, J.S.; Longabaugh, R.;
Alason, B.J.; Mattean, M.E.; Miller, W.R.; Petirinal, H.M.;
Randall, C.L.; Swift, R.; Weiss, R.D.; Willierns, L.D.;
Randall, C.L.; Swift, R.; Weiss, R.D.; Williams, L.D.;
and Zwelen, A., for the COMBINE Study Research
Group, Combined planmacotherapies and behavioral
interventions for activel dependence; The COMBINE
study, A enadomized controlled trial, The Journal of the
American Medical, Association 295117,2003–2012, 2006.

National Institute on Alcohol Abuse and Alcoholism, Helping Patients Who Drink Too Much: A Clinician's Guide, Updated 2005 Edition. Bethesda, MD: NIAAA, updated 2005. Available at pubs.miaua.min.gov/publications/Practitioner/Clinicians.Guide/2005/clinicians\_guide.html

### BEHAVIORAL THERAPIES

Behavioral approaches help engage people in drug abuse treatment, provide incentives for them to remain abstinent, modify their attitudes and behaviors related to drug abuse, and increase their life skills to handle stressful circumstances and environmental cues that may trigger intense craving for drugs and prompt, another cycle of compulsive abuse. Below are a number of behavioral therapies shown to be effective in addressing substance abuse (effectiveness with particular drugs of abuse is denoted in parentheses).

### Cognitive-Behavioral Therapy (Alcohol, Marijuana, Cocaine, Methamphetamine, Nicotine)

Cognitive-Behavioral Therapy (CBT) was developed as a method to prevent relapse when treating problem drinking, and later it was adapted for cocaine-addicted individuals. Cognitive-behavioral strategies are based on the theory that in the development of maladaptive behavioral patterns like substance abuse, learning processes play a critical role. Individuals in CBT learn to identify and correct problematic behaviors by applying a range of different skills that can be used to stop drug and co-occur with it.

A central element of CBT is anticipating likely problems and enhancing patients' self-control by helping them develop effective coping strategies. Specific techniques include exploring the positive and negative consequences of continued drug use, self-monitoring to recognize cravings early and identify situations that might put one at risk for use, and developing strategies for coping with cravings and avoiding those high-risk situations.

Research indicates that the skills individuals learn through cognitive-behavioral approaches remain after the completion of treatment. Current research focuses on how to produce even more powerful effects by combining CBT with medications for drug abuse and with other types of behavioral therapies. A computer-based CBT system has also been developed and has been shown to be effective in helping reduce drug use following standard drug abuse treatment.

### Further Reading:

Carroll, K.M., Easton, C.J.; Nich, C.; Hunkele, K.A.; Neavins, T.M.; Sinha, R.; Ford, H.L.; Vitolo, S.A; Doebrick, C.A.; and Rounsaville, B.J. The use of contingency management and motivational/skills-building therapy to treat young adults with marijuana dependence. Journal of Consulting and Clinical Psychology 74(5):955– 966, 2006.

Carroll, K.M.; and Onken, L.S. Behavioral therapies for drug abuse. *The American Journal of Psychiatry* 168(8):1452–1460, 2005.

Carroll, K.M.; Sholomskas, D.; Syracuse, G.; Ball, S.A.; Nuro, K.; and Fenton, L.R. We don't train in vain: A dissemination trial of three strategies of training clinicians in cognitive-behavioral therapy. *Journal of Consulting and Clinical Psychology* 73(1):106–115, 2005.

Carroll, K.; Fenton, L.R.; Ball, S.A.; Nich, C.; Frankforter, T.L.; Shi, J.; and Rounsaville, B.J. Efficacy of disulfiram and cognitive behavior therapy in cocaine-dependent outpatients: A randomized placebo-controlled trial. Archives of General Psychiatry 61(3):264–272, 2004. Carroll, K.M.; Ball, S.A.; Martino, S.; Nich, C.; Babuscio, T.A.; Nuro, K.E.; Gordon, M.A.; Potnoy, G.A.; and Romssville, B.J. Computer-assisted delivery of cognitivebehavioral therapy for addiction: a randomized trial of CBT4CBT. The American Journal of Psychiatry, 165(7):881–888, 2008.

### Contingency Management Interventions/ Motivational Incentives (Alcohol, Stimulants, Opioids,

(Atconot, Stimutants, Opio Marijuana, Nicotine)

Research has demonstrated the effectiveness of treatment approaches using contingency management (CM) principles, which involve giving patients tangible rewards to reinforce positive behaviors such as abstinence. Studies conducted in both methadoue programs and psychosocial counseling treatment programs demonstrate that incentive-based interventions are highly effective in increasing treatment retention and promoting abstinence from drugs.

Voucher-Based Reinforcement (VBR) augments other community-based treatments for adults who primarily abuse opioids (especially heroin) or stimulants (especially accaine) or both. In VBR, the patient receives a voucher for every drug-free urine sample provided. The voucher has monetary value that can be exchanged for food items, movie passes, or other goods or services that are consistent with a drug-free lifestyle. The voucher values are low at first, but increase as the number of consecutive drug-free urine samples increases; positive urine samples reset the value of the vouchers to the initial low value. VBR has been shown to be effective in promoting abstinence from opioids and cocaine in patients undergoing methadone deteoxification.

Prize Incentives CM applies similar principles as VBR but uses chances to win cash prizes instead of vouchers. Over the course of the program (at least 3 months, one or

more times weekly), participants supplying drug-negative urine or breath tests draw from a bowl for the chance to win a prize worth between \$1\$ and \$100. Participants may also receive draws for attending counseling sessions and completing weekly goal-related activities. The number of draws starts at one and increases with consecutive negative drug tests and/or counseling sessions attended but resets to one with any drug-positive sample or unexcused absence. The practitioner community has raised concerns that this intervention could promote gambling—as it contains an element of chance—and that pathological gambling and substance use disorders can be comorbid. However, studies examining this concern found that Prize Incentives CM did not promote gambling behavior.

### Further Reading:

Budney, A.J.; Moore, B.A.; Rocha, H.L.; and Higgins, S.T. Clinical trial of abstinence-based vouchers and cognitivebehavioral therapy for cannabis dependence. *Journal of Consulting and Clinical Psychology* 74(2):307–316, 2006.

Budney, A.J.; Roffman, R.; Stephens, R.S.; and Walker, D. Marijuana dependence and its treatment. *Addiction Science & Clinical Practice* 4(1):4–16, 2007.

Elkashef, A.; Vocci, F.; Huestis, M.; Haney, M.; Budney, A.; Gruber, A.; and el-Guebaly, N. Marijuana neurobiology and treatment. *Substance Abuse* 29(3):17–29, 2008.

Peirce, J.M.; Petry, N.M.; Stitzer, M.L.; Blaine, J.; Kellogg, S.; Satterfield, F.; Schwartz, M.; Krasnansky, J.; Pencer, E.; Silva-Vazquez, L.; Kirby, K.C.; Royer-Malvestuto, C.; Cohen, A.; Copersino, M.L.; Kolodner, K.; and Li, R. Effects of lower-cost incentives on stimulant abstinence in methadone maintenance treatment: A National Drug Abuse Treatment Clinical Trials Network study. Archives of General Psychiatry 63(2):201–208, 2006.

Petry, N.M.; Peirce, J.M.; Stitzer, M.L.; Blaine, J.; Roll, J.M.; Cohen, A.; Obert, J.; Killen, T.; Saladin, M.E.; Cowell, M.; Kirby, K.C.; Sterling, R.; Koyer-Malvestuto, C.; Hamilton, J.; Booth, R.E.; Macdonald, M.; Liebert, M.; Rader, L.; Burns, R; DiMaria, J.; Copersino, M.; Stabile, P.Q.; Kolodner, K.; and Li, R. Effect of prize-based incentives on outcomes in stimulant abusers in outpatient psychosocial treatment programs: A National Drug Abuse Treatment Clinical Trials Network study. Archives of General Psychiatry 62(10):1148–1156, 2005.

Petry, N.M.; Kolodner, K.B.; Li, R.; Peirce, J.M.; Roll, J.M.; Stitzer, M.L.; and Hamilton, J.A. Prize-based contingency management does not increase gambling. Drug and Alcohol Dependence 83(3):269–273, 2006.

Prendergast, M.: Podus, D.; Finney, J.; Greenwell, L.; and Roll, J. Confingency management for treatment of substance use disorders: A meta-analysis. *Addiction* 101(11):1546–1560, 2006.

Roll, J.M.; Petry, N.M.; Stitzer, M.L.; Brecht, M.L.; Peirce, J.M.; McCann, M.J.; Blaine, J.; MacDonald, M.; DiMaria, J.; Lucero, L.; and Kelloeg, S. Contingency management for the treatment of methamphetamine use disorders. *The American Journal of Psychiatry* 163:111:1993–1999, 2006.

# Community Reinforcement Approach Plus Vouchers (Alcohol, Cocaine, Opioids)

Community Reinforcement Approach (CRA) Plus Vouchers is an intensive 24-week outpatient therapy for treating people addicted to cocaine and alcohol. It uses a range of recreational, familial, social, and vocational reinforcers, along with material incentives, to make a non-drug-using lifestyle more rewarding than substance use. The treatment goals are twofold:

 To maintain abstinence long enough for patients to learn new life skills to help sustain it; and  To reduce alcohol consumption for patients whose drinking is associated with cocaine use

Patients attend one or two individual counseling sessions each week, where they focus on improving family relations, learn a variety of skills to minimize drug use, receive vocational counseling, and develop new recreational activities and social networks. Those who also abuse alcohol receive clinic-monitored disulfiram (Antabuse) therapy. Patients submit urine samples two or three times each week and receive vouchers for cocaine-negative samples. As in VBR, the value of the vouchers increases with consecutive clean samples, and the vouchers may be exchanged for retail goods that are consistent with a drug-free lifestyle. Studies in both urban and rural areas have found that this approach facilitates patients' engagement in treatment and successfully aids them in gaining substantial periods of cocaine abstinence.

A computer-based version of CRA Plus Vouchers called the Therapeutic Education System (TES) was found to be nearly as effective as treatment administered by a therapist in promoting abstinence from opioids and cocaine among opioid-dependent individuals in outpatient treatment. A version of CRA for adolescents addresses problem-solving, coping, and communication skills and encourages active participation in positive social and recreational activities.

Further Reading:

Brooks, A.C.; Ryder, D.; Carise, D.; and Kirby, K.C. Feasibility and effectiveness of computer-based therapy in community treatment. *Journal of Substance Abuse Treatment* 39(3):227–235, 2010.

Higgins, S.T.; Sigmon, S.C.; Wong, C.J.; Heil, S.H.; Badger, G.J.; Donham, R.; Dantona, R.L.; and Anthony, S. Community reinforcement therapy for cocaine-dependent outpatients. Archives of General Psychiatry 60(10):1043 1052, 2003. Rozzen, H.G.; Boulogue, J.J.; van Talder, M.W.; van den Brink, W.; De Jong, C.A.J.; and Kerlof, J.F.M. A systemic review of the effectiveness of the community reinforcement approach in alcohol, cocaine and opioid addiction. Drug and Alcohol Dependence 74(1): 13, 2004.

Silverman, K.; Higgins, S.T.; Brooner, R.K.; Montoya, I.D.; Cane, E.J.; Schuster, C.K.; and Presson, K.L. Sustained corea abstractive in methadore maintenance patients through vocaber-based reinforcement thereupy. Archives of General Psyduary 58(5):499–415, 1996. Smith, J.E.; Meyers, R.J.; and Delancy, H.D. The community reinforcement approach with homeless alcohol-dependent mischdals, forward of Gensulting and Clinical Psychology 66/29/541-548, 1998.

Stather, G.J.; Shipley, T.E.; Kirby, K.C.; Godboldte, C.; Kerwin, M.E.; Shandler, I.; and Simons, L. Development and initial demonstration of a community-based intervenion for homeless, cocaine-using African-American women. Journal of Substance Aluce Treatment 28(2):171-179, 2005.

# Motivational Enhancement Therapy (Alcohol, Marijuana, Nicotine)

Motivational Enhancement Therapy (MET) is a counseling approach that helps individuals resolve their ambivalence about engaging in treatment and stopping their drug use. This approach aims to evoke rapid and internally motivated change, rather than guide the patient stepwise through the recovery process. This obstances to an initial assessment battery session, followed by two to four individual treatment sessions with therapy cousings of an initial assessment battery session, followed by two to four individual treatment sessions with selectly to the first treatment ession in the first treatment essions with a self-motivational statements. Motivational interviewing principles are used to strengthen motivation and build a plan for change. Coping strategies for high-risk

situations are suggested and discussed with the patient. In subsequent sessions, the therapist monitors clange, reviews cession strategies being used, and continues to excounage commitment to change or sustained abstinence. Patients sometimes are encounaged to bring a significant other to sessions.

Research on MET suggests that its effects depend on of the the type of drug used by participants and on the goal of the intervention. This approach has been used successfully with people additived to also both improve their engagement in treatment and reduce their problem chinking, MET has also been unsed successfully with manjuan-dependent adults when continue, with nanjuan-dependent adults when continue, with cognitive-behavioral therapy, constituting a more comprehensive treatment approach. The results of MET are mixed for people dansing other drugs (e.g., heroin, cocaine, nicotine) and for adobscents who tend to use multiple drugs. In general, MET seems to be more effective for engaging drug abusers in treatment than for producing changes in drug use.

# Further Reading:

Baker, A.; Lewin, T.; Reichler, H.; Clancy, R.; Clarr, V.; Garrett, R.; Siy, K.; Devir, H.; and Terry, M. Evaluation of a motivational interview for substance use with psychiatric in-patient services. Addiction 97(10):1329–1337, 2002.

Haug, N.A.; Svikis, D.S.; and Diclemente, C. Motivational enhancement therapy for nicotine dependence in methadone-maintained pregnant women. Psychology of Addiction Behaviors 18(5):289–292, 2004.

Marijuana Treatment Project Research Group. Brief Treatments for eaunabis dependence: Findings from a randomized multisite trial, Journal of Consulting and Clinical Psychology, 72(3):455-466, 2004. Miller, W.R.; Yahne, C.E.; and Tonigan, J.S. Motivational interviewing in drug abuse services: A randomized trial, Journal of Consulting and Clinical Psychology 71(4):754– 763, 2003.

Stotts, A.L.; Dickemente, G.C.; and Dolan-Mullen, P. Oneto-one: A motivational intervention for resistant pregnant smokers. *Addictive Behaviors* 27(2):275–292, 2002.

### The Matrix Model (Stimulants)

The Matrix Model provides a framework for engaging stimulant (e.g., methamphetamine and cocaine) abusers in treatment and helping them achieve abstinence. Patients learn about issues critical to addiction and relapse, receive direction and support from a trained therapist, and become familiar with self-help programs. Patients are monitored for drug use through urine testing.

The therapist functions simultaneously as teacher and coach, fostering a positive, encouraging relationship with the patient and using that relationship to reinforce positive behavior change. The interaction between the therapist and the patient is authentic and direct but not confrontational or parental. Therapists are trained to conduct treatment sessions in a way that promotes the patient's self-esteem, dignity, and self-worth. A positive relationship between patient and therapist is critical to patient retention.

Treatment materials draw heavily on other tested treatment approaches and, thus, include elements of relapse prevention, family and group therapies, drug education, and self-help participation. Detailed treatment manuals contain worksheets for individual sessions; other components include family education groups, early recovery skills groups, relapse prevention groups, combined sessions, urine tests, 12-step programs, relapse analysis, and social support groups.

A number of studies have demonstrated that participants treated using the Marrix Model show statistically significant reductions in drug and alcohol use, improvements in psychological indicators, and reduced risky sexual behaviors associated with HIV transmission.

#### Further Readin

Huber, A.; Ling, W.; Shoptaw, S.; Gulan, V.; Brethen, P.; and Rawson, R. Integrating treatments for methamphetamine abuse: A psychosocial perspective. Journal of Addictive Diseases 16(4):41–50, 1997.

Rawson, R.; Shoptaw, S.J.; Obert, J.L.; McCann, M.J.; Hasson, A.L.; Marinelli-Casey, P.J.; Brethen, P.R.; and Ling, W. An intensive outpatient approach for cocaine abuse: The Matrix model. fournal of Substance Abuse Treatment 12(2):117–127, 1995.

Rawson, R.A.; Huber, A.; McCann, M.; Shoptaw, S.; Farabee, D.; Reiber, C.; and Ling, W. A comparison of contingency management and cognitive-behavioral approaches during methadone maintenance treatment for cocaine dependence. Archives of General Psychiatry 59(9):8317–824, 2002.

## 12-Step Facilitation Therapy (Alcohol, Stimulants, Opioids)

Twelve-step facilitation therapy is an active engagement strategy designed to increase the likelihood of a substance abuser becoming affiliated with and actively involved in 12-step self-help groups, thereby promoting abstinence. Three key ideas predominate: (1) acceptance, which includes the realization that drug addiction is a chronic, progressive disease over which one has no control, that life has become ummanageable because of drugs, that willpower alone is insufficient to overcome the problem, and that abstinence is the only alternative; (2) surrender, which involves giving oneself over to a higher power, accepting the fellowship and support structure of other

recovering addicted individuals, and following the recovery activities laid out by the 12-step program; and 13) active involvement in 12-step pregrams (and 12-step furthers). While the efficacy of 12-step programs (and 12-step facilitation) in treating alcohol dependence has been established, the research on its usefulness for other forms of substance abuse is more preliminary, but the treatment appears promising for belping drug abusers sustain recovery.

### Further Reading:

Carroll, K.M.; Nich, C.; Ball, S.A.; McCance, E.; Frankforter, T.L.; and Rounsaville, B.J. One-year follow-up of distillinam and psychotherapy for coatine-alcohol users: Sustained effects of treatment. Addiction 95(9):1335-1349, 2000.

Donovan, D.M.; and Wells, E.A. "Tweaking 12-step"; The potential role of 12-Step self-help group involvement in methamphetamine recovery. *Addiction* 102(Suppl. 1):121–199–2047.

Project MATCH Research Group. Matching alcoholism treatments to client heterogeneity: Project MATCH posttreatment drinking outcomes. *Journal of Studies on Alcohol* 58(1):7–29, 1997.

### Family Behavior Therapy

Family Behavior Therapy (FBT), which has demonstrated positive results in both adults and adolescents, is aimed at addressing not only substance use problems but other co-occurring problems as well, such as conduct disorders, child mistreatment, depression, family conflict, and unemployment. FBT combines behavioral contracting with contingency management.

FBT involves the patient along with at least one significant other such as a cohabiting partner or a parent (in the case of adolescents). Therapists seek to engage families in applying the behavioral strategies taught in sessions and in acquiring new skills to improve the home environment. Patients are encouraged to develop behavioral goals for preventing substance use and HIV infection, which are anchored to a contingency management system. Substance-abusing parents are prompted to set goals related to effective parenting behaviors. During each session, the behavioral goals are reviewed, with rewards provided by significant others when goals are accomplished. Patients participate in treatment planning, choosing specific interventions from a menu of evidence-based treatment options. In a series of comparisons involving adolescents with and without conduct disorder, FBT was found to be more effective than supportive counseling.

### Further Reading:

Azrin, N.H.; Donohue, B.; Besalel, V.A.; Kogan, E.S.; and Acierno, R. Youth drug abuse treatment: a controlled outcome study. *Journal of Child and Adolescent Substance Abuse* 3:1–16, 1994.

Carroll, K.M.; and Onken, L.S. Behavioral therapies for drug abuse. *American Journal of Psychiatry* 168(8):1452-1460, 2005.

Donohue, B.; Azrin, N.; Allen, D.N.; Romero, V.; Hill, H.H.; Tracy, K.; Lapota, H.; Gorney, S.; Abdel-al, R.; Caldas, D.; Herdzik, K.; Bradshaw, K.; Valdez, R.; and Van Hasselt, V.B. Family Behavior Therapy for substance abuse: A review of its intervention components and applicability. Behavior Modification, 33:495–519, 2009.

LaPota, H.B.; Donohue, B.; Warren, C. S.; and Allen, D.N. Integration of a Healthy Living curriculum within Family Behavior Therapy: A clinical case example in a woman with a history of domestic violence, child neglect, drug along, and obesity. Journal of Family Violence 26:227–234, 2011.

### BEHAVIORAL THERAPIES PRIMARILY FOR ADDLESCENTS

Drug-abusing and addicted adolescents have unique: treatment needs. Research has shown that treatments designed for and tested in adult populations often need to be modified to be effective in adolescents. Familyinvolvement is a particularly important component for interventions targeting youth. Below are examples of behavioral interventions that employ these principles and have shown efficacy for treating addiction in youth.

### Multisystemic Therapy

Multisystemic Therapy (MST) addresses the factors associated with serious antisocial behavior in children and adolescents who abuse alcohol and other drugs. These factors include characteristics of the child or adolescent; (e.g., favorable attitudes toward drug use), the family (poor discipline, family conflict, parental drug abuse), peers (positive attitudes toward drug use), school (dropout, poor performance), and neighborhood (criminal subculture). By participating in intensive treatment in natural environments (homes, schools, and neighborhood settings), most youths and families complete a full course of treatment. MST significantly reduces adolescent drug use during treatment and for at least 6 months after treatment. Fewer incarcerations and out-of-home juvenile placements. offset the cost of providing this intensive service and maintaining the clinicians' low caseloads.

#### Further Reading:

Henggeler, S.W.; Clingempeel, W.G.; Brondino, M.J.; and Pickrel, S.G. Four-year follow-up of multisystemic therapy with substance-abusing and substance-dependent juvenile offenders, Journal of the American Academy of Child and Adolescent Psychiatry 41(7):808–874, 2002.

Henggeler, S.W.; Rowland, M.D.; Randall, J.; Ward, D.M.; Pickrel, S.G.; Cumuingham, P.B.; Miller, S.L.;

Edwards, J.; Zealberg, J.J.; Hand, L.D.; and Santos, A.B. Home-based multisystemic therapy as an alternative to the hospitalization of youths in psychiatric crisis: Clinical outcomes. Journal of the American Academy of Child and Adolescent Psychiatry 38(11):1331–1339, 1999.

Henggeler, S.W.; Halliday-Boykins, C.A.; Cunningham, P.B.: Randall, J.; Shapiro, S.B.; and Chapman, J.E. Juvenile drug court: Enhancing outcomes by integrating evidence-based treatments. Journal of Consulting and Clinical Psychology 74(1):42–54, 2006.

Henggeler, S.W.; Pickrel, S.G.; Broudino, M.J.; and Grouch, J.L. Eliminating (almost) treatment dropout of substance-abusing or dependent delinquents through home-based multisystemic therapy. *The American Journal* of Psychiatry 153(3):427–428, 1996.

Huey, S.J.; Henggeler, S.W.; Brondino, M.J.; and Pickrel, S.G. Mechanisms of change in multisystemic therapy: Reducing delinquent behavior through therapist adherence and improved family functioning. *Journal of Consulting and Clinical Psychology* 68:33:451–467, 2000.

### Multidimensional Family Therapy

Multidimensional Family Therapy (MDFT) for adolescents is an outpatient, family-based treatment for teenagers who abuse alcohol or other drugs. MDFT views adolescent drug use in terms of a network of influences (individual, family, peer, community) and suggests that reducing unwanted behavior and increasing desirable behavior occur in multiple ways in different settings. Treatment includes individual and family sessions held in the clinic, in the home, or with family members at the family court, school, or other community locations.

During individual sessions, the therapist and adolescent work on important developmental tasks, such as developing decision-making, negotiation, and problemsolving skills. Teenagers acquire vocational skills and skills in communicating their thoughts and feelings to deal better with life stressors. Parallel sessions are held with family members. Parents examine their particular parenting styles, learning to distinguish influence from control and to have a positive and developmentally appropriate influence on their children.

#### Further Reading:

Dennis, M.; Godley, S.H.; Diamoud, G.; Tims, E.H.; Babor, T.; Donaldson, J.; Liddle, H.; Titus, J.C.; Kaminer, Y.; Webb, C.; Hamilton, N.; and Funk, R. The Cannabis Youth Treatment (CYT) Study: Main findings from two randomized clinical trials. Journal of Substance Abuse Treatment 27(3):197–213, 2004.

Liddle, H.A.; Dakof, G.A.; Parker, K.; Diamond, G.S.; Barrett, K.; and Tejeda, M. Multidimensional. family therapy for adolescent drug abuse: Results of a randomized clinical trial. The American Journal of Drugand Alcohol Abuse 27(4):651–688, 2001.

Liddle, H.A.; and Hogue, A. Multidimensional family therapy for adolescent substance abuse. In E.F. Wagner and H.B. Waldron (eds.), Innovations in Adolescent Substance Abuse Interventions. London: Pergamon/ Elsevier Science, pp. 227–261, 2001.

Liddle, H.A.; Rowe, C.L.; Dakof, G.A.; Ungaro, R.A.; and Henderson, C.E. Early intervention for adolescent substance abuse: Pretreatment to postureatment outcomes of a randomized clinical trial comparing multidimensional family therapy and peer group treatment. Journal of Psychoatrine Drugs 36(1):49–63, 2004.

Schmidt, S.E.; Liddle, H.A.; and Dakof, G.A. Effects of multidimensional family therapy: Relationship of changes in parenting practices to symptom reduction in adolescent substance abuse. *Journal of Family Psychology* 10(1):1–16, 1996

### Brief Strategic Family Therapy

Brief Strategic Family Therapy (BSFT) targets family interactions that are thought to maintain or exacerbate adolescent drug abuse and other co-occurring problem behaviors. Such problem behaviors include conduct problems at home and at school, oppositional behavior, delinquency, associating with antisocial peers, aggressive and violent behavior, and risky sexual behavior. BSFT is based on a family systems approach to treatment, in which family members' behaviors are assumed to be interdependent such that the symptoms of one member (the drug-abusing adolescent, for example) are indicative. at least in part, of what else is occurring in the family system. The role of the BSFT counselor is to identify the patterns of family interaction that are associated with the adolescent's behavior problems and to assist in changing those problem-maintaining family patterns. BSFT is meant to be a flexible approach that can be adapted to a broad range of family situations in various settings (mental health clinics, drug abuse treatment programs, other social service settings, and families' homes) and in various treatment modalities (as a primary outpatient intervention, in combination with residential or day treatment, and as an aftercare/continuing-care service following residential treatment).

### Further Reading:

Coatsworth, J.D.; Santisteban, D.A.; McBride, C.K.; and Szapocznik, J. Brief Strategic Family Therapy versus community control: Engagement, retention, and an exploration of the moderating role of adolescent severity. Family Process 40(3):313-332, 2001.

Kurtines, W.M.: Murray, E.J.; and Laperriere, A. Efficacy of intervention for engaging youth and families into treatment and some variables that may continue to differential effectiveness. *Journal of Family Psychology* 10(1):35–44, 1996.

Santisteban, D.A.; Coatsworth, J.D.; Perez-Vidal, A.; Mitrani, V.; Jean-Gilles, M.; and Szapocznik, J. Brief Structural/Strategic Family Therapy with African-American and Hispanic high-risk youth, Journal of Community Psychology 25(5):453-471, 1997.

Santisteban, D.A.; Suarez-Morales, L.; Robbins, M.S.; and Szapocznik, J. Brief strategic family therapy: Lessons learned in efficacy research and challenges to blending research and practice. Family Process 46(2):259–271, 2006.

Santisteban, D.A.; Szapocznik, J.; Perez-Vidal, A.; Mitrani, V.; Jean-Gilles, M.; and Szapocznik, J. Birief Structural/ Strategic Family Therapy with African-American and Hispanic high-risk youth. *Journal of Community Psychology* 25(5):453–471, 1997.

Szapoczuik, J.; Perez-Vidal, A.; Brickman, A.L.; Foote, E.H.; Sannisteban, D.; Hervis, O.; and Kurtines, W.M.. Engaging adolescent drug abusers and their families in treatment: A strategic structural systems approach. *Journal* of Consulting and Clinical Psychology 56(4):552–557, 1988.

### Functional Family Therapy

Functional Earnily Therapy (FFT) is another treatment based on a family systems approach, in which an adolescent's behavior problems are seen as being created or maintained by a family's dysfunctional interaction patterns. FFT aims to reduce problem behaviors by improving communication, problem-solving, conflict resolution, and parenting skills. The intervention always includes the adolescent and at least one family member in each session. Principal treatment tactics include (1) engaging families in the treatment process and enhancing their motivation for change and (2) bringing about changes in family members behavior using contingency management techniques, communication and problem-solving, behavioral contracts, and other behavioral interventions.

Further Reading:

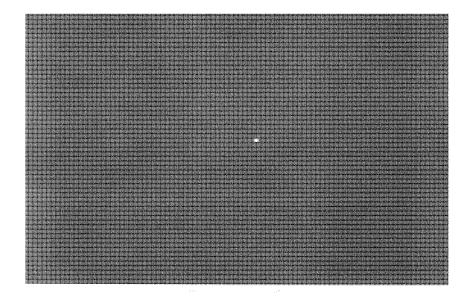
Waldron, H.B.; Slesnick, N.; Brody, J.L.; Turner, C.W.; and Peterson, T.R. Treatment outcomes for adolescent substance abuse at 4- and 7-month assessments, fournal of Consulting and Clinical Psychology 69:802–813, 2001.

Waldron, H.B.; Turner, C. W.; and Ozechowski, T. J. Profiles of drug use behavior change for adolescents in treatment. *Addictive Behaviors* 30:1775–1796, 2005.

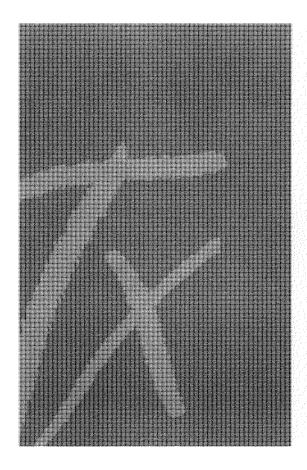
### Adolescent Community Reinforcement Approach and Assertive Continuing Care

The Adolescent Community Reinforcement Approach (A-CRA) is another comprehensive substance abuse treatment intervention that involves the adolescent and his or her family. It seeks to support the individual's recovery by increasing family, social, and educational/vocational reinforcers. After assessing the adolescent's needs and levels of functioning, the therapist chooses from among 17 A-CRA procedures to address problem-solving, coping, and communication skills and to encourage active participation in positive social and recreational activities. A-CRA skills training involves role-playing and behavioral rehearsal.

Assertive Continuing Care (ACC) is a home-based continuing-care approach to preventing relapse. Weekly home visits take place over a 12- to 14-week period after an adolescent is discharged from residential, intensive outpatient, or regular outpatient treatment. Using positive and negative reinforcement to shape behaviors, along with training in problem-solving and communication skills, ACC combines A-CRA and assertive case management services (e.g., use of a multidisciplinary team of professionals, round-the-clock coverage, assertive outreach) to help adolescents and their caregivers acquire the skills to engage in positive social activities.



Further Reading;
Denuis, M.; Godley, S.H.; Diamond, G.; Time, P.M.;
Babor, T.; Danaldson, J.; Lidde, H.; Time, J.C.; Karnier,
Y.; Webb, C.; Hamilton, N.; and Funk R. The Cannadis
Youth Treatment (CYT) Study: Man finding from two
randomized trials, Jaurnal of Substance Abuse Treatment
27:197–213, 2004.
Godley, S.H.; Garner, B.R.; Passerti, L.L.; Funk, R.R.;
Dennis, M.L.; and Godley, M.D. Arbelescent outpatient
treatment and continuing care: Main findings from a
randomized clinical trial. Drug and Alcohol Dependence.
Jul 17:101–25:44–54, 2010.
Godley, M.D.; Godley, S.H.; Dennis, M.L.; Funk, R.; and
Passerti, L.L. Preliminary outcomes from the assertive
continuing care experiment for adobeseens discharged
from residential treatment, Journal of Substance debase
Treatment 32:31, 30; 2002.



### RESOURCES

### NATIONAL AGENCIES

The National Institute on Drug Abuse (NIDA) leads the Nation in scientific research on the health aspects of drug abuse and addiction. It supports and conducts research across a broad range of disciplines, including genetics, functional neuroimaging, social neuroscience, prevention, medication and behavioral therapies, and health services. It then disseminates the results of that research to significantly improve prevention and treatment and to inform policy as it relates to drug abuse and addiction. Additional information is available at drugabuse. gov or by calling 301-443-1124.

### NATIONAL INSTITUTE ON ALCOHOL. ABUSE AND ALCOHOLISM (NIAAA)

The National Institute on Alcohol Abuse and Alcoholism (NIAAA) provides leadership in the national elfort to reduce alcohol-related problems by conducting and supporting research in a wide range of scientific areas, including genetics, neuroscience, epidemiology, health risks and benefits of alcohol consumption, prevention, and treatment; coordinating and collaborating with other research institutes and Federal programs on alcohol-related issues; collaborating with international, national, State, and local institutions, organizations, agencies, and programs engaged in alcohol-related work; and translating and disseminating research findings to healthcare providers, researchers, policymakers, and the public, Additional information is available at miana.nih.gov or by calling 301-443-3860.

### NATIONAL INSTITUTE OF MENTAL HEALTH

The mission of the National Institute of Mental Health (NIMH) is to transform the understanding and treatment of mental illnesses through basic and clinical research, paving the way for prevention, recovery, and cure. In support of this mission, NIMH generates research and promotes research training to fulfill the following four objectives: (1) promote discovery in the brain and behavioral sciences to fuel research on the causes of mental disorders; (2) chart mental illness trajectories to determine when, where, and how to intervene; (3) develop new and better interventions that incorporate the diverse needs and circumstances of people with mental illnesses; and (4) strengthen the public health impact of NIMH-supported research. Additional information is available at ninh.nih.guo or by calling 301-443-513.

### CENTER FOR SUBSTANCE ABUSE TREATMENT (CSAT)

The Center for Substance Abuse Treatment (CSAT), a part of the Substance Abuse and Mental Health Services Administration (SAMHSA), is responsible for supporting treatment services through a block grant program, as well as disseminating findings to the field and promoting their adoption. CSAT also operates the 24-hour National Treatment Referral Hotline (1-800-662-HELP), which offers information and referral services to people seeking treatment programs and other assistance. CSAT publications are available through SAMHSA's Store (store.samhsa.gov). Additional information about CSAT can be found on SAMHSA's Web site at samhsa.gov/about/csat.aspx.

### SELECTED PUBLICATIONS AND RESOURCES FOR DRUG ADDICTION TREATMENT

The following are available from the NIDA DrugPubs Research Dissemination Center, the National Technical Information Service (NTIS), or the Government Printing Office (GPO). To order, refer to the DrugPubs (877-NIDANIH [643-2644]), NTIS (1-800-553-6847), or GPO (202-512-1800) number provided with the resource description:

Blending products. NIDA's Blending Initiative—a joint venture with SAMHSA and its nationwide network of Addiction Technology Transfer Centers (ATTCs)—uses "Blending Teams" of community practitioners, SAMHSA trainers, and NIDA researchers to create products and devise strategic dissemination plans for them. Completed products include those that address the value of buprenorphine therapy and onsite rapid HIV testing in community treatment programs; strategies for treating prescription opioid dependence; and the need to enhance healthcare workers' proficiency in using tools such as the Addiction Severity Index (ASI), motivational interviewing, and motivational incentives. For more information on Blending products, please visit NIDA's Web site at drugabuse gool/blending-initiative.

Addiction Severity Index. Provides a structured clinical interview designed to collect information about substance use and functioning in life areas from adult clients seeking drug abuse treatment. For more information on using the ASI and to obtain copies of the most recent edition, please visit triweb.tresearch.org/index.php/tools/download-asi-instruments-manuals/.

Drugs, Brains, and Behavior: The Science of Addiction (Reprinted 2010). This publication provides an overview of the science behind the disease of addiction. WIH Publication #10 - 5605. Available online at drugabuse, gov/publications/science-addiction.

Seeking Drug Abuse Treatment: Know What To Ask (2011). This lay-friendly publication offers guidance in seeking drug abuse treatment and lists free questions to ask when searching for a treatment program. NIH Publication #12-7764. Available online at drugabuse.gov/publications/seeking-drug-abuse-treatment.

Principles of Drug Abuse Treatment for Criminal Justice Populations: A Research-Based Guide (Revised 2012). Provides 13 essential treatment principles and includes resource information and answers to frequently asked questions. NIH Publication No.: 11-5316. Available online at nida.nih.gov/PODAT\_CJ.

NIDA DrugFacts: Treatment Approaches for Drug Addiction (Revised 2008). This is a fact sheet covering research findings on effective treatment approaches for drug abuse and addiction. Available online at drugabuse. gov/publications/drugfacts/treatment-approaches-drugaddiction. Alcohol Alert (published by NIAAA). This is a quarterly bulletin that disseminates important research findings on alcohol abuse and alcoholism. Available online at niaaa.nih.gov/publications/journals-and-reports/alcohol-dert.

Helping Patients Who Drink Too Much: A Clinician's Guide (published by NIAAA). This booklet is written for primary care and mental health clinicians and provides guidance in screening and managing alcohol-dependent patients. Available online at pubs.niaaa.nih.gov/publications/Practitioner/CliniciansGuide2005/clinicians\_guide.htm.

Research Report Series: Therapeutic Community (2002). This report provides information on the role of residential drug-free settings and their role in the treatment process. NIH Publication #02-4877. Available online at drugabuse-gov/publications/research-reports/therapeutic-community.

### INITIATIVES DESIGNED TO MOVE TREATMENT RESEARCH INTO PRACTICE

### CLINICAL TRIALS NETWORK

Assessing the real-world effectiveness of evidence-based treatments is a crucial step in bringing research to practice. Established in 1999, NIDA's National Drug Abuse Treatment Clinical Trials Network (CTN) uses community: settings with diverse patient populations and conditions to adjust and test protocols to meet the practical needs: of addiction treatment. Since its inception, the CTN has tested pharmacological and behavioral interventions for drug abuse and addiction, along with common. co-occurring conditions (e.g., HIV and PTSD) among various target populations, including adolescent drug abusers, pregnant drug-abusing women, and Spanishspeaking patients. The CTN has also tested prevention strategies in drug-abusing groups at high risk for HCV and HIV and has become a key element of NIDA's multipronged approach to move promising science-based drug addiction treatments rapidly into community settings. For more information on the CTN, please visit drugabuse. gov/CTN/Index.htm.

### CRIMINAL JUSTICE-DRUG ABUSE TREATMENT STUDIES

NIDA is taking an approach similar to the CTN to enhance treatment for drug-addicted individuals involved with the criminal justice system through Criminal Justice Drug Abuse Treatment Studies (CJ-DATS). Whereas NIDA's CTN has as its overriding mission the improvement of the quality of drug abuse treatment by moving innovative approaches into the larger community,

research supported through CJ-DATS is designed to effect change by bringing new treatment models into the criminal justice system and thereby improve outcomes for offenders with substance use disorders. It seeks to achieve better integration of drug abuse treatment with other public health and public safety forums and represents a collaboration among NIDA; SAMHSA; the Centers for Disease Control and Prevention (CDC); Department of Justice agencies; and a host of drug treatment, criminal justice, and health and social service professionals.

### SLENDING TEAMS.

Another way in which NIDA is seeking to actively move science into practice is through a joint venture with SAMHSA and its nationwide network of Addiction Technology Transfer Centers (ATTCs). This process involves the collaborative efforts of community treatment practitioners, SAMHSA trainers, and NIDA researchers, some of whom form "Blending Teams" to create products and devise strategic dissemination plans for them. Through the creation of products designed to foster adoption of new treatment strategies, Blending Teams are instrumental in getting the latest evidencebased tools and practices into the hands of treatment professionals. To date, a number of products have been completed. Topics have included increasing awareness of the value of buprenorphine therapy and enhancing healthcare workers' proficiency in using tools such as the ASI, motivational interviewing, and motivational incentives. For more information on Blending products, please visit NIDA's Web site at nida.nih.gov/blending.

### OTHER FEDERAL RESOURCES

### NIDA DrugPubs Research Dissemination Center.

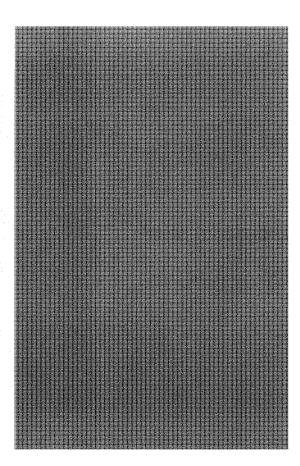
NIDA publications and treatment materials are available from this information source. Staff provide assistance in English and Spanish and bave TTY/TDD capability. Phone: 877-NIDA-NIH (877-648-2644); TTY/TDD: 240-645-0227; e-mail: drugplub@nida.nih, gor; Web site: drugplubs.dnugabuse.gov.

The National Registry of Evidence-Based Programs and Practices. This database of interventions for the prevention and treatment of mental and substance use disorders is maintained by SAMHSA and can be accessed at neeph sumbsa.gov.

SAMHSA's Store has a wide range of products including manuals, brochures, videos, and other publications. Phone: 800-487-4889; Web site: store.samhsa.gov.

The National Institute of Justice. As the research agency of the U.S. Department of Justice, the National Institute of Justice (NIJ) supports research, evaluation, and demonstration programs relating to drug abuse in the context of crime and the criminal justice system. For information, including a wealth of publications, contact the National Criminal Justice Reference Service at 800-851-3420 or 301-519-500; or visit mit.gov.

Clinical Trials. For more information on federally and privately supported clinical trials, please visit clinicaltrials.gov.



NIN Publication No. 12-4180 Politika October 1989. Reprinted July 2980, February 2008, Pavisad April: December 2012





### 2

Ken Burgdorf, Ph.D. Xiaowu Chen, M.D., M.S.P.H.

CSAT Women's Conference, July 12, 2004

\*Study conducted under Contract 270-97-7030 funded by the Center for Substance Abuse Treatment, Substance Abuse and Mental Health Services Administration, U.S. Department of Health and Human Services. Center for Substance Abuse Treatment, 5600 Fishers Lane, Rockwall II, Suite 740, Rockville, Maryland 20857, 301/443-5052. Contents are solely the responsibility of the authors and do not necessarily represent the official views of the agency.

Residential Women's Treatment:

Cost-Benefit and Outcome

Findings from a CSAT Cross-

Site Evaluation

### The RWC/PPW Program and Cross-Site Evaluation

- The Residential Women and Children (RWC)/Pregnant and Postpartum Women (PPW) programs were funded by the Substance Abuse and Mental Health Services Administration's Center for Substance Abuse Treatment
- The cross-site evaluation encompassed 50 5-year RWC/PPW projects that were funded in two cohorts:
  - 39 in FY 1993
  - 11 in FY 1995
- Each project was required to develop a comprehensive, long-term (6- or 12-month) residential treatment program for pregnant and parenting women with serious substance abuse problems, including on-site care of clients' infants and young children

### **RWC/PPW Projects Provided:**

- Outreach services to promote Tx entry & retention
- Screening/assessment for women, infants, & children
- Medical testing for substance abuse related diseases/conditions
- Medical care for clients & children
- Individual and group therapy/counseling for clients & children

77

### **RWC/PPW Projects Provided (con't)**

- Educational & vocational services for clients & children
- Other support services for clients & children
- Individualized case management, w/ active involvement of clients
- Family member involvement in children's Tx
- Full continuum of care in residential setting

	<b>]</b>	
Coumseling Treatment Services Prov Gross-Site Demonstration	s Provided by I ration Projects	r rowermow Is
Service	% of Clients Receiving Service	% of Projects Offering Service
Individual Counseling	98%	100%
Group Counseling Planned Structure	96%	100%
Group Counseling Open Discussion	95%	100%
Family Group Counseling	5256	
Sexual Abuse Therapy	37%	
Psychological/Emotional Abuse Therapy	47%	9886
Physical Abuse Therapy		34
Smoking Cessetion		18 11 100
Recreational Groups	79%	
12-Step, Self-Help Programs (AOD related)	91%	100%

7	te 2.	
Health Care Services Provided Cross-Site Demonstration	Provided by RV nstration Proje	WC/PPW cts
	% of Clients	% of Projects
	Service	Service
Acupuncture		7437
Doutel Care		100%
Vision/Eye Care	19%	*6001
Family Planning		
Primary Health Care	75%	
Gymecological Care	21%	23
Prenatal Care (only for pregnant clients)	78%1	84%
Postnatal Care (only for postpartum clients)	64%	38%
Nutritional Therapy		-1007%

 We would expect a very high percentage of women to receive such care right before or night after delivery.

W Gross-Site	s Projects ing Offering	94,001		Ē		-		*61				36
3 <u>.</u> by RWC.PP n Projects	% of Clients Receiving Service	% 86		H			3° 23 				# # #	8
Table 3 Ancillary Services Provided b Demonstration	Service	Parenting Training/Education	Vocational Training	Life Skills Training	Health/Nutrition Education	pirituality Groups	GED/Postsecondary Education	Arranging Public Assistance	egal Services	Transportation	Respite Gare	Self-Help Groups for Non- Substance Abuse Related Conditions (e.g., Overesters

### 222

### The RWC/PPW Cross-Site Evaluation

- Cross-site evaluation collected data from October 1, 1996 to March 31, 2001
- 50 RWC/PPW projects submitted a standardized set of quantitative data on a quarterly basis including admission, treatment services, discharge, and 6-month follow-up data
- Outcome data set represents 1,768 former clients from 32 projects that met minimal requirements for follow-up data collection (50% follow-up rate or better)
- Follow-up data are available for 1,181 women
- Nonresponse adjustments made to account for underrepresentation of shortstay clients

### Project Characteristics (n=32)

## Client Characteristics (n = 1,768)

### Client Characteristics (continued)

### Child Characteristics (n=4,048)

Male	49.0%					
Mean age	$3.8 \pm 3.4$ years					
Child Placement before treatment	Legal custody (%)	Living situation (%)				
Mother	67.1	45.8				
Father	0.9	4.1				
Mother & Father	12.8	9.0				
Grandparent	2.1	13.3				
Other relative	0.8	6.0				
State	13.8	15.9				
Other	2.5	5.7				

### Client, Pregnancy, and Project Outcomes

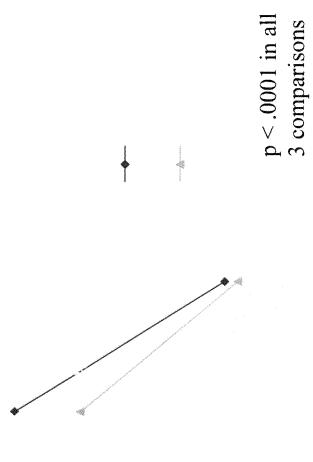
### **Outcome Dimensions Covered**

- Abstinence vs. Relapse
- Arrests for Illegal Activities
- Economic/Social Outcomes
- Physical and Mental Health
- Pregnancy Outcomes
- Project Sustainability

22

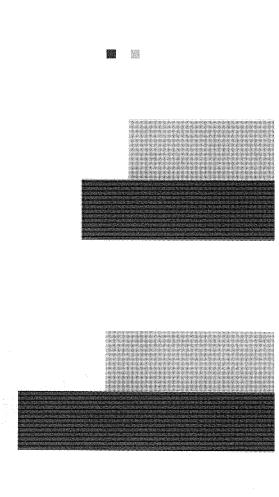
## Client Substance Use, Pre-Post Change

### Client Arrests for Illegal Activities



### Economic/Social Outcomes

## Client Physical and Mental Health Problems, Pre-Post Change



### **Pregnancy Outcomes**

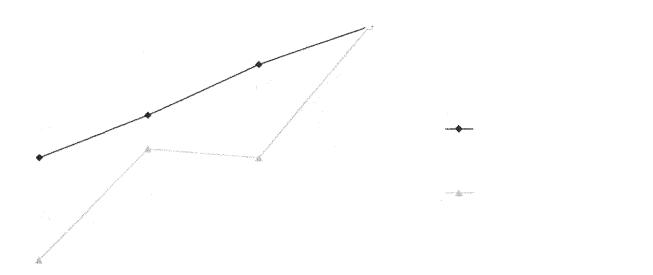
Ŋ

\* n = 2,837 from 12 recent hospital-based studies of outcomes for cocaine-using women

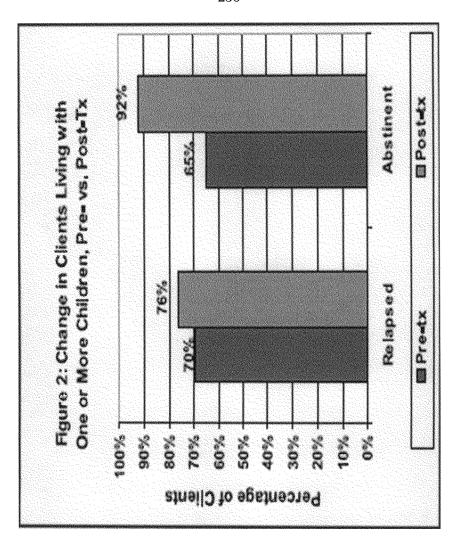
\*\* n = 9,737 from 10 recent hospital-based studies of outcomes for cocaine-using women

\*\*\* n = 10,816 previous pregnancies of RWC/PPW clients, as reported at treatment admission

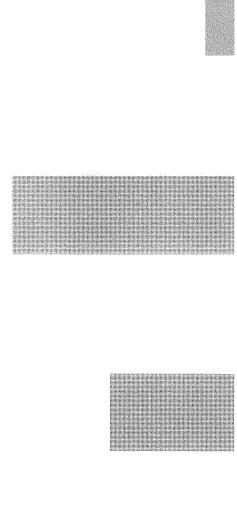
### Percentage of Clients Abstinent Post Discharge, by LOS and Study



## Key Client Outcomes, Broken Out By Length of Stay



# Sustainability Status of RWC/PPW Projects at End of CSAT Grant (n = 36)



### Outcome Study Conclusions

- This type of residential treatment accrues substantial benefits to clients in many areas of life
- Benefits are most widespread and pronounced for clients who remain in treatment 3 months or more, who are especially successful in achieving lasting abstinence

### Treatment Cost

### Treatment Cost Data

- Collected on-site by professional accounting firm (CCC) in 1997; 39 sites
- Used CSAT-developed cost accounting system (SATCAAT)
- Comprehensive, based on full market value of project facilities, goods, and services (incl. donated)

### Site Variation in RWC/PPW Unit Costs

	Mean ± SD
Annual cost per site	$$928,190 \pm 305,114$
Episode cost per client	\$25,744 ± 13,440
Daily cost per client, total	\$159 ± 62
Housing	\$51 ± 30
Client services	$$60 \pm 28$
Child services	\$48 ± 26

### Average Treatment Episode Costs by Group

	Group									
Statistics	Total	1-30	31-90	91-180	181+	Pregnt	Not pre			
N (clients)	1768	368	362	381	657	457	1311			
Mean LOS (days)	151.8	15.6	58.2	140.2	286.5	143.2	154.8			
Clinical intensity	1	2.9	1.6	0.9	0.9	varies	varies			
Episode cost by component										
Intake	\$834	\$834	\$834	\$834	\$834	\$834	\$834			
Resid. Care	\$11,686	\$1,201	\$4,480	\$10,793	\$22,055	\$11,024	\$11,917			
Clin. Care	\$11,670	\$3,478	\$7,159	\$9,701	\$19,824	\$11,130	\$11,859			
Total, per client	\$24,190	\$5,513	\$12,473	\$21,327	\$42,712	\$22,988	\$24,610			

### Monetizing Benefits

### Benefit Types Included

- Only benefits to society
- Only benefits that can be quantified from study data and then monetized based on outside literature
- Include both in-treatment and post-treatment (PT) benefits
- Include both client- and child-related benefits
- Estimate PT benefits for at least 1 year

## Benefits to be Estimated

- In-treatment: reduced crime, reduced TANF, reduced foster care
- Post-treatment: reduced crime (1 yr), reduced TANF (1 yr), reduced Foster Care (33 mos), reduced LBW (lifetime)

Crime Reduction, by		In-tx			Post-tx (1 yr)		
Type of Offense	Unit cost (\$)	Units avert (total)	Units avert (mn)	Saving (mn)	Units avert (total)	Units avert (mn)	Saving (mn)
Drug sale, dist., manfr.	26	5150	2.9	\$76	9162	5.2	\$135
DWI, DUI	58	1292	0.7	\$42	1973	1.1	\$65
Forgery, fraud	690	2505	1.4	\$978	5504	3.1	\$2148
Fencing stolen propty	124	2540	1.4	\$178	4291	2.4	\$301
Gambling, bookmaking	8	1164	0.7	\$5	1360	0.8	\$6
Prostitution	54	3465	2.0	\$106	6083	3.4	\$186
Burglary/auto theft	1637	1644	0.9	\$1522	3534	2.0	\$3272
Other theft	915	2153	1.2	\$1114	3295	1.9	\$1705
Robbery	5944	511	0.3	\$1718	1074	0.6	\$3611
Aggravated assault	5440	983	0.6	\$3025	1469	0.8	\$4520
Vandalism	58	836	0.5	\$27	1572	0.9	\$52
Total		22243		\$8791	39317		\$16000

Benefit type and amount	Unit cost (\$)	Total N=1,768	Mean per client (\$)
Crime			
In-tx: N crimes averted		22,243	
Savings	varies	\$15,543,283	\$8,791
Yr post-tx: N crimes avrt.		39,317	
Savings	varies	\$28,288,327	\$16,000
Crime total		\$43,831,610	\$24,792
TANF (& Food Stamps)			
In-tx: N sup. days averted		121,071	
Savings	\$31/day	\$3,753,201	\$2,123
Yr post-tx: N sup. yrs avrtd		349	
Savings	\$11,300/yr	\$3,943,700	\$2,231
TANF total		\$7,696,901	\$4,353

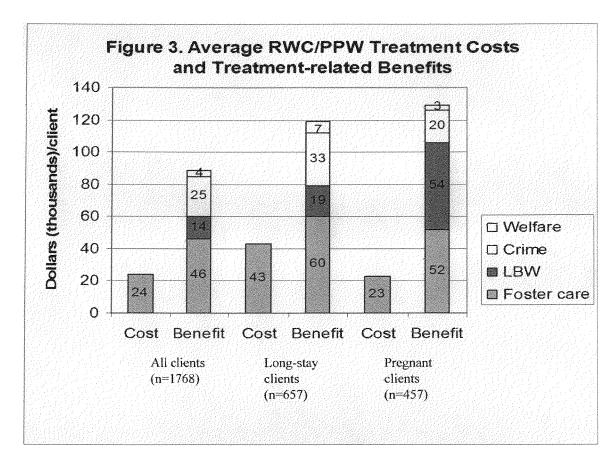
2
Ĺ
<b>T</b>
$\alpha$

Benefit type and amount	Unit cost (\$)	Total	Mean per client (\$)
(continued)		N=1,768	Cheff (\$)
LBW Deliveries			
N LBWs averted		55	
1st year med cost saving	\$25,413	\$1,397,715	\$791
Lifetime med/edu saving	\$423,760	\$23,306,800	\$13,183
LBW total	\$449,173	\$24,704,515	\$13,973
Foster Care (FC)			
In-tx: N days for FC kids		48,432	
Saving	\$64/day	\$3,099,648	\$1,753
Post-tx: FC plmts averted		1,217	
Saving	\$64,218/plmt	\$78,153,306	\$44,204
FC total		\$81,252,954	\$45,958

### RWC/PPW Benefit Summary

Benefit type and period	Savings Quantity	Total (\$M)	Mean (\$thou)	%
Total (n=1,768)		157.5	89.1	100
In-tx offsets		22.4	12.7	(14)
Foster care	48,432 days	3.1	1.8	2
Crime	22,243 crimes	15.5	8.8	10
Public support	121,071 days	3.8	2.1	2
Post-tx benefits		135.1	76.4	(86)
LBW, lifetime	55 LBWs	24.7	14.0	16
Foster care, 1st plmt	1,217 placemts	78.2	44.2	50
Crime, 1st yr	39,317 crimes	28.3	16.0	18
Pub. assist 1st yr	349 families	3.9	2.2	2

249



## Conclusions

Q: Do program benefits exceed costs? A: Yes Total B exceeds Total C by \$65,000/client (\$89.1K-\$\$21.2K), for B/C=3.7:1

- For LT, B-C=\$76,000; B/C=2.8:1
- For preg, B-C=\$103,000; B/C=5.5:1
- Post-tx B (\$76.4K)/net C (\$11.5K)=6.6:1

## Caveats

- Outcome data from client self-report
- No control group
- Benefit estimates conservative and incomplete in type, duration
- Analysis excluded role of leveraged services

#### ASSESSING THE FEDERAL RESPONSE

#### **TUESDAY, MAY 17, 2016**

U.S. Senate, COMMITTEE ON HOMELAND SECURITY AND GOVERNMENTAL AFFAIRS, Washington, DC.

The Committee met, pursuant to notice, at 3:33 p.m., in room SD-342, Dirksen Senate Office Building, Hon. Ron Johnson, Chairman of the Committee, presiding.

Present: Senators Johnson, Portman, Ayotte, Carper, McCaskill, Tester, Booker, and Peters.

#### OPENING STATEMENT OF CHAIRMAN JOHNSON

Chairman JOHNSON. This hearing will come to order. I do apologize to the witnesses for the delay. We had a couple of votes, so appreciate your indulgence.

Because we are short on time, I just have a written statement

that I would ask consent to enter in the record.1

And, I would also like to recognize the fact that it is National Police Week. There have been 123 law enforcement officers killed in the line of duty during calendar year 2015, including two in Wisconsin: Officer Ryan Copeland from McFarland, Wisconsin and Trooper Trevor John Caspar, who was killed in Fond du Lac, Wisconsin. So, I would just ask everybody to bow their heads and take a moment of silence.

[Moment of silence.]

Thank you. The sacrifice of our police officers is really too large to even express in words, so I appreciate everybody taking that moment of silence.

With that, Senator Carper.

#### OPENING STATEMENT OF SENATOR CARPER

Senator CARPER. Thank you, Mr. Chairman. Thank you for pulling this together. To our witnesses, again, we apologize for the delay. Sometimes, our day jobs get in the way of our job here on the Committee—and that was voting—voting on the Senate floor. I have a statement and I would also like to ask, Mr. Chairman,

unanimous consent that it be included in the record.2 I just want to mention one or two things, if I could, and then we will get going.

The situation we are in, as a country—there is a large focus here on the three countries where the most illegal immigration is coming from in Central America—South America—and they are: Hon-

 $<sup>^1\</sup>mathrm{The}$  prepared statement of Senator Johnson appears in the Appendix on page 285.  $^2\mathrm{The}$  prepared statement of Senator Carper appears in the Appendix on page 286.

duras, Guatemala, and El Salvador. And, the reason why people are coming up here is that, a lot of times, young kids-young families live hellacious lives. They live hellacious lives because we send them money and they send us drugs. We send money and guns to some of the people that are just making life miserable for the citizens of those countries.

I am one who always wants to focus on root causes—to find out what is the root cause of a problem, not just look at the symptoms of a problem. You have all of these people trying to get into our country across the border. What is the root cause of that? The root cause of that is that their lives are miserable because of our addiction to drugs and the trafficking of those drugs through those coun-

So, we are doing a couple of things to try to address it, including investing some money to help enable those countries to be a better place to live—less horrific—a place they would want to stay and raise their families. And, the root cause is our addiction—our addictions to opioids and heroin—that sort of thing. And, we cannot

ignore that.

The last thing I would say is this: We talk in this Committee, from time to time, about how, in order to be able to stop human trafficking—in order to be able to stop the bringing of things that are illegal—including drugs—into this country, we need to reduce the size of the "haystack." The "needle in the haystack"—we have to reduce the size of the "haystack" if we are going to find those "needles." We have to be able to—and I am not talking about needles for addiction—but the key is reducing the size of the "haystack." And, part of that is making sure that the people living in these countries have a life that is not miserable—not full of fear, but one for which they would be more inclined to stay if they could. And, I think they would like to. And, part of it is on us. Part of that is on us. And, that is why we are having this hearing today.

We welcome you all. Thank you so much for coming.

Chairman JOHNSON. Thank you, Senator Carper.

I think this is our 18th hearing on some aspect of the lack of security on our border. And, certainly, my conclusion—and I think at least some of the Members here would probably, at least partially, agree with me-when I have looked at the root cause of our unsecured border—the primary root cause is our insatiable demand for drugs—which is why we are having this hearing. It has given rise to drug cartels who, let us face it, control whatever portion of the Mexican side of the border they choose to. It is destroying public institutions in Central America and parts of Mexico. So, this is an enormous problem and we just simply have not been winning the "War on Drugs."

So, with that, it is the tradition of this Committee to swear in witnesses. So, if you will all rise and raise your right hand. Do you swear the testimony you will give before this Committee will be the truth, the whole truth, and nothing but the truth, so help you,

God?

Mr. Botticelli. I do.

Ms. ENOMOTO. I do.

Ms. Maurer. I do.

Chairman JOHNSON. Thank you. Please be seated.

Our first witness is Michael Botticelli. Mr. Botticelli is Director of the Office of National Drug Control Policy (ONDCP). Mr. Botticelli has more than two decades of experience supporting Americans who have been affected by substance abuse disorders. Prior to joining ONDCP, Mr. Botticelli served as Director of the Bureau of Substance Abuse Services (BSAS) at the Massachusetts Department of Public Health (DPH). He is also in long-term recovery from a substance use disorder, celebrating more than 25 years of sobriety. We certainly congratulate you on that. Thank you for your service and we look forward to your testimony.

#### TESTIMONY OF HON. MICHAEL P. BOTTICELLI,1 DIRECTOR, OFFICE OF NATIONAL DRUG CONTROL POLICY

Mr. BOTTICELLI. Thank you, Chairman Johnson, Ranking Member Carper, and Members of the Committee. I want to thank you for the opportunity to be here today to discuss ONDCP's authorities along with our collaborative efforts to carry out the Administration's drug control priorities, including our response to the opioid epidemic.

As a component of the Executive Office of the President (EOP), we establish policies and objectives for the Nation's drug control programs and ensure that adequate resources are provided to implement them. We also develop, evaluate, coordinate, and oversee the international and domestic anti-drug efforts of Executive Branch Agencies.

We are charged with producing the annual National Drug Control Strategy, which is the Administration's blueprint for drug pol-

icy along with a national drug control budget.

Let me first start off by saying that the National Drug Control Strategy has produced results. Particularly important to us, right now, is that, among youth aged 12 to 17, the number of current nonmedical users of opioid medication has declined 29 percent from 2009 to 2014—and 39 percent among young adults aged 18 to 29. Perhaps most importantly, the number of new nonmedical users of prescription pain medication went down 35 percent over this same time period—from 2.2 million in 2009 to 1.4 million in 2014.

Also, between 2009 and 2014, there were reductions in the use of illicit drugs—other than marijuana—dropping 21 percent among youth aged 12 to 17 and 20 percent among young adults aged 18

Substantial progress has also been achieved in reducing alcohol and tobacco use among youth, with a 28-percent decline in the rate of the lifetime use of alcohol among eighth-grade students—and 34 percent for cigarettes. These declines exceed the targets that we established for the 2010 National Drug Control Strategy.

Despite these achievements, we know that much remains to be done. And, while we have seen the leveling off of deaths associated with prescription pain medication, we have seen a tremendously alarming increase in deaths involving heroin and illicit fentanyl. These correspond with recent increases in poppy cultivation and heroin production in Mexico.

<sup>&</sup>lt;sup>1</sup>The prepared statement of Mr. Botticelli appears in the Appendix on page 288.

With the continued implementation of the Administration's plan for addressing this crisis, including our engagement with the government of Mexico, we are hopeful that the Nation will see renewed declines in the availability of heroin and in deaths involving

opioids.

ONDCP's oversight of the national drug control budget ensures that the government's efforts are well coordinated and support the objectives of the National Drug Control Strategy. ONDCP leads a broad range of interagency groups that support the National Drug Control Strategy's initiatives. Examples include interagency working groups on opioid treatment, prevention, and data as well as the

National Heroin Coordination Group.

ONDCP's funding authorities reflect a balanced demand reduction and supply reduction approach to drug control, including continued interdiction and enforcement actions against criminal drugtrafficking organizations. While the level of supply reduction funding has remained constant, demand reduction funding has increased. When the Administration took office, only 37 percent of Federal drug control resources were devoted to demand reduction efforts. For fiscal year (FY) 2017, 51 percent has been requested for demand reduction and 49 percent for supply reduction.

The President's 2017 budget control matches the seriousness of the situation we face as a Nation. It includes \$1.1 billion in new mandatory funding over 2 years to expand access to treatment and recovery support services for people with opioid use disorders. This funding will reduce barriers to treatment and will ensure that every American who wants treatment can access it and get the

help that they need.

Members of the Committee, ONDCP will seek to continue to find new and effective solutions to address drug use and its consequences. We remain committed to working with Federal, State, local, tribal, and private sector partners to develop an effective drug control strategy and use our budget authority to develop new programs and expand successful ones.

We know that by working together, we will continue to reduce the prevalence and consequences of drug use and help individuals

recover from the disease of addiction.

Thank you.

Chairman Johnson. Thank you, Mr. Botticelli.

Our next witness is Kana Enomoto. Ms. Enomoto is Principal Deputy Administrator of the Substance Abuse and Mental Health Services Administration (SAMHSA) at the U.S. Department of Health and Human Services (HHS). SAMHSA is the agency, within HHS, that leads public health efforts to advance the behavioral health of the Nation with the mission of reducing the impact of substance abuse and mental illness on America's communities. Ms. Enomoto began her tenure at SAMHSA in 1998. Ms. Enomoto.

# TESTIMONY OF KANA ENOMOTO,¹ PRINCIPAL DEPUTY ADMINISTRATOR, SUBSTANCE ABUSE AND MENTAL HEALTH SERVICES ADMINISTRATION, U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES

Ms. Enomoto. Good afternoon, Chairman Johnson, Ranking Member Carper, and Members of the Committee. I thank all of you for your leadership to raise awareness and catalyze action to address addiction in America. It is truly a matter of life or death.

Unfortunately, in recent years, overdose deaths have reached record numbers—and not enough people are getting treatment. As a Nation, we will not stem the rising tide of this public health crisis if only one out of 10 people with a substance use disorder gets the treatment they need. It would not work for diabetes, it would not work for cancer, and it will not work for addiction. We must join together to ensure that every person with a substance use dis-

order, who seeks treatment, will find an open door.

Toward this end, SAMHSA is proud to support the President's National Drug Control Strategy and HHS Secretary Sylvia Mathews Burwell's Opioid Initiative. The Fiscal Year 2017 President's budget, as Director Botticelli noted, makes a bold commitment to face this crisis head on: a \$1.1 billion, 2-year investment in new mandatory funding to build the addiction workforce and bolster the continuum of services. Of the \$1 billion, SAMHSA proposed \$920 million, over 2 years, for State grants to close the treatment gap for opioid use disorder by making medication-assisted treatment (MAT), including needed psychosocial services and recovery supports, affordable and available to people who are seeking recovery. These funds would support community prevention, build the workforce, and use technology to expand the reach of treatment. The initiative also includes \$30 million in new mandatory funding for SAMHSA to evaluate the effectiveness of MAT programs under real-world conditions.

The fiscal year 2017 budget also includes \$50 million of discretionary funding—an increase of \$25 million—to support 23 new State medication-assisted treatment prescription drug and opioid addiction (MAT-PDOA) grants. MAT-PDOA was created, in fiscal year 2015, to provide comprehensive care and evidence-based MAT, including all three medications approved by the Food and Drug Administration (FDA) to treat opioid use disorders. In fiscal year 2016, Congress grew this program and directed SAMHSA to allow medications and services to achieve and maintain abstinence from all opioids as well as to prioritize treatment regimens that are less susceptible to diversion.

One example of MAT-PDOA's success is the Wisconsin Care Program. Their efforts to expand the availability of medication-assistant treatment. Originally, there were only two providers willing to prescribe long-acting injectable naltrexone in Sauk County, Wisconsin. But, by having a champion physician present on how effective MAT can be in combating addiction, that number has already expanded to 12 providers. That means that 10 more providers are willing to see patients with substance use disorders that may need life-saving medications to help them become and stay drug-free.

<sup>&</sup>lt;sup>1</sup>The prepared statement of Ms. Enomoto appears in the Appendix on page 298.

We must ensure that the substance use workforce is sufficient to meet the growing demand. Another 2017 proposal to expand access to MAT is the \$10 million Buprenorphine-Prescribing Authority Demonstration to test the safety and effectiveness of expanding buprenorphine prescribing to advanced practice providers, such as nurses and physician assistants (PAs).

As part of its regulatory responsibility, SAMHSA certifies the Nation's opioid treatment programs, which provide monitored, controlled conditions for the safe and effective treatment of opioid addiction. Finally, SAMHSA is proposing a new regulation to increase the patient limit for physicians who have a waiver to prescribe

buprenorphine.

Another important program at SAMHSA is the Pregnant and Postpartum Women's (PPW) initiative. PPW grantees increase access to family centered residential treatment for pregnant and parenting women. The evaluation of this program shows great outcomes. On intake, about two-thirds of these pregnant women are using alcohol or drugs. At the 6-month follow-up point, 85 percent are alcohol-and drug-free. Healthy babies are being born and progress is being made.

But, there are still more lives to save. We know that naloxone can reverse a potentially fatal opioid overdose. But, it only works

if you have it.

In SAMHSA's overdose prevention course for prescribers and pharmacists, one of the targeted strategies we promote is the coprescribing of naloxone with opioid analgesics, particularly, for patients at high risk of overdose. And, this month, SAMHSA is accepting applications for State grants to purchase naloxone and to equip and train first responders. We appreciate Congress' strong support of this effort.

An underpinning of the Nation's Behavioral Health Safety Net is the Substance Abuse Prevention and Treatment Block Grant (SABG). Since 2013, the block grant has grown by \$150 million to \$1.9 billion. Further investments like these are crucial because this program is delivering an impact for the American people. At discharge, more than 70 percent of individuals who receive block grant-funded services report no drug use in the past month. Eighty-four percent report no alcohol use. And, 95 percent report no involvement with the criminal justice system.

Other important components of SAMHŠA's treatment and recovery portfolio include: drug courts and offender reentry programs, efforts to combat homelessness, Human Immunodeficiency Virus/Acquired Immunodeficiency Syndrome (HIV/AIDS), peer

services, and workforce training.

Prevention is another important core element of the National Drug Control Strategy. SAMHSA's Center for Substance Abuse Prevention (CSAP) implements the Strategic Prevention Framework (SPF) grant program, where communities like New Castle County, Delaware work with their State to focus on using data and evidence-based strategies to reduce drug abuse and underage drinking.

In 2016, Congress appropriated \$10 million for a new program, SPF Rx, which will help States to use their Prescription Drug Mon-

itoring Program (PDMP) data to identify communities at the highest risk for the diversion and misuse of prescription drugs.

SAMHSA's prevention efforts also include the administration of ONDCP's Drug-Free Communities (DFC) Program, which supports anti-drug coalitions across the country, like Merrimack Safeguard in New Hampshire, who is implementing evidence-based programs to increase parental awareness, support parental responsibility, and reduce easy access to prescription medications by encouraging responsible and safe storage and disposal methods.

SAMHSA also implements the Sober Truth on Preventing Underage Drinking (STOP) Program, so current and former drug-free communities can focus their efforts to reduce underage drinking. Thanks to these and other prevention strategies, national rates of underage drinking among 12-to 20-year-olds declined by 21 percent

from 2004 to 2013.

And, for our tribal communities, SAMHSA's Tribal Behavioral Health (Native Connections) Grant Program addresses the high incidence of substance use and suicide among American Indian and Alaska Native populations. And, we are pleased that, in fiscal year 2016, across all of its programs, SAMHSA will have its largest cohort of tribal grantees ever—of 160 grants.

In the area of surveillance and evaluation, many of our efforts to inform policy and program decisionmaking are made possible through our Center for Behavioral Health Statistics and Quality (CBHSQ), which provides critical data to the field from evaluation and surveillance. CBHSQ's signature programs include the National Survey on Drug Use and Health (NSDUH), the Behavioral Health Barometer, and the National Registry of Evidence-based Programs and Practices (NREPP).

Members of the Committee, thank you for convening this important hearing. I look forward to working with you to ensure that we are using our investments strategically, responsibly, and effectively to deliver a significant impact for the American people. I am happy

to answer any questions.

Chairman JOHNSON. Thank you, Ms. Enomoto.

Our final witness is Diana Maurer. Ms. Maurer is the Director of Homeland Security and Justice (HSJ) at the U.S. Government Accountability Office (GAO). Ms. Maurer's recent work includes, among other issues, reports and testimonies on the Federal prison system, Department of Justice (DOJ) grant programs, nuclear smuggling, national drug control policy, and Department of Homeland Security (DHS) morale. Ms. Maurer.

#### TESTIMONY OF DIANA C. MAURER,1 DIRECTOR, HOMELAND SECURITY AND JUSTICE, U.S. GOVERNMENT ACCOUNT-**ABILITY OFFICE**

Ms. Maurer. Good afternoon, Chairman Johnson, Ranking Member Carper, other Members, and staff. I am pleased to be here today to discuss GAO's perspectives on Federal efforts to address illicit drug use.

Drug trafficking, drug abuse, and the associated impacts on public health and safety have been longstanding issues. Combating

<sup>&</sup>lt;sup>1</sup>The prepared statement of Ms. Maurer appears in the Appendix on page 308.

these problems is costly. The Administration has requested more than \$31 billion to prevent drug abuse, provide treatment for substance abuse disorders, support domestic enforcement of drug laws, interdict drug smuggling, and combat international drug trafficking.

Now, consider that list of activities for just a second. Doing all of that involves dozens of very different Federal Agencies working in the fields of medicine, law enforcement, intelligence, corrections, and diplomacy. This truly is a multifaceted effort—and it needs to be, because the problems from drug abuse in the United States are

complex and deep-seated.

If there is one thing we have learned over the past several decades, it is that there are no quick or easy fixes. The Administration's 2017 request is noteworthy because, for the first time, it has proposed spending more on treatment and prevention—the socalled "demand side" of the problem—than on law enforcement, interdiction, and international programs—the so-called "supply side."

Over the past several years, spending for supply side activities has remained roughly the same. Spending today is roughly comparable-allowing for inflation-to what we spent in 2007. However, spending for the demand side has increased, especially in recent years. Specifically, since 2013, spending on treatment programs has increased 67 percent, from \$7.9 billion to over \$13 billion today. This reflects a growing emphasis on the increasingly dire public health consequences of drug abuse, especially of controlled prescription drugs and heroin.

In 2014, for example, the Center for Disease Control (CDC) reported nearly 50,000 drug-induced deaths in this country. That is about 136 Americans every day. To put it another way, it is also more per day than the total number of Americans killed, in this country, from terrorist attacks in the nearly 15 years since the attacks on September 11, 2001 (9/11). Given that bleak fact, ensuring that this money is well spent, that we are making progress, and

that the various agencies are well coordinated is vital.

ONDCP, to its credit, has focused a great deal of time, attention, and resources on developing and using performance measures to assess the progress of Federal drug control efforts. The 2010 National Drug Control Strategy established a series of goals with specific outcomes ONDCP hoped to achieve by last year.

In 2013, we reported that a related set of measures were generally consistent with effective performance management and useful for decisionmaking—so, unlike many other Federal programs, in this area, there is a dashboard with meaningful indicators of progress and clear targets. So, keep that in mind when the conversation turns to what these measures tell us. And, overall, there has been a lack of progress.

According to a report ONDCP issued late last year, none of the seven goals were achieved. And, in some key areas, the trend lines moved in the opposite direction. For example, the percentage of eighth graders who have ever used illicit drugs increased rather than decreased. The number of drug-related deaths increased 27

percent rather than decreased 15 percent, as planned.

We should also recognize some progress in key areas. For example, the 30-day prevalence of drug use by teenagers has dropped. There has also been recent progress in Federal drug abuse prevention and treatment programs. In 2013, we found that coordination across 76 Federal programs at 15 Agencies was all too often lacking. Forty percent of the programs at that time reported no coordination with other Federal agencies. We recommended that ONDCP take action to reduce the risk of duplication and improve coordina-

Since our report, ONDCP has done just that. It has conducted an inventory of the various programs and updated its budget process

and monitoring efforts to enhance coordination.

Mr. Chairman, as Congress considers its options, it is worth reflecting on the deeply ingrained nature of illicit drug use in this country. It is an extremely complex problem that involves millions of people, billions of dollars, and thousands of communities. There are very real costs in lives and livelihoods across the United States. Helping reduce these costs and achieving national drug policy goals will require effective program implementation, demonstrated results, and enhanced coordination among the various Federal Agen-

GAO stands ready to help Congress assess the extent to which ONDCP and other Federal Agencies achieve these goals and reduce the impact of drug abuse in this country.

Thank you for the opportunity to testify this afternoon. I look for-

ward to your questions.

Chairman JOHNSON. Thank you, Ms. Maurer.

Our clocks are obviously not working here, so we have a timer, which I will ask staff to put it right there. So, when we see the little buttons go off, I will know I have run out of time.

Mr. Botticelli, we have heard a lot of percentages—up and down.

In previous testimony the Committee heard, about 24 million Americans—I think that is correct, somewhere in that ballpark use some sort of illegal drug on a monthly basis. About 3 million are using non-marijuana—in other words, cocaine, heroin, fentanyl, and those things. Is that pretty much the number we are talking about here?

Mr. Botticelli. Correct.

Chairman JOHNSON. How has that changed in the last 10 or 20

Mr. Botticelli. As we have looked at measures—and I want to thank Ms. Maurer because we actually do have a dashboard of measures that we track. And, when we look across our measures, one of the reasons why we have not made progress in many of these areas, in terms of reducing illicit drug use, has to do with increasing rates of marijuana use among eighth graders and, particularly, young adults. And, if you take marijuana out of the equation, we actually have made significant results with 12-year olds to 17year-olds in many areas. And, there have been results among young adults, particularly, in cocaine, methamphetamine (meth), and prescription drug use issues.

Chairman JOHNSON. So, rather than look at very narrow categories, I am just kind of looking at the macro level here. Three million hard drug users a month—that is about one percent of the population. Has that held pretty steady? Did it used to be 2 percent and now it is 1 percent? I mean, has it always been kind of in that

1-percent range?

Mr. Botticelli. The overall prevalence of drug use has remained relatively stable over the years. And, we have seen some—I do think that one of the areas where we have seen a decrease in prevalence has largely been among youth in the United States. And, I think this speaks to our overall issues, because we know that drug use is an issue of early onset. So, I think as we have seen reductions in, particularly, underage use rates across the board—with the exception of marijuana—that it holds promise for seeing a significant decrease in prevalence overall.

Chairman JOHNSON. But, in general, the percentage of Ameri-

cans using hard drugs has held pretty steady?

Mr. BOTTICELLI. Generally.

Chairman JOHNSON. So, not much—we have spent billions of dollars. I do not know what the history is, but we are spending \$30 billion this year. And, prior to that we were spending \$20 billion to \$25 billion. We spent a lot of money and we really have not made a dent in this.

Mr. Botticelli. But, I do think, Chairman, if you would allow me—I think part of the intractability of the issue speaks to—the fact that, historically, our drug control budget has been out of balance. While supply reduction and law enforcement play a critical role, our historic funding around prevention and treatment efforts—

Chairman Johnson. We will get to those issues.

Mr. Botticelli. OK.

Chairman JOHNSON. In testimony, General Kelly, former head of the Southern Command (SOUTHCOM), said that we have visibility for about 90 percent of the drug flow—and yet, we just lack the interdiction capability. Do you, basically, agree with that assessment?

Mr. Botticelli. I do, to some extent. I get quarterly data on the amount of drugs that are interdicted in the United States. I have to say that, while we do have operational awareness, in terms of drugs, I think the U.S. Coast Guard (USCG) has, significantly, stepped up, in terms of their interdiction efforts—as well as some of our partner nations. So, actually, when you look at the amount of, particularly, cocaine that is interdicted, those numbers are at the highest level that they have ever been.

Chairman Johnson. But, again, we are talking about narrow categories. Let us just take a look at another metric that has come out in testimony—certainly, in briefings. In the early 1980s, the price of a gram of heroin would be, in today's terms, equivalent to about \$3,200. There are reports in Milwaukee that you can get a gram of heroin for \$100. At 10 doses per gram, that is \$10 a hit.

Obviously, from the standpoint of interdicting supply, you would think that, if we were doing a better job, those prices would remain

high. But, they have dropped significantly. Correct?

Mr. BOTTICELLI. I would say, particularly, in terms of heroin interdiction, we have a lot more work to do. Part of the reason that we are seeing such a dramatic increase in heroin has to do with

the dramatic increase in availability and the lower price in many parts of the United States.

Chairman JOHNSON. What I am just trying to elicit here is—we are not making progress on this. I think we are losing the war.

Ms. Enomoto, all of us would love to believe that we could treat drug addiction effectively. What is the success rate, in terms of—Mr. Botticelli is obviously one of the examples of success. What

is, basically, the success rate?

Ms. Enomoto. I am incredibly optimistic in this space because we do have science that tells us people can and do recover. While substance use disorders are chronic neurological conditions that have the potential for recurrence, they also have amazing potential for recovery. So, within the SAMHSA portfolio, we are seeing about two-thirds of people coming out of our programs at the 6-month follow-up point not using drugs or alcohol. From our block grants, that number is a little bit higher. We are seeing that. And, there are other programs, like our drug court program, where people have a high degree of motivation. Or, our PPW programs, where we are seeing—

Chairman Johnson. Those results are far higher than what I have heard in other testimony. For example, in Pewaukee, Wisconsin, we were being told 5, maybe—at most—10 percent. Do you

dispute that then?

Ms. ENOMOTO. I do not dispute that that is what those testimonies were, and——

Chairman JOHNSON. I understand. Ms. Maurer, have you looked

at any studies on these things?

Ms. Maurer. GAO has not conducted any studies to assess the effectiveness of treatment or prevention programs. One of the issues here could be the difference between the number of people who successfully complete the program compared to the number of people who go into the program.

I know that one of the indicators that ONDCP is tracking is trying to get to a 50-percent completion rate for some of the programs. And, they are close to that mark, but they have not been able to get to that 50-percent mark. What that says about people who have completed—as opposed to those who have not completed, we do not know, from a GAO perspective, but it is a part of the story.

know, from a GAO perspective, but it is a part of the story.
Chairman JOHNSON. OK. Mr. Botticelli, do you want to weigh in?
Mr. BOTTICELLI. So, one of the areas, particularly, with opioid use disorders, that we see problems with is the fact that we have three highly effective medications that should be the standard of care for people with opioid use disorders. Yet, too few people have access to those for a variety of reasons. And so, part of our—

Chairman Johnson. Name those reasons.

Mr. BOTTICELLI. So, we have too few physicians who are prescribing these medications. We have parts of this country where we actually do not have a physician who is trained to do that. So, that workforce is important to make sure we do it—and SAMHSA's grants to promote that.

We also know that we have too few treatment programs that have incorporated medication-assisted treatment into their treatment programs—and that has been a focus of both ONDCP and

SAMHSA.

And, we also know—and, again, Congress has taken action on this—that there was a cap on the number of patients that physicians treating people with addictions could serve. And, HHS has proposed increasing that number from 100 to 200 as a way to increase capacity for opioid use disorders.

Chairman JOHNSON. OK. Thank you. I am out of time. I will pass it to you. It is scout's honor, by the way.

Senator CARPER. Alright, 6:56. No, I have 9 minutes. OK. This

is good. We only get 7 minutes.

Again, thank you all for joining us today. I started writing down, while you all were talking—testifying, rather—and I started writing down the elements of a comprehensive strategy to deal with these addiction-related problems. And, I wrote down treatment, I wrote down education—and not just the education of, particularly, young people—maybe, people not addicted to anything, but also education for health providers, particularly doctors, who I think are overprescribing. We have, in a lot of the Medicaid programs across the country, policies that are designed to make sure that someone who has a prescription for opioids can only go to one pharmacy. What do we call it? "Lock-out" or something like that.

Certainly, the stuff that we are doing with drug interdiction—I used to be a naval flight officer (NFO) and we used my old Navy P-3 Orion airplanes in the Caribbean—and that part of the world—to try to interdict folks that are running drugs in by air. We do it by sea and by land. We do a lot of law enforcement and

so forth.

I want to ask each of you just to, if you could, craft for us just briefly—take about a minute and a half apiece—and just describe for us a comprehensive strategy that you think America would be smart to have. And, Ms. Maurer, if you would go first and then—is it "Enomoto"? OK. And, is it "Botticelli"? OK. Ms. Maurer. Ms. Maurer. Well, thank you. I think the elements of a key

Ms. Maurer. Well, thank you. I think the elements of a key strategy would have to involve many different elements of national power and many of the elements that you already talked about. Certainly, there needs to be an approach to reduce the supply of illicit drugs—and that has to cover both fronts of that—drugs that are illegal everywhere all of the time—so heroin, cocaine, and so forth—as well as—

Senator CARPER. One of the things we tried to do, I think, in Afghanistan, was to convince the farmers there—and help the farmers there to learn how to plant stuff other than poppies and to make money doing that. Go ahead.

Ms. MAURER. That is right. Exactly. And, that program ran into some problems as a result. But, that is certainly part of the overall effort.

In addition to that, we also have to have efforts in place to put appropriate controls around the prescription medications that millions of Americans rely on for pain relief, but which can be misused and abused and—

Senator CARPER. Somebody told me—excuse me for interrupting. Somebody told me they had a daughter that had her wisdom teeth extracted and they got a month's prescription of opioids to help her deal with the pain.

Ms. Maurer. That is right. I think, in the most recent data, there were 12 billion pills produced for U.S. domestic consumption. That is about 37 pills per American. So, that is a lot that you have to keep track of. That is on the supply side.

Then, on the demand side, it is really important, like you said, to have education. It is vital to have treatment and prevention programs as well because you need to treat the medical disease of addiction. But, you need to couple that with programs to try to keep people from getting started and using drugs illegally and illicitly in the first place.

Senator Carper. We have done that with tobacco quite successfully through the American Legacy Foundation's-which is now

called the Truth Initiative's—"truth" campaign.

Ms. Maurer. Absolutely.

Senator Carper. Also, Montana did some very good work years ago on methamphetamines—the same kind of approach as the

"truth" campaign. Go ahead.

Ms. Maurer. And, there may be things that we can learn from those efforts. One thing I would note about the campaigns to reduce the use of tobacco—as well as the campaign encouraging people to use seat belts—those are generational changes that require people to rethink the way they fundamentally approach things like smoking and driving. It took a while for that to take hold, but they were successful. There may be things we can learn from those efforts that we could apply to the drug problem in this country.

Senator Carper. Alright. Thank you. I have only 8 minutes left,

so, Ms. Enomoto?

Ms. Enomoto. Thank you. Chairman Johnson. You were never a Boy Scout, were you?

Senator Carper. No. [Laughter.]

I aspired to be, but they would not let me in.

Ms. ENOMOTO. Thank you very much. It is a great question. I will leave it to others to address the supply reduction or interdiction issues, but for us on the demand reduction side, we think that the President has put forward a very strong and meaningful strategy, which does encompass prevention, treatment, and recovery as well as data and public education initiatives around these issues. And, we are happy to be a part of that. For the opioid initiative, we are focusing on three opportunities for high impact, which are: changing prescriber behavior—as you noted, increasing access to naloxone to reduce those opioid overdoses, and increasing access to medication-assisted treatment. And, to do all three of those things, we need a strong emphasis on data collection, on surveillance, on evaluation, and on research. And, for all of those, we need to focus on engaging States and communities as well as expanding our behavioral health workforce, because, as it stands, when we only have 1 out of 10 people with an addiction getting treatment and only 2 out of 10 people with an opioid use disorder getting treatment—and we still have waitlists and we still cannot reach all of the people that we need to with our prevention messaging. We simply do not have the resources—we do not have the manpower, as it currently stands. And so, it will require additional investment. And, I think that is what the President has made clear in his proposals.

Senator CARPER. Alright. Thank you.

Mr. Botticelli, you have about 2 minutes. Go ahead.

Mr. Botticelli. First and foremost, if you look at the structure of our national drug-

Senator Carper. What was the first thing you said? You do not agree with either of them? Is that what you said?

Mr. Botticelli. Oh, no. I do agree with both of them.

Senator CARPER. Thank you.

Mr. Botticelli. I agree that we should take this comprehensive, multifaceted approach that focuses on prevention, treatment, and criminal justice reform as well as looks at our supply reduction efforts, our international efforts, our interdiction efforts, and our domestic law enforcement efforts.

I would agree that, particularly with the opioid piece, you are right on target in saying that reducing the prescribing of these medications becomes particularly important. So, just to underscore that, we are now prescribing enough pain medication to give every adult American their own bottle of pain pills. And, we know that, with the heroin situation, four out of five newer users to heroin started by misusing prescription pain medication.

Senator Carper. Four out of five.

Mr. Botticelli. Four out of five. Four out of five started misusing. So, this is not a heroin issue that is separate from our pre-

scription drug issue.

We have been calling for mandatory prescriber education, saying that we think it is not unreasonable to ask every prescriber in the United States to take a minimal amount of education on the topic of safe and effective opioid prescribing.

Senator Carper. Alright. Thank you all for those responses.

Chairman JOHNSON. Thank you, Senator Carper.

While we are passing the timer down to Senator Ayotte, I had a couple seconds left. I just wanted to ask you—one of the pieces of legislation I have introduced is the Promoting Responsible Opioid Prescribing (PROP) Act, which is trying to get rid of the unintended consequences of the surveys being used, in terms of pain

medication. Can you just quickly comment on that?

Mr. Botticelli. Sure. So, one of the things we have heard—and, actually, the Department of Health and Human Services is doing a review. It is called the Hospital Consumer Assessment Healthcare Providers and Systems (HCAHPS) survey and it links financial incentives to patient satisfaction around pain. And, it has gotten reported to us that that could be, actually, a misaligned incentive and actually promote opioid prescribing. So, folks at HHS now are looking at that survey and seeing to what extent those questions have the unintended consequence of increased opioid prescribing—and if so, changing those questions to make them more about overall pain management and not necessarily about opioid prescribing.

Chairman JOHNSON. Well, if you cannot do it internally—if you need that law, hopefully, you will support the PROP Act. Senator Avotte.

#### OPENING STATEMENT OF SENATOR AYOTTE

Senator Ayotte. Thank you, Chairman.

Director Botticelli, I wanted to follow up on the issue of the cap for buprenorphine. I have certainly written—and I know others here in Congress have also—on this issue. But, do you know where the decisionmaking process is at for HHS? Right now the cap still exists, right? And so, as we think about trying to increase our capacity for medication assisted treatment, how quickly do you expect the Administration is going to look at lifting the cap, so that we can increase our capacity there?

Mr. BOTTICELLI. Sure. I believe that is still open for public comment from now until, I believe, the end of May. I can check, in terms of HHS' timeline on that. I would suspect, Senator, that we are going to have a significant number of comments that we are going to have to work through surrounding that. But, it is an im-

portant priority.

But, we also want to look at other opportunities—through SAMHSA's grants and through increasing the number of physicians who can prescribe this. But, increasing capacity is particu-

larly important.

Senator Ayotte. Right. And, also, I would ask you, Director and Ms. Enomoto, about the issue of the bed cap. So we have—as I understand it—a cap of 16, in terms of the number of residential beds, not only for the treatment of substance use disorders, but also for mental illness. As we think about—I know efforts in my own State—and elsewhere—to try to increase capacity—sometimes it makes sense to increase the existing capacity of a facility that already has a good treatment program in place. So, what are your thoughts on that cap? And, what efforts should be taken to lift that cap as well?

Ms. Enomoto. So, within the Department, the Centers for Medicare and Medicaid Services (CMS) has the leading role for the Institute for Mental Disease (IMD) exclusion. And, they have been working really closely, I think, with States to promote innovation in this area—and California is an example of a State with an 1115 waiver that is looking at providing support to residential treatment providers that have more than 16 beds under their waiver. And so, I think there is a considerable effort to look at this, both on the mental health side and on the substance abuse side.

Senator Ayotte. Also, a lot of this is sometimes co-occurring between these illnesses.

Ms. Enomoto. Right. We also think it is important, though, to look at expanding options for community-based treatment because we know that that is important and is an avenue—that not everyone needs residential treatment and not everyone requires hospitalization if adequate community-level or intensive outpatient services and supports are readily available.

Senator Ayotte. And, as a follow up to that, I have been one of the lead sponsors of the Improving Treatment for Pregnant and Postpartum Women Act of 2016. And, a component of that Act also involves looking at nonresidential treatment options for pregnant women. And, I wanted to get your thoughts on that as well.

Ms. ENOMOTO. In the President's Fiscal Year 2017 budget proposal, we have proposed a pilot demonstration innovation program,

which would request the "notwithstanding" language for the PPW program because the statute requires that it is, right now, exclusively for residential treatment. We would like to have the flexibility to use some of the funding for States looking at options for multiple pathways to care. So, for some of the women in those programs—who have other children at home or who have other job or family responsibilities—to be able to participate in treatment on an outpatient basis as well and to see whether or not they achieve similar, comparable outcomes.

Senator Ayotte. Great. Thank you.

Director Botticelli, a lot of the efforts—as I, certainly, heard in the testimony from Ms. Maurer as well—as we think about the supply side piece of this—you and I have talked about this in the past—the heroin and fentanyl are coming over the Southern border. And, an amendment that I offered to the National Defense Authorization Act (NDAA), is going to increase some resources there for the interdiction of heroin and fentanyl.

But, one of the concerns we have heard before, on this Committee, is that the precursor chemicals needed to make fentanyl are actually shipped to Central America from China and then smuggled into Mexico—or sometimes actually shipped to the United States and then smuggled into Mexico—and then made into fentanyl

So, where do you see our efforts? And, certainly, Ms. Maurer, if you have any comments on that, in terms of what we are doing to look at our drug policy. What more can we do to address the fentanyl interdiction issue? I heard what you had to say on cocaine and I know that we have seen an increase. But, this is really the main driver of the drug deaths—as I see the huge increase in New Hampshire, obviously, with heroin and prescription drugs. But, when you combine the fentanyl, that is really the killer.

Mr. BOTTICELLI. Correct. And, actually, the vast majority of increases that we have seen, in overdose deaths in the United States, seem to be attributed to either straight fentanyl or heroin-laced fentanyl—not just in New Hampshire, but around the country. And, you are right. While we know some about the fentanyl supply chain, we need to actually amplify our intelligence around the fentanyl supply chain.

So, we have been working with the intelligence community (IC) to look at—so, clearly, I think what you have articulated—of this being manufactured in China, either shipped directly to the United States—or through Mexico—and getting into the supply chain—particularly important areas, but we need to continue to study that.

But, we have had—China has actually moved to schedule a number of new chemicals, including acetyl fentanyl, which is one of the precursors of that—and we continue to work with the Mexican Government. I was just down there in March meeting with the Attorney General (AG), focusing on both reducing poppy cultivation and on increasing their efforts to combat fentanyl and fentanyl labs.

Senator Ayotte. Good.

I did not know if you wanted to comment on this at all?

Ms. Maurer. We do not have any specific work focused on fentanyl. We have done work more broadly on supply chain security and drug control policy.

Senator AYOTTE. OK.

Ms. Maurer. But, nothing specific to fentanyl yet.

Senator Ayotte. Well, I think we are going to, probably, have you engaged on that, too—just because this is a huge, growing issue.

Ms. Maurer. Fantastic.

Senator AYOTTE. Thank you.

I have one final question. We have been seeing these reports about the increased price of naloxone and having been working on this issue with you. Having been in my State doing ride-alongs with our police and fire departments—with Narcan, which is the brand name for naloxone, we are saving so many lives. Our numbers of drug deaths would be so much higher without access to the life-saving drug. And, that is a key component of CARA. But, the reports that I have been seeing—at least in the news—is an increase in this drug price. And, do you know what is happening with this? Anyone who would like to jump in and comment on this—the increases in naloxone prices—why these price increases are occurring—please do. And, should we be concerned that some manufacturers looking to profit off of this epidemic? I just think it is important that we highlight this and understand it.

Mr. Botticelli. I wish I could give you the reasons why the manufacturer has decided to increase the price of this. My gut tells me the same thing that yours does—that there are some opportunistic issues—

Senator Ayotte. I do not like what my gut is telling me. That

is why I am raising this.

Mr. BOTTICELLI. No, I think you are absolutely right. I think what we have been trying to do by acknowledging the price increase around naloxone, is to look at, one—through CARA and other vehicles—how we can get increased access. There has been a purchasing collaborative set up through the National Governors Association (NGA) and the U.S. Conference of Mayors to harness their purchasing authority to do it—and SAMHSA is giving guidance to States, through their block grant, about using naloxone purchased. But, it is particularly disturbing that the cost has gone up, dramatically, at the time that we need it the most.

Senator AyoTTE. I just think, as we think about this issue—we are in this very public hearing—I hope that those who are hiking up these prices take notice that we notice. And, we are going to be focusing on this, because the last thing that we want as we increase access, is for the price to increase—so that we can actually

save fewer people.

Chairman JOHNSON. Senator Portman.

Senator Portman. Thank you, Mr. Chairman. And, thank you for having this hearing on an incredibly important issue. We have an epidemic in our country right now. And, obviously, I am concerned by some of the testimony this morning, because, as we heard from Ms. Maurer, at a time when we have had a huge increase in opioid addictions, overdoses, and deaths, that, of the goals that were set out in the 2010 strategy, not a single one has been achieved. And,

Mr. Botticelli said, "Well, that is because we are not taking into account the increase in marijuana use—it is not other things." And, one of the things you talked about was overdose deaths going from—instead of a 15-percent reduction—a 27-percent increase. That is not marijuana, is it?

Mr. BOTTICELLI. No. That is, typically, other drugs.

Senator Portman. OK. So, I mean, I think I understand, from the Administration's point of view, why you want to put a good face on it and say things are going great. They are not going great. They are going terribly. And, we have had, since March 10th, when CARA passed the U.S. Senate—we believe there are about 7,000 Americans who have died of an overdose. We spent a lot of time today talking about the Zika virus, which is a huge problem. I think one American has died so far—and I support more efforts on Zika. But, my gosh, we have a crisis and an epidemic going on

right now—and it is right in front of our eyes.

I was at another treatment center yesterday. I appreciate what both of you do every day. I do. And, I really appreciate your testimony to the Senate Judiciary Committee, where you talked about the need for CARA to provide a more comprehensive response. And, I would just say everything we have talked about today is touched on in CARA. The House bill, I think, improves CARA with regard to the limitation on the number of patients that a buprenorphine-prescribing doctor can handle. That is going to be part of the final conference report. On the increased number of beds, we kicked it to GAO because we did not have a consensus on that. But, you are going to be working on that issue, I hope, very soon.

On naloxone—as you know, thanks to your help, we do a lot more on naloxone, in terms of funding the grants. But, also significantly, we put some more contours around it to target it more and to encourage people to provide folks with treatment options, which, when I went—as I did—to one of our major drug store pharmacy companies recently to talk about over-the-counter Narcan—I, of course, support that—and strongly—but I also support having a consultation, so that the people who are getting this naloxone—or Narcan—to be able to help a loved one or a friend can also know where the treatment centers are in the area and can get these people into treatment. The solution, alone, is not more Narcan—the treatment is Narcan to save lives—but also getting people into treatment.

So, I appreciate both of you and what you do every day, but I think we have to have a little bit of a different attitude about this. It has to be a crisis mentality, in order for us to do what needs to be done. And, as you know, the House, on Friday, passed 18 different bills and put them into one bill—into the CARA legislation. We have our CARA legislation. The difference is, I have put down here—and I am happy to provide this to you today—we would love your help in getting us through this conference as quickly as possible, because we cannot wait. And, there are people now talking about adding new elements to it that have to do with other important issues. We have to focus on this issue—the opioid crisis that we face.

So, I would ask you today, are you willing to work with us, as you did in the Senate Judiciary Committee? And, both of your testi-

monies were, actually, very helpful. And, as you know, there are many groups—130 groups at last count—around the country, who are with us on this to try to get through a process with the House and the Senate where we take the best of both and can be sure that we do not weaken the Senate bill.

I know you care a lot about funding. So do I. But, let us be honest. We did increase the funding in the omnibus for this year. We have to do it again for next year. The \$82 million that is authorized every year going forward, in the additional funding in CARA, has to be held and not taken from programs that may not have an authorization anymore, but that are appropriated every year. For instance, with the Drug Monitoring Program, I saw the House used that for some of their funding. That has to continue to be used for drug monitoring.

So, anyway, any thoughts on that, Director Botticelli?

Mr. BOTTICELLI. So, first of all, I really appreciated your leadership on this important issue and on CARA. I think you know that many of the elements of CARA are very important to the Administration here.

I think we also understand, though, that this issue needs to be resourced. As I travel the country, in Ohio and other places, the biggest issue that I hear is the number of people who want treatment who cannot get it. And, despite everything that we have done, I think, in previous—and with the support of Congress and by increasing capacity—we still have too many people who are not able to access treatment when they need it. And, I think we need to work with Congress on additional funding for this issue, because having long waiting lists of people who cannot get in is a tremendously important issue. We have parts of the country that do not have a treatment program that people can access.

So, we know we need a comprehensive response to this, but it also really needs to include a robust increase in treatment funding in the United States.

Senator Portman. Yes. Well, this is an authorization bill and it does authorize additional funding. And then, we need, every year, of course, to fight for that appropriation. And, it is not just for one year. It is an authorization going forward. And, the way these authorization bills work around here is that, once you get it authorized, it tends to continue. And so, it is \$800 million—\$820 million, over 10 years, of additional funding. And, most of it does go into treatment—not all of it. But, it is for prevention. One of the things I want to fight for, in the conference, is a prevention program, because I do think that is part of the answer, as Ms. Maurer talked about.

So, we need your help on this because we can keep talking about how we want more of this and we want more of that, but nothing is going to happen. And then, in our communities we are going to continue to see families torn apart, communities devastated, people dying, and people not being able to fulfill their purpose in life—their God-given purpose. And, that is where we are now—and where we will continue to be if we continue to disagree.

So, let us figure out how to come together. And, again, you all were very constructive and helpful in the Senate Judiciary Committee. I do not think we would have gotten a unanimous

vote—or a 94–1 vote—on the floor of the Senate without your help—and I appreciate that. But, it has some—as I mentioned, those four items that we have talked about today, they are all addressed in here. And, of course, treatment is addressed.

Finally, I just want to say—I cannot really figure this out. OK. I really appreciate the additional emphasis on the demand side. As you know, I am the author of the Drug-Free Communities Act of 1997, I started my own coalition back home, and I am still very involved with that. We just had our 20th anniversary, by the way. But, we have to make that shift—and continue to make it. So, I do not disagree with my colleagues who talk about the need for us to have better border enforcement. Of course. But, I will just, I guess, stipulate that, if it is not coming from Mexico, it is coming from your basement. And, if it is not coming across the border, it is coming across on a ship. And, as long as the demand is strong here, there will be ways that it will be filled—whether it is a return to methamphetamines, which we finally started to make progress on, or whether it is other drugs that can be produced by chemists—by the way, that is the case with regard to fentanyl. It is a form of synthetic heroin. It is produced by chemists. So, we have to continue to focus on the prevention side and the treatment and recovery side. And, if we do not, we will never be able to turn the tide.

So, Ms. Enomoto, do you have any thoughts?

Ms. Enomoto. I just want to express my absolute willingness to work with you on a package that moves forward. And, to emphasize your point about the prevention piece of CARA, we must make sure that we have robust prevention programming in this country with the resources to match it as well as the recovery support piece and the peer piece. These are both very important to helping people achieve and maintain their recovery.

Senator PORTMAN. Yes. Thank you.

Thank vou. Mr. Chairman.

Chairman Johnson. Senator Tester.

#### OPENING STATEMENT OF SENATOR TESTER

Senator Tester. Thank you, Mr. Chairman. I want to thank the panelists for being here today.

We hear a lot about the health effects of drugs, about incarceration for minor drug offenses, and about the rates of drug abuse among minors. I want to talk a little bit about the effect of drugs on Federal hiring practices. Right now, four States and the District of Columbia have legalized marijuana and a number of States have passed medical marijuana laws that allow for limited use of cannabis. Mr. Botticelli, have you seen any evidence that marijuana laws in these States have affected the hiring decisions for Federal positions?

Mr. BOTTICELLI. I was actually just looking at workplace drug testing data this morning. The data shows significant increases in overall general workplace testing—and we have seen the rates of positive marijuana tests go up dramatically. I will go back and ask

my staff to see if they have specific data, as it relates to Federal hiring practices.<sup>1</sup>

What we do know is that there was actually an interesting article in the New York Times this morning that said that many employers with available jobs are having difficulty hiring folks be-

cause they cannot pass a drug test.

Senator Tester. I would also like to know if you have seen an increase within the four States that have legalized it—or if you have seen a problem in the hiring practices of the Federal Government. If you can pare those out, that would be good.

Mr. BOTTICELLI. Great. I am happy to do that.

Senator Tester. You said that there has been a significant increase. Since when?

Mr. BOTTICELLI. I believe this goes back over the past 5 years. Particularly, over the past 3 years, we have seen a significant increase in people who are testing positive for marijuana use as a part of their workplace testing.

Senator Tester. Did you do any other testing for substances

other than marijuana?

Mr. BOTTICELLI. This is actually an independent—yes, it did. So, we have seen actually—and here is where it is challenging, because some of the—we have seen increases in positive amphetamine results, but the tests do not show us whether a result is due to a misuse or because of a prescription. We have actually seen decreases in positive prescription pain medication test results as well as for methamphetamine and cocaine.

Senator Tester. You have seen decreases in those?

Mr. BOTTICELLI. Correct.

Senator Tester. OK. But, increases in amphetamine?

Mr. Botticelli. Yes.

Senator Tester. But, you do not know if it is because of prescription drugs or—

Mr. BOTTICELLI. Correct. So, for instance, we know that there are a lot of people who are on Attention Deficit Hyperactivity Disorder (ADHD) medications, which could be a part of it. The test does not differentiate between those who are testing positive because of misuse and those who have a legitimate prescription. Obviously, marijuana is not in that category.

Senator Tester. OK. Do any of you have metrics, as far as that goes, or metrics on the connection to poverty and drug abuse?

Mr. Botticelli. So, we have known for a long time that people's economic circumstances can significantly contribute to drug use rates. We have seen this in recent studies that looked at the dramatic increase in mortality rates among 44-year-old to 54-year-old men and women in some areas of particularly significant poverty in the United States. So, we have known that there is a correlation there. And, there have been a number of interesting studies that looked at the intersection of poverty and increased mortality, particularly around liver disease, which is associated with alcoholism, suicide, and drug overdoses.

Senator Tester. OK, So, last weekend I did a little sweep around the western part of Montana and I was up near the Salish-

<sup>&</sup>lt;sup>1</sup>The information submitted by Mr. Botticelli appears in the Appendix on page 329.

Kootenai reservation. A hospital in a little town up there said that somewhere between 70 to 80 percent of the pregnancies they saw resulted in children born drug-addicted. Although it is not the economically worst-off reservation in the State of Montana, poverty is high. In fact, it is probably the economically best-off reservation, but poverty is still very high.

Are these the kinds of rates you are seeing in poor urban areas, too?

Mr. BOTTICELLI. I do not know if it is that high, in terms of that. I mean, we have known for a long time that substance use, among Native Americans, is very high in many of our tribal communities. And, I know Ms. Enomoto can talk about this, but part of our efforts have been to increase our efforts—our prevention and treatment. We have seen a higher-than-normal overdose rate among Native Americans as a result of this epidemic.

Senator Tester. You are going to increase your prevention and treatments efforts in Indian country? Is that what you meant?

Mr. Botticelli. Correct.

Senator Tester. So, how are you doing that? Are you working through the Bureau of Indian Affairs (BIA)? How are you doing it?

Mr. BOTTICELLI. So, one effort is through our Drug-Free Communities Program grants. We are actually reaching out to tribes.

Senator Tester. And, is that being utilized by the tribes?

Mr. BOTTICELLI. It has been underutilized. And, we think, in terms of—

Senator Tester. So, who are you reaching out to in the tribes? Mr. Botticelli. We can get you their information, because we have done a number of technical assistance visits to tribes.<sup>1</sup>

Senator TESTER. That would be really good because, who you reach out to is going to make a difference, in terms of what the take-up rate is.

Mr. BOTTICELLI. We also worked with the Bureau of Indian Affairs and the Indian Health Service (IHS) to actually start equipping tribal law enforcement with naloxone. We have seen a dramatic increase in overdoses among Native American tribes.

Senator TESTER. How about education in the schools? Are there any efforts being done by—and I do not care if it is in poverty-stricken areas or not. It would seem to me that poverty-stricken areas should be the focus, but is there any education being done in the schools?

Ms. ENOMOTO. We are really excited that, this year, we are issuing \$25 million—\$30 million in grants under our Tribal Behavioral Health Grant Programs.

Senator TESTER. OK.

Ms. Enomoto. We will have over 100 new tribal grantees focusing on substance abuse prevention, suicide prevention, and emotional wellness among tribal youth, including doing activities in the schools and to educate youth. And, also working—

Senator Tester. Once again, is this money granted out or how—

Ms. Enomoto. These are grants.

Senator Tester. So, it is a competitive grant?

<sup>&</sup>lt;sup>1</sup>The information submitted by Mr. Botticelli appears in the Appendix on page 330.

Ms. Enomoto. It is a competitive grant, yes.

Senator TESTER. OK. Go ahead.

Mr. BOTTICELLI. Are there particular tribes, actually, that you would like to—

Senator Tester. I mean, all that I am telling you is that I think you can look at the tribes who have high instances of poverty—most of which are non-gaming tribes—and you can see they have issues. They have issues with domestic violence. They have issues with drug use. They have issues with housing. They have issues—pick a topic, truthfully.

The point is that you cannot do it from this level. You need to have partners on the local level to do it—whether it is education for kids, whether it is prevention for adults, or whatever it might be. If you do not have those partners, we are going to be throwing money out of the window. And, those partners have to be held accountable, too, by the way. So, it is a hell of a circle. But, when I am told that 70 to 80 percent of the kids that are born on that reservation—and these figures could be wrong because I did not fact-check them. But, they came from somewhere. Those kids are born drug-addicted—holy mackerel. I mean, in the world we live in, I mean, talk about being put in the hole right out of the chute. Holy mackerel.

So, go ahead. You were going to say something.

Ms. Enomoto. I do not think those numbers are completely unexpected for some tribal communities. I think we have also seen five-time increases for the American Academy of Neurology's (AAN's) statistics on overdoses. So, while we talk about this—often people talk about this overdose as a white middle-class problem—it is striking Indian country very hard. And, on average, of American pregnant women, about 30 percent are getting prescriptions for opioids during pregnancy. So, that rate for women in Indian country is very high.

I wanted to let you know that we are about to release a Tribal Behavioral Health Agenda (TBHA)—a National Tribal Behavioral Health Agenda. We have worked very closely across the country with the National Indian Health Board, which we have consulted, in many communities, to identify, across our Federal partners, local partners, and national organizations—we talked about what the priorities are for tribal behavioral health and how can we agree to move forward together. We are all rowing in the same direction, giving communities a blueprint for working toward better behavioral health for all of their young people, including—as well as the adult populations in their communities.

Senator Tester. OK. My light is flashing, so you can cut me off here, Mr. Chairman. But, I do have one more question.

Chairman JOHNSON. OK. Well, I am just a little concerned about that thing going off.

Senator TESTER. Will it buzz?

Chairman Johnson. I am not sure.

Senator Tester. I cannot wait. Chairman Johnson. Go ahead.

Senator Tester. I will just hold it next to the microphone so that everybody can hear it. [Laughter.]

This is the last one. Mr. Botticelli, you talked about a significant increase over the last 5 years—and, especially, the last 3 years. Has anybody asked why? Why are we seeing a significant increase in drug abuse over the last 3 years? Why now?

Mr. Botticelli. I do not mean to sound overly simplistic, but I

think-

Senator Tester. The simpler, the better.

Mr. Botticelli. The simpler, the better. It is the overprescribing of prescription pain medication in the United States. We have never had an epidemic like we are currently facing, in terms of addictions to prescription pain medication and the overdoses——
Senator Tester. So, are we working with the American Medical

Association (AMA)?

Mr. Botticelli. I will tell you that the AMA has stepped forward, in terms of voluntary training. I know that they have, historically, opposed mandatory training. Also, the AMA has issued a policy statement urging physicians to check prescription drug monitoring programs. But, at this point, they see it as a totally voluntary issue. But, we think, at this time in the epidemic, asking

these things to be mandatory is not unreasonable.

Senator Tester. OK. I am going to give you just a really quick little story. I had some veterans' listening sessions a few years ago—I have had some since then, too. But, a few years ago, one of the people stood up and said—and these were back-to-back, honest to God. One stood up and said, "I needed pain pills for my back and the Department of Veterans Affairs (VA) would not give me the pain medication." The very next person stood up and said, "The VA killed my son because of overmedication."

There has to be some education done here on what the right line

is, because this is insanity.

Mr. Botticelli. Let me respond to that. As part of the Federal Government, the President felt it to be so important that we model this for the medical community, that every Federal prescriber—including the VA-has to go through mandatory training and education.

Senator Tester. Yes. Thank you all very much.

Chairman JOHNSON. The bottom line is, there are no easy solutions. You may want to take a look at the PROP Act. That, to a certain extent, addresses some of the unintended consequences in

I want to go back to treatment metrics. What percentage of those 3 million hard drug users ever seeks treatment in a given year? Mr. Botticelli, you were talking about how you hear consistently that there is no funding for treatment. What percentage actually seeks treatment?

Mr. Botticelli. So, we know from the National Survey on Drug Use and Health, which SAMHSA administers, that only a very small percentage of people who actually meet diagnostic criteria for a substance use disorder get care and treatment—and that number is usually between 10 and 20 percent. And, if I can give you some substance use disorders have roughly the prevalence of diabetes. Yet, the treatment rate for diabetes is about 80 to 85 percent. And, we know some of the reasons why people do not get care and treatment. One is that they either do not have insurance or that their

insurance does not appropriately cover it. Stigma also still plays a huge role—that people are afraid to ask for help. So, part of our effort here has been to kind of destigmatize people with addiction. And, we have seen great efforts, I think, across this country, to en-

courage people in recovery to stand up.

But, that is part of what fuels our demand—what fuels some of the negative consequences—this huge treatment gap that we have in the United States. And, that is why the President really kind of stepped forward and said that, despite all of the insurance and expansion that we have done, we still have too large of a treatment gap in the United States.

Chairman JOHNSON. What percentage of alcoholics seek treat-

ment in a given year?

Mr. BOTTICELLI. It depends. And, I can give you the exact number, depending on the diagnosis. I think that the number is slightly higher for people with alcohol use disorders—and, Kana, you may know these numbers better than I do. But, we can get you those. But, it is not much higher than 20 percent for alcohol use disorders.<sup>1</sup>

Chairman Johnson. So, my point is that you have things, like Alcoholics Anonymous (AA) for alcohol—that type of thing. If you do not have a significantly higher percentage of people seeking treatment there, what would make us expect that there would be a higher percentage—even if there was more funding—for treatment? How many addicts just want to keep using drugs and really do not desire treatment?

Mr. BOTTICELLI. I think that there is a significant number of people who do. First of all, I have some experience with this and I think that most people who are addicted to drugs—particularly, to opioids—want to stop using. And, the hallmark of addiction is that

people keep using.

We have to do a better job with intervening. One of the reasons why we have done a great job with tobacco is that, every time you go to the doctor, if you are smoking, the doctor offers you an intervention. And, we need to do the same thing for people with substance use disorders. And, unfortunately, we often wait until they get to their most acute stage—and, often, that is an intersection with the criminal justice system, where we do then leverage people into treatment. Our drug courts—and other programs—do a fabulous job, but we wait far too long while people are developing these disorders and we need to do a better job at systemically intervening before people even reach that acute stage.

We would have better treatment outcomes if we intervened earlier in people's disease progression as opposed to how we wait now until basic—you have heard the expression "hitting bottom." It is crazy that we expect people to hit bottom before we give them care

and treatment.

Chairman JOHNSON. The best solution would be trying to convince people never to even try a drug, so they do not become addicted. We have been successful—we had a hearing on it. This strategy has been really very successful, in terms of reducing the use of tobacco through a very concerted, long-term effort—through

<sup>&</sup>lt;sup>1</sup>The information submitted by Mr. Botticelli appears in the Appendix on page 332.

education and a public relations campaign. Does anybody want to express an opinion as to why, for example, our education efforts

with drugs have not worked? Ms. Maurer.

Ms. Maurer. I think, in many respects, the challenge is much more difficult. We issued some reports early in the decade that looked at some of the education campaigns that were implemented in the late 1990s. We found that, for those particular programs, many did not have any discernible impact—and, in a few cases, it actually worked in the opposite direction. So, in other words, in some groups, when teenagers were exposed to the anti-drug message, they actually used drugs more frequently. That is an issue with the—

Chairman JOHNSON. That is not very effective education.

Ms. Maurer. It is not. And, it really goes back to the idea that you need to have good program design and implementation for

these things to be successful.

I think that, in many respects, the problem we are trying to address here—while there may be lessons learned from seat belts and smoking—it is a much more difficult problem, because it is associated with particular kinds of behaviors and particular kinds of medical conditions. It is intertwined with poverty and a bunch of other issues as well. It is tougher to crack, absolutely.

Chairman JOHNSON. Ms. Enomoto, in your testimony—and now I want to try and name these drugs—naltrexone, methadone, and—what is it?—buprenorphine? Whatever. Can you describe the difference in those drugs—those treatment drugs—and how they really work? What are the differences? Or are they all the same?

Ms. Enomoto. I am not a physician. So, I am happy to get you a more expert description of the pharmacology of those different medications. But, from my perspective, the two drugs methadone and buprenorphine are often referred to as "agonist medications" because they have some opioid qualities. But, they do not lead to the euphoric state that people get when they are using drugs, like heroin or oxycodone. And, they minimize the cravings that people will have for illicit drugs. And, people are able to initiate the use of those drugs while they are still in a state of active addiction, so that they can taper off of the drugs that they are using with the medication-assisted treatment and work toward their recovery without maintaining illicit drug use. Those go along with behavioral services and supports to get the best outcomes. Methadone is a dispensed drug. It is a prescribed drug for pain relief, but, for addiction treatment, it is a dispensed drug. Buprenorphine is available as a prescription in office-based treatment.

Naltrexone is available in two formulations, both an oral form and an injectable, long-acting form. The oral form is a pill and the other one is an injection. Those can be prescribed by any physician, so they are not Schedule II drugs, like buprenorphine and methadone. And, to use the long-acting naltrexone—people need to be detoxed from their opioid. Naltrexone also works on alcohol as well, so that, once people are through detox and they can get the naltrexone—it is an antagonist medication, so it actually completely blocks the opioid receptors. So, if you are taking any other—if you take alcohol or if you take an opioid, then you will not feel the effects of those drugs. I think often people refer to it as a re-

lapse prevention intervention. So, they have different actionsmechanisms of action-and, maybe, they are preferable by different—one patient may prefer one over the other. I think it is a decision between a patient and their physician about what is the best avenue for them and for their particular condition.

Chairman JOHNSON. So, they reduce the craving. Is that kind of

a simple way of putting it?

Ms. ENOMOTO. Yes.

Chairman JOHNSON. Can somebody describe for me the difference between heroin and the other opioids?

Mr. Botticelli. The difference from the medication?

Chairman JOHNSON. Yes, I mean like OxyContin, is that a synthetic opioid?

Mr. BOTTICELLI. Again, while I often pretend to be a doctor, I am

Chairman JOHNSON. We will stipulate that.

Mr. Botticelli. No, but they have very similar properties, in terms of how they interact on the brain. And so, that is why people often turn from opiate pain medication to heroin.

Chairman JOHNSON. But, are those synthetic drugs or are those

also grown from—where are they sourced from?

Mr. Botticelli. So, the others are manufactured medications. Heroin, which is an illicit—it is a grown-

Chairman JOHNSON. It is a plant.

Mr. BOTTICELLI. It is a plant.

Chairman JOHNSON. Whereas the others are the result of some manufacturing process?

Mr. BOTTICELLI. They are manufactured.

Chairman JOHNSON. Like fentanyl, for example? Fentanyl is a synthetic compound?

Mr. Botticelli. Yes.

Chairman JOHNSON. OK. Interesting. Senator Carper.

Senator CARPER. Thank you, Mr. Chairman.

A little more than a month ago, I was part of an Aspen Institute seminar in China. And, I had learned some things about China, but never really spent any time there to speak of. And, I learned a lot of things. One of the things I learned about China is that they now have a two-child policy—not a one-child policy, but a two-child policy that they are kind of moving toward. I learned that a lot of the kids that grow up there grow up in intact, two-parent families, which I was pleased to see. I learned that folks are not much into gambling, lotteries, or stuff like that. And, I learned that drug abuse is not really a problem to speak of in their society.

And, yet, we hear that they ship us materials that are used for fentanyl and stuff like that—and we have had problems before with the Chinese using cyber theft to steal our intellectual property and to use that to create economic opportunity for themselves at

our expense.

I do not know that we have ever said to the Chinese—that our President said to President Xi Jinping, last September, with respect to cyber theft, to, basically, "knock it off." And, the Chinese always say, "Well, we do not do that." And, he said, "Knock it off," just not in so many words. And, they said, "We do not really do that." And, our President, basically, said—just not in so many words, "If you continue to use cyber theft to steal our intellectual property, you know what we did to Iran with economic sanctions? We are your biggest customer. We could do that to you." And, we have seen, since that time, literally, a significant reduction in the instances of cyber theft going on with intellectual property.

Have you ever heard, in terms of whether it is China—or some other country—that is providing these kinds of substances—have you ever heard of how we can use direct contact, leader to leader

and agency to agency, to get them to stop?

Mr. BOTTICELLI. I can talk about that a little bit. So, I do not know if President Obama has had a direct conversation, in terms of the fentanyl issue.

Senator Carper. Not that I know of.

Mr. BOTTICELLI. I know he has with President Enrique Peña Nieto, in terms of the heroin and fentanyl issue—around that—and trying to get his commitment to work government to government.

Senator CARPER. Any luck on that?

Mr. BOTTICELLI. We have been having very productive conversations with the Mexican Government at the working level.

Senator Carper. Good.

Mr. Botticelli. I met with the Mexican Attorney General, who is spearheading their efforts around it. I think they have come up with a plan. I think what we would like to see, is for that to translate into actionable work that they are able to do, in terms of reducing poppy cultivation, going after labs, and looking at the fentanyl situation.

Senator CARPER. OK.

Mr. Botticelli. I know, at the working level, both the State Department and I have had a number of conversations with our colleagues in the Chinese Government, particularly around the fentanyl issue. We are somewhat optimistic. They have moved to reschedule a number of the drugs that they are producing. I think what we would like to see next, is incredibly more robust enforcement action, on their part, to go after—I mean, they have a huge industry there, but we would like to see more oversight and see them going after some of these producers. This is where, I think, being able to have better intelligence, in terms of knowing directly where these substances might be coming from and how they are being shipped, becomes very important for us.

Senator CARPER. Thank you.

Could I ask you another question, Mr. Botticelli? While I am asking this question, I want the other witnesses just to—I have been in and out of the hearing today. I apologize for that. We had to start late—not our fault—not the Chairman's fault, but it is because of the series of votes on the floor. So, I missed part of what you said—and, Ms. Maurer—and I am going to ask Ms. Enomoto to just share with me like one great takeaway from this hearing, as we think of this issue and how to deal with it—this challenge and how to deal with it, please.

Here is my question, Mr. Botticelli, while they are thinking of that. I was pleased to see—we only have three counties in Delaware. The northernmost county is called New Castle County and it is right up along the Pennsylvania border, as you may know. And, I was pleased to see that New Castle County was added to

the Philadelphia-Camden regional High Intensity Drug Trafficking Area (HIDTA) program last year.

Could you just take a moment and share with us some insights on why the work of HIDTAs is so critical to the success of your of-

fice, overall, please?

Mr. BOTTICELLI. So, we were glad to be able to have the resources from Congress to be able to do that, first of all. But, I will say two things about why I think HIDTAs are very successful—or three reasons.

One, I think they do a very accurate assessment of what the drug threat looks like in any given county in a community and they

are able to target resources against that.

I think, second, as we talked about, that coordination is key. They are able to really coordinate law enforcement efforts at the Federal, State, and local level. And, they involve local law enforce-

ment, in terms of their work, to be able to do that.

I think the third thing is that they understand that law enforcement is only part of the problem and they actually work with public health officials to really make sure that we are having that balanced strategy—that we are not just focusing on law enforcement, but we are also focusing on demand reduction, too.

So, I think that is, from my perspective, why the HIDTAs do a

very good job at the local level.

Senator CARPER. OK, good. Alright. Ms. Maurer.

Ms. Maurer. I think the one key takeaway from today's hearing would be that, I think, we are in a unique time right now, where there is an appreciation that addressing this problem is going to involve many different aspects of the Federal Government and involve working with State and local authorities. We have not always—

Senator CARPER. And, the nonprofits.

Ms. Maurer. And, nonprofits.

Senator CARPER. The health community, schools, etc.

Ms. Maurer. Absolutely. So, we have not, for example, always seen this emphasis—or almost an equal emphasis—on the demand side and the supply side—because both are equally important for addressing the problem.

I will put in a plug for GAO. There are a lot of programs at a lot of different Federal Agencies. We could play a role in helping to assist Congress with its oversight responsibilities to make sure these programs are being implemented effectively and efficiently.

Senator CARPER. OK. Thank you. Ms. Enomoto.

Ms. ENOMOTO. So, I have a couple of points and some of them go back to questions that Senator Johnson asked.

Senator CARPER. OK.

Ms. ENOMOTO. And, I did not get a chance to jump in, but I think they are relevant.

One of the questions that had been asked is, "Why are people saying that only a small fraction of people who go to treatment get better?"

Senator CARPER. That is a very good question.

Ms. Enomoto. And, what I would say, is that not all treatment is created equal. Director Botticelli referenced medication-assisted treatment, which we know is a standard of care for opioid use dis-

orders. Not all treatment providers are equipped or adequately resourced to provide evidence-based services and the interventions and supports that we know yield the best outcomes. And, that is why, when you ask the question about why more resources would make a difference—how do we know that more resources are going to help—first of all, it is because we know that not all providers are able to really provide that wrap-around, science-based level of care that we know can create recovery for the majority of people.

The other thing is that, in our surveys—and I am happy to get you this data—we actually do not ask people, "Do you think you have a disorder?" We ask people what their behaviors and their symptoms are—and then, we can generate that deduction. And then, we ask them: "Did you seek treatment? Did you get treatment? If you did not get treatment, why did you not get treatment? Or, did you not seek treatment at all? If you did not seek treatment, why was that?"

For opioid use disorders, we know that there are about half a million people who wanted treatment, but had different reasons for not being able to get that treatment. Often it is because they did not know where to go, their insurance was not adequate, or they

did not have the insurance to pay for it.

So, it is not an insignificant number of people—half a million people—who need treatment and who are ready to get treatment, but who do not have a way to pay for it or to get there. So, I think

that is a tremendous opportunity.

And, in terms of public campaigns, I know that GAO had a look at campaigns and whether or not they were making a difference. This is something that Madison Avenue figured out a long time ago. There is a science to this. I think people who run campaigns also know that there is a science to how many impressions over a given period of time you need to have to raise awareness, how many impressions over a given period of time you need to change belief, and then, even further, how many you need to change behavior

Our campaigns are often significantly underresourced, so it is sort of like, "Well, we gave you a \$10 kit to build a potato clock, how come you did not get to the moon with that, when your neighbor, the National Aeronautics and Space Administration (NASA), was able to get to the moon? Well, we had a \$10 potato clock kit, so that is why we did not get to the moon. But, with our \$10 potato clock, we actually did some amazing work."

And so, for example, with our \$1 million STOP Act campaign to combat underage drinking, we are generating \$54 million of donated media. That is a lot. We are getting millions and millions of

impressions.

That being said, we may not be rising to the level that we know—that the science would tell us—that you need to get to in order to change knowledge, behavior, and action over time. And so, I think that is the conversation that needs to be had.

Senator CARPER. Great. Those are great answers. Thank you, Mr. Chairman. And, our thanks to all of you. I am sorry we were in and out this afternoon, but thank you for bearing with us and for your testimonies.

Chairman JOHNSON. Thank you, Senator Carper.

I want to thank the witnesses again for your time, your testimonies, your answers to our questions, and, really, for all of your work and efforts in this area. This is a crisis. It is an enormously difficult challenge—a very complex problem. So, again, thank you all.

The hearing record will remain open for 15 days until June 1, at 5 p.m., for the submission of statements and questions for the record.

This hearing is adjourned.

[Whereupon, at 4:56 p.m., the Committee was adjourned.]

#### APPENDIX

Chairman Johnson Opening Statement "America's Insatiable Demand for Drugs: Assessing the Federal Response"

Tuesday, May 17, 2016

As submitted for the record:

As chairman of this committee, I have made addressing border security a top priority. We have held 18 hearings on the topic and released a 100-page report, "The State of America's Border Security." The clear finding is that America's borders are not secure. Over the course of the committee's extensive work on this issue, it also has become clear that America's insatiable demand for drugs is the root cause of our insecure border. Today, we will examine the federal government's response to this demand.

At the federal level, we spend approximately \$31 billion per year on our war on drugs. According to testimony before this committee, we interdict less than 10 percent of illegal drugs coming across our southwest border and somewhere between 11 and 18 percent coming in through our maritime borders.

As a result, heroin entering the United States today is significantly higher in purity and lower in price than it was in the past. According to Wisconsin Attorney General Brad Schimel, heroin sold on the street has increased from five percent in purity to now between 20 and 80 percent. Meanwhile, the price of heroin has decreased from a nationwide average of \$3,260 per gram of pure heroin in 1981 to \$100 to \$150 per gram in Wisconsin today. That can translate into as little as \$10 for one hit.

The ease with which an addict can access heroin has led to an alarming rise in overdoses across the country. In Milwaukec County alone, 109 heroin-related overdose deaths were reported in 2015. In 2014, there were more than 47,000 drug overdoses in the United States, meaning that every day an average of 129 Americans die of overdose. One of those senseless losses was Lauri Badura's son, Archie. During a field hearing in Wisconsin last month, I had the opportunity to meet with Lauri and learn about her son and his tragic death from a heroin overdose. During her courageous testimony, she stated that she did not understand the lack of outrage and attention being paid to this killer.

We are not winning the war on drugs. I share Lauri Badura's frustration that we are not effectively addressing this problem, and I believe we owe it to our nation's families to reassess our current strategies. To that end, today's hearing will examine how the United States is allocating funds to fight the war on drugs. In particular, we will explore how resources are currently directed, what is working, and what should be done differently.

I thank our witnesses for providing the attention to this issue that it deserves and I look forward to your testimony.

### Statement of Ranking Member Tom Carper "America's Insatiable Demand for Drugs: Assessing the Federal Response"

#### Tuesday, May 17, 2016

As prepared for delivery:

Thank you, Mr. Chairman, for holding this hearing today to examine the federal government's efforts to stem the demand for illegal drugs and treat the substance abuse disorders that fuel it. I look forward to hearing from our witnesses on this difficult issue that has developed into a health emergency across the country and to learning more about what the federal government is doing and should be doing to address the root causes of this complex challenge.

As we all know, substance abuse, particularly prescription opioid and heroin abuse, has been a growing problem in our country for a number of years now. According to the Centers for Disease Control, there has been a dramatic increase in opioid-related overdoses in recent years with the number of incidents actually quadrupling since 2000. And opioids, primarily prescription pain relievers and heroin, are the main cause of overdose deaths. All told, there were just over 47,000 drug overdose deaths in 2014 in our country, up from just under 44,000 in 2013, a more than six percent increase in just one year. Even when drug abuse is not deadly, it inflicts other damage, not just on those doing the drugs, but also their families and communities. And we must also be honest about how our country's demand for drugs has fueled violence and disorder in Mexico and much of Central America, breaking down communities and touching families throughout the region.

This committee is familiar with the work the Department of Homeland Security and others do at and around our borders to stop the supply of illicit drugs coming into our country. But as former SouthCOMM Commander General Kelly has told us, we cannot intercept our way out of this problem. We must do more to address the demand for drugs. That means looking at the challenge we face as a public health crisis, not just a law enforcement issue.

Simply put, substance abuse issues are complex and require a robust and comprehensive response. We of course need to make sure that our law enforcement agencies have the tools and resources they need to combat drug traffickers and reduce the supply drugs available in our country. But we also need to make sure we're investing in public health and funding treatment and other initiatives that can reduce the demand for drugs. We also need to ensure that these efforts are well coordinated, and that the agencies involved are working effectively with states and localities.

That's why I'm pleased to see that the individual responsible for our national drug control efforts, the Director of the Office of National Drug Control Policy, Michael Botticelli, is here to provide insight into what the Obama Administration has done in the last several years to address these issues. I'm also pleased to see that the Principal Deputy Administrator at the U.S. Substance Abuse and Mental Health Services Administration (SAMHSA), Ms. Kana Enomoto, is here to provide us with information on the government's efforts to prevent and treat substance abuse disorders, as we all know that treatment and prevention are crucial if we want to reduce the

demand for drugs. Additionally, Ms. Diana Maurer, Director of Homeland Security and Justice at the GAO, will provide us with an overview of the progress made toward our national drug control strategy goals and the work that remains to be done in this area.

In sum, this problem we're facing is complex, and the potential solutions are neither quick nor easy. Getting a handle on drug abuse and substance abuse disorders and the tragic problems that stem from them both in our communities, and in neighboring countries, will require an all-handson-deck effort. Again, my thanks to our Chairman for holding this hearing and to our witnesses for their contributions. I look forward to reviewing our federal efforts to reduce the supply and demand for illegal drugs.



# EXECUTIVE OFFICE OF THE PRESIDENT OFFICE OF NATIONAL DRUG CONTROL POLICY

# Assessing the Federal Response to Drug and Opioid Use

Homeland Security and Government Affairs Committee United States Senate

> Tuesday, May 17, 2016 2:30 p.m.

Statement of Michael P. Botticelli Director of National Drug Control Policy

#### Overview

Chairman Johnson, Ranking Member Carper, and members of the Committee, thank you for this opportunity to discuss the Office of National Drug Control Policy's authorities and efforts to collaboratively carry out President Obama's drug control priorities.

The Office of National Drug Control Policy (ONDCP) was established by Congress in 1988 with the principal purpose of reducing illicit drug use, manufacturing, and trafficking; drug-related crime and violence; and drug-related health consequences. As a component of the Executive Office of the President, ONDCP establishes policies, priorities, and objectives for the Nation's drug eontrol programs and ensures that adequate resources are provided to implement them. We also develop, evaluate, coordinate, and oversee the international and domestic antidrug efforts of Executive Branch agencies and ensure such efforts sustain and complement state and local drug policy activities.

At ONDCP, we are charged with producing the *National Drug Control Strategy* (*Strategy*), the Administration's primary blueprint for drug policy, along with a national drug control budget. The *Strategy* is a 21<sup>st</sup> century plan that outlines a series of evidence-based reforms that treat our Nation's drug problem as a public health challenge, not just a criminal justice issue. It is guided by what science, experience, and compassion demonstrate about the true nature of drug use in America.

#### Status of Drug Use and Availability

The Strategy takes a thorough and comprehensive approach to addressing .drug use and availability. With its inaugural 2010 Strategy, the Administration stressed a public health and public safety approach that recognized substance use disorder is a disease of the brain that can be prevented, treated, and from which people can recover. It also recognized the continued importance of law enforcement efforts, including interdiction and cooperation with international partners to reduce the supply of illicit drugs.

The *Strategies* have produced results. In 2012, the Nation saw the first decline in the rate of deaths involving opioid medications. From 1999 to 2011, these death rates increased each year, rising from 2.4 deaths per 100,000 population to 6.2. In 2012, they dipped to 5.8 and remained there in 2013 before rising again to 6.5 in 2014. This rise in 2014 may likely be attributed to fentanyl. The rate of overdose deaths involving synthetic opioids nearly doubled between 2013 and 2014; it includes prescription opioids and non-pharmaceutical fentanyl manufactured in illegal laboratories, and toxicology tests used by medical examiners and coroners are unable to distinguish between the two.<sup>2</sup> With the continued implementation of the various elements of the Administration's plan for addressing this crisis, including increasing access to treatment for opioid use disorders, improving prescription drug monitoring programs and their interoperability, expanding distribution of the opioid overdose antidote naloxone to all first responders, prescriber education, expanding local prescription medication disposal

<sup>&</sup>lt;sup>1</sup> Centers for Disease Control and Prevention (CDC), National Center for Health Statistics. Multiple Case of Death, 1999-2014 on CDC WONDER Online Database, released 2015. Extracted by ONDCP from <a href="http://wonder.cdc.gov/mcd-jcd10.html">http://wonder.cdc.gov/mcd-jcd10.html</a> on December 9, 2015. 
<sup>2</sup> Rose A. Rudd, MSPH, Noah Aleshire, JD, Jon E. Zibbell, PhD; R. Matthew Gladden, PhD Centers for Disease Control and Prevention (CDC) Morbidity and Mortality Weekly. Report. Increases in Drug and Opioid Overdose Deaths – United States 2000-2014. Weekly. January 1, 2016. 64(50), 1378-82. Available at: <a href="http://www.cdc.gov/mmwt/preview/mmwthtm//mm6450a3.htm">http://www.cdc.gov/mmwt/preview/mmwthtm//mm6450a3.htm</a>.

programs, and continuing law enforcement actions against pill-mill operators and suppliers and traffickers of heroin and illicit fentanyl, we are hopeful that the Nation will see renewed declines in deaths involving all opioids.

Our hope is fueled by recent reductions in the non-medical use of these powerful drugs. Among youth age 12 to 17, current non-medical use of these drugs declined 29 percent from 2009 to 2014, and 39 percent among young adults age 18 to 29. Perhaps most importantly, initiation of nonmedical use of opioid medications is down 35 percent over this same period, from 2.2 million in 2009 to 1.4 million in 2014. These significant declines in the number of nonmedical prescription opioid use by youth and young adults, and in the number of new initiates, demonstrate the effectiveness of this Administration's policies, including education and prevention efforts on the harms of prescription opioid misuse.

From 2009 to 2014, there have been reductions in the use of illicit drugs other than marijuana, dropping 21 percent among youth age 12 to 17, and 20 percent among young adults age 18 to 29. The declines have been driven by decreases in the non-mcdical use of prescription drugs, ecstasy, hallucinogens, and inhalants.<sup>3</sup> Substantial progress also has been achieved in reducing alcohol and tobacco use among youth, the two most frequently used substances at this age. Among 8th grade students, the rate of lifetime use of these substances declined 28 percent for alcohol (from 36.6 percent in 2009 to 26.1 percent in 2015) and 34 percent for cigarettes (from 20.1 percent to 13.3 percent in 2015).<sup>4</sup> These declines exceeded the targets established for them in the 2010 Strategy.

Substantial progress also has been achieved in reducing the number of HIV infections attributable to intravenous drug use. Such infections fell from 5,799 in 2009 to 4,366 in 2013, exceeding the 2015 Strategy target of 4,929.<sup>5</sup> Nonetheless, only certain parts of the country have benefitted from policies to reduce the risk of exposure to blood-borne infections. For example, in rural southeastern Indiana, intravenous use of prescription oxymorphone caused an HIV outbreak where 191 persons have tested positive since January 2015.6 This outbreak reminds us that more work remains.

Despite these achievements, much remains to be done. The past five years have seen an alarming increase in deaths involving heroin, rising from 3,038 in 2010 to 10,574 in 2014.<sup>7</sup> This increase has been accompanied by a sharp rise in the availability of purer forms of heroin that allow for non-intravenous use, 8 and at a relatively lower price, 9 and an increase in the initiation of heroin use (from 116,000 people in 2008 to 212,000 in 2014). 10 Drugged driving continues to be of great concern. In 2007, the National Highway Traffic Safety Administration estimated that 16.3 percent of the Nation's weekend nighttime drivers tested positive for an illicit drug or

<sup>&</sup>lt;sup>3</sup> Center for Behavioral Health Statistics and Quality (CBHSQ). 2015, 2014 National Survey on Drug Use and Health (NSDUH): Detailed

Tables: Substance Abuse and Mental Health Services Administration, Rockville, MD

\* Johnston, L.D., O'Malley, P.M., Miech, R.A., Bachman, J.G.; and Schulenberg, J.E. 2015. D.; 2015. Monitoring the Future. National Survey Results on Drug Use. 2015 Overview: Key Findings on Adolescent Drug Use. The University of Michigan, Institute for Social Research, Ann

Senters for Disease Control and Prevention. February 2015. HIV Surveillance Report-Diagnoses of HIV Infection in the United States, 2013

<sup>\*</sup>Centers for Disease Control and Prevention Foundary 2015. It is diseased to the States of HIV infection in the Onited States, 2015. Vol. 25. Department of Health and human Services, Washington, DC

\*Morbidity and Mortality Weekly Report (MMWR), Community Outbreak of HIV Infection Linked to Injection Drug Use of Oxymorphone—
Indiana, 2015, 64 (16); p 443-444, May 1, 2015. Data from State of Indiana, available at <a href="https://secure.in.gov/isdh/2649.htm">https://secure.in.gov/isdh/2649.htm</a>. Op cit., CDC WONDER 2015.

<sup>\*</sup> Drug Enforcement Administration. Strategic Intelligence Section. 2015 National Heroin Threat Assessment. DEA-DCT-DIR-039-15.
\* Drug Enforcement Administration. System to Retrieve Information from Drug Evidence (STRIDE), Price and Purity Data, 2015.

<sup>10</sup> Op cit., CBHSQ NSDUH 2015.

medication capable of impairing driving skills. Unfortunately, by 2013/2014 that estimate had risen to 20.0 percent.11

#### Drug Policy Priorities and Strategy Goals

ONDCP produces the Strategy each year in partnership with our fellow Federal agencies and with extensive feedback and input from stakeholders across the country and around the world. The Strategy establishes the framework for the Nation's drug control efforts, focusing on prevention, early intervention, treatment and recovery support, criminal justice reform, law enforcement efforts, and international partnerships. The Strategy also reviews the results of current data and research efforts that inform our policies, and identifies areas where more information is needed.

To assist in establishing policy and evaluating the success of our efforts, the Strategy includes two broad policy goals accompanied by performance measures and targets. The Strategy seeks to: (1) Curtail illicit drug consumption in America, and (2) Improve the public health and public safety of the American people by reducing the consequences of drug use. There are 15 data items that inform seven Strategy Measures in support of the two goals. In addition, for the past six years, each chapter of the Strategy has included action items assigned to Federal agencies. Each action item addresses an area of policy critical to improving the health and safety of our Nation. Completion of these action items supports the Administration's efforts to meet the goals of the Strategy.

#### Overview of 2015 Strategy

President Obama's inaugural Strategy, released in May 2010, labeled opioid overdose a "growing national crisis" and laid out specific actions and goals for reducing nonmedical prescription opioid and heroin use.12

Building on this, the Administration released a comprehensive Prescription Drug Abuse Prevention Plan (Plan)<sup>13</sup> in 2011, which created a national framework for reducing prescription drug diversion and misuse. The Plan focuses on: improving education for patients and healthcare providers; supporting the expansion of state-based prescription drug monitoring programs; developing more convenient and environmentally responsible disposal methods to remove unused and unneeded medications from the home; and reducing the prevalence of pill mills and diversion through targeted enforcement efforts.

Success in each of these efforts has been the result of concerted collaboration among Federal agencies and coordination by ONDCP. Since the release of this plan, our efforts have built upon this foundation and have expanded to respond more comprehensively to the growing crisis.

<sup>11</sup> National Highway Traffic Safety Administration. 2015. Traffic Safety Facts. Research Note. Results of the 2013-2014 National Roadside

<sup>\*\*</sup>National Highway Traffic Safety Administration, 2015. Traffic Safety Facts. Research Note, Results of the 2013-2014 National Roa Survey of Alcohol and Drug Use by Drivers. Department of Transportation (DOT HS 812 118).

\*\*Office of National Drug Control Policy. 2010 National Drug Control Strategy. Executive Office of the President. [2010]. Available: <a href="http://www.whitehouse.gov/sites/default/files/ondcp/policy-and-research/ndcs2010.pdf/#page=49">http://www.whitehouse.gov/sites/default/files/ondcp/policy-and-research/ndcs2010.pdf/#page=49</a>

\*\*Office of National Drug Control Policy. \*\*Epidemic: Responding to America's Prescription Drug Abuse Crisis [2011] Available: <a href="http://www.whitehouse.gov/sites/default/files/ondcp/issues-content/prescription-drugs/rx">http://www.whitehouse.gov/sites/default/files/ondcp/issues-content/prescription-drugs/rx</a> abuse\_plan.pdf

The Administration has increased access to treatment for substance use disorders, expanded efforts to prevent overdose, and coordinated a Government-wide response to address the consequences of opioid misuse. We have worked to educate prescribers and the public on the risks associated with misusing prescription opioids. We have worked with state and local governments to improve legislative and policy responses to opioid use in their communities. We have also continued to pursue actions against criminal organizations trafficking in opioid drugs and we continue our close cooperation with the Government of Mexico to disrupt criminal networks and reduce the flow of heroin from Mexico into the United State.

Mexico is currently the primary supplier of heroin to the United States, with Mexican drug traffickers producing heroin in Mexico and smuggling the finished product into the United States. <sup>14</sup> Opium poppy cultivation in Mexico has increased substantially in recent years, rising from 17,000 hectares in 2014, with an estimated potential pure heroin production of 42 metric tons, to 28,000 hectares in 2015 with potential production of 70 metric tons of pure heroin. <sup>15</sup> Additionally, we are working with several states to obtain better reporting on the use and abuse of fentanyl to help us better understand the increased availability of fentanyl in the United States. This not only includes reporting on fentanyl seizures by law enforcement agencies but also postmortem detection of fentanyl in suspected overdose cases that may not be attributed to heroin alone.

At the same time, we have focused on addressing Neonatal Abstinence Syndrome and opioid use disorder among pregnant women; worked with Congress to revise the ban against federal funds for syringe service programs; expanded the availability of medication assisted treatment for opioid use disorder, including increasing the number of trained and waivered healthcare providers that can prescribe buprenorphine; and taken budget and policy actions that have expanded the availability and use of the opioid overdose reversal medication naloxone, including by law enforcement and other first responders. In each of these areas, multiple agencies have come together to leverage resources and policy expertise toward a common goal.

#### How the Drug Budget is Aligned with Policy Priorities

ONDCP's authorities allow it to engage in a policy and budget development process that is dynamic, nimble, and responsive to the needs of communities and which allow us to collaborate effectively with Congress, state and local governments, community organizations, individual citizens, and other stakeholders.

Nowhere is this more evident than in the Federal response to the prescription drug and heroin epidemic currently facing our Nation. ONDCP's oversight of the National Drug Control Budget ensures the Federal Government's drug control efforts are well coordinated and support the objectives of the Strategy. Since the Administration's inaugural 2010 Strategy, we have deployed a comprehensive and evidence-based strategy to address opioid use disorders and opioid induced overdose deaths. ONDCP's annual funding guidance to Drug Control Program agencies emphasized the need for increased access to treatment for substance use disorders, expanded efforts to prevent overdose, and a coordinated Government-wide response to address the public health and public safety consequences of substance use—particularly heroin use and

 <sup>&</sup>lt;sup>14</sup> Drug Enforcement Administration. Strategic Intelligence Section. 2015 National Heroin Threat Assessment. DEA-DCT-DIR-039-15.
 <sup>15</sup> US Department of State, Bureau of International Narcotics and Law Enforcement Affairs. International Narcotics Control Strategy Report -2015 INCSR [March 2015) for data from 2013 - 2014 and unpublished U.S. Government Estimated.

the non-medical use of opioid medications. The guidance also recognizes the need for continued interdiction and enforcement actions against criminal drug trafficking organizations.

The funding guidance provides Drug Control Program agencies notification of the budget priorities needed to support the objectives of the *Strategy*. ONDCP reviews and makes funding recommendations on the budget submissions of Drug Control Program agencies twice during each budget cycle. The budgets are first reviewed in the summer when bureaus submit budget data to their respective Departments for review. They are reviewed a second time in the fall when Departments submit their budgets to the Office of Management and Budget. ONDCP coordinates closely with policy and budget officials to ensure that ONDCP funding priorities are supported as much as possible in the President's Budget.

ONDCP's efforts have helped to secure necessary resources for the Administration's priorities, and align overall funding to reflect a balanced demand reduction and supply reduction approach to drug control efforts.

When the Administration took office, 37 percent of Federal drug control resources were devoted to demand reduction efforts such as preventing and treating substance use disorders. In FY 2017, 51 percent of Federal drug control resources are requested for demand reduction and 49 percent of Federal drug control resources are requested for supply reduction. This is the first time that more Federal funding has been requested to support drug treatment and prevention than for supply -reduction efforts.

The total national drug control policy budget request in FY 2017 is \$31.1 billion. This is half-a-billion dollars more than the FY 2016 enacted level and represents an increase of \$6.2 billion (+25 percent) in drug control funding since the beginning of the Administration. Since the Administration took office in 2009, the policy guidance and the drug control funding levels supporting those policies show that ONDCP's efforts have contributed to a change in how the Federal government approaches substance use and its consequences. The FY 2017 Administration's request of \$15.8 billion for drug treatment and prevention includes an increase of \$6.7 billion since the beginning of the Administration, increasing the amount of funding available for demand reduction programs by more than 70 percent. In FY 2017, the Administration requests more than \$15.2 billion for supply reduction programs. Since 2009, the funding request for supply reduction efforts has provided increases for domestic law enforcement (+\$63 million) and interdiction (+\$439 million), but a reduction in funding for international drug control (-\$952 million).

The FY 2017 drug control budget matches the seriousness of the situation we face as a nation. The President's FY 2017 Budget takes a two-pronged approach to address the opioid epidemic. First, it includes \$1 billion in new mandatory funding over two years to expand access to treatment and recovery support services for those suffering from opioid use disorder. This funding will boost efforts to help individuals seek and complete treatment, and sustain recovery. This funding includes:

\$920 million to support cooperative agreements with States to expand access to treatment
for opioid use disorders. States will receive funds based on the severity of the epidemic
and on the strength of their strategy to respond to it. States can use these funds to expand
treatment capacity and make services more affordable.

- \$50 million to the National Health Service Corps to expand access to substance use disorder treatment providers. This funding will support approximately 700 substance use disorder treatment providers in areas most in need of these services.
- \$30 million to evaluate the effectiveness of treatment programs employing medicationassisted treatment and to improve treatment for patients with opioid use disorder.

This investment, combined with efforts to reduce barriers to treatment for substance use disorders, is a critical step in helping every American who wants treatment access it and get the help they need.

In addition to the request for new mandatory funding, the President's FY 2017 Budget request includes an increase of more than \$90 million for the Departments of Justice and Health and Human Services to continue expanding state-level prescription drug overdose prevention strategies, increase the availability of medication-assisted treatment programs, improve access to the overdose-reversal drug naloxone, and support targeted enforcement activities. A portion of this funding is directed to rural areas, where rates of opioid use and overdose are high and access to resources is limited.

#### Evaluating the Effectiveness of Drug Policy Programs.

As for so many of the issues facing our Nation, we must continue seeking new and effective solutions to reduce drug use and its consequences. As policy develops in response to the changes in drug trafficking and use, ONDCP has been able to work in partnership with the Federal Drug Control agencies to develop new programs and expand successful ones.

Measuring performance is a key tool for ONDCP in its oversight of National Drug Control Program agencies – it enables ONDCP to assess the extent to which the *Strategy* is achieving its goals, and accounts for the contributions of individual drug control agencies. ONDCP's approach to performance evaluation includes several elements.

The first element is implementation of the *Strategy*. The *Strategy* identifies Action Items that are essential to achieving the *Strategy's* Goals and Objectives. The implementation of these action items by interagency partners is monitored by ONDCP's Delivery Unit, which works with ONDCP components to coordinate and track progress. When progress is not being achieved, relevant agency partners are convened to assess challenges and implement corrective actions. Additionally, once funds are appropriated by Congress, Drug Control Program agencies submit financial plans to ONDCP with account-level detail that links the drug budget to the operating budget, and provides policy officials with the information to make resource allocation decisions. Occasionally, an agency may seek to reprogram funding to address an unanticipated need. Drug Control Program agencies that seek to reprogram or transfer appropriated Drug Control Program funds exceeding one million dollars must have the request approved by ONDCP.

The second element is the Performance Reporting System (PRS). As noted above, the *Strategy* has two overarching goals: (1) curtailing illicit drug consumption in the United States;

and (2) improving the public health and public safety of the American people by reducing the consequences of drug use. ONDCP and its Federal partners use the PRS to assess progress toward meeting specific quantitative targets of the *Strategy's* Goals and Objectives. The *Strategy's* overarching goals call for reductions in the rate of young adult drug use, chronic drug use, and drug-related consequences, such as drug-related morbidity and drugged driving. The PRS' seven objectives focus on prevention, early intervention, treatment & recovery support, breaking the cycle of drug use and crime, drug trafficking and production, international partnerships, and enhancing data sources to inform policies, programs, and practices.

Data from the Substance Abuse and Mental Health Services Administration (SAMHSA), National Institute on Drug Abuse (NIDA), Centers for Disease Control and Prevention (CDC), Health Resources and Services Administration (HRSA), Department of Justice, Department of State, and ONDCP are used to track 32 measures. These data are used to track progress-to-date compared to the baseline for each measure. In reviewing these data, ONDCP and its Federal partners look at trends and shifts in trends that may be a sign of an emerging issue. An example would include monitoring trends of drug-induced deaths. In 2009, there were 39,147 drug-induced deaths; 37,004 of these were drug poisoning deaths and 20,848 of those were reported to involve prescription drugs. In 2013, there were 46,471 drug-induced deaths, an increase of 19 percent compared to 2009. These data, among other data and information, prompted a more extensive review that was used to inform ONDCP's response to shifts in prescription drug misuse and heroin use.

A third element of ONDCP's approach to performance is the Performance Summary Report (PSR). Individual agency performance summary reports are a component of ONDCP's assessment of agency performance. These reports provide the Administration and Congress with independent assessments of agency accountability systems – the measures, the process of developing targets, the quality of data systems, and the use of performance information.

#### Progress on Strategy Goals

A suite of seven measures, informed by 15 data items, was developed to assess the Nation's progress toward achieving the *Strategy*'s goals. The 2015 PRS Report found good progress in a number of areas, including a decrease in 30-day prevalence of drug use among 12-17 year olds, a decrease in lifetime prevalence of 8<sup>th</sup> graders using alcohol and tobacco, a reduction in HIV infections attributable to drug use, and reduction in the number of chronic cocaine and methamphetamine users.

However, challenges remain. We have not achieved reduction targets for lifetime prevalence of 8<sup>th</sup> graders using illicit drugs and have not made progress on reducing drug use among 18-25 year olds. The primary reason for this lack of success is the continued and unchanging high prevalence of past month marijuana use among young adults—nearly 20 percent since 2009. However, when marijuana is excluded from the estimation of illicit drug use, the Nation has actually already doubled the targeted reduction—a 20 percent decline from 2009 to 2013. This decline has been driven by a 25 percent decline in past month non-medical use of prescription drugs overall, which in turn was driven by a 31 percent decline in past month non-medical use of prescription opioid medications.

The heroin crisis is being compounded by the emergence of illicit fentanyl, a powerful opioid more potent than morphine or heroin. 16 Fentanyl is sometimes added to heroin to increase potency, or mixed with adulterants and sold as heroin with or without the buyer's knowledge. Some states are being hit especially hard by fentanyl-related overdoses. For example, Ohio med ical authorities reported 514 fentanyl-related overdose deaths in Ohio in 2014 alone - up from 92 in the previous year. 17 And in New Hampshire, the Office of the Chief Medical Examiner reports that out of 433 drug deaths in 2015, 396 involved opioids. Of those deaths involving opioids, 281 involved fentanyl and 88 involved heroin.18

In response, and per the Strategy, ONDCP coordinates with Federal partners to identify, disrupt and dismantle criminal organizations trafficking in opioid drugs; works with the international community to reduce the cultivation of poppy; identifies labs creating dangerous synthetic opioids like fentanyl and acetyl-fentanyl; and enhances efforts along the Nation's borders to decrease the flow of these drugs into our country. Expanding on these efforts, in October, ONDCP created the National Heroin Coordination Group, a multi-disciplinary team of subject matter experts to lead Federal efforts to reduce the availability of heroin and fentanyl in the United States, This hub of interagency partners will leverage their home agency authorities and resources to disrupt the heroin and illicit fentanyl supply chain coming into the U.S. and will establish mechanisms for interagency collaboration and information-sharing focused on heroin and fentanyl.

With regard to drugged driving, the data are mixed. As noted above, data from the National Highway Traffic Safety Administration's National Roadside Survey show the Nation moving in the wrong direction on drug-involved driving. Results from the 2013/2014 survey indicated that driving after consuming drugs on weekend nights was 20 percent, up from 16.3 percent in 2009. ONDCP also is tracking the prevalence of drugged driving with self-report data from the National Survey on Drug Use and Health (NSDUH). According to data from the 2014 NSDUH, the United States is almost at its target of reducing drugged driving by 10 percent by 2015. The baseline rate of drugged driving for drivers 16 and older in 2009 was 4.4 percent; the target rate by 2015 is 4.0 percent; and in 2014 at the rate achieved was 4.1 percent.

#### Coordinating Drug Control Efforts to Eliminate Duplication

ONDCP coordinates drug control efforts and eliminates duplication through a variety of mechanisms. ONDCP works closely with all Federal drug control agencies to develop the President's National Drug Control Strategy, and the drug control budget. Additionally, ONDCP leads a broad range of interagency groups that support the Strategy's initiatives. Examples include interagency working groups on treatment, prevention, and data, the Interdiction Committee, the National Heroin Task Force, and the National Heroin Coordination Group.

<sup>16</sup> Zuurmond WW, Meert TF, and Noorduin H. (2002). Partial versus full agonists for opioid-mediated analgesia--focus on fentanyl and buprenorphine, Acta Anaesthesiol Belg, 53(3):193-201

<sup>17 2014</sup> Ohio Drug Overdose Preliminary Data: General Findings, Ohio Department of Health, Office of Vital Statistics; Analysis Conducted by

http://www.healthvohio.gov/-/media/HealthvOhio/ASSETS/Files/injury%20prevention/2014%20Ohio%20Preliminary%20Overdose%20Report pdf Accessed 11-24-15.

\*\*Personal\*\* = mail\*\* =

Personal E-mail Communication. April 28, 2016. New Hampshire Office of the Chief Medical Examiner. 2015 Current Drug Data as of April

In 2013, the General Accountability Office (GAO) released a report indicating overlapping services in substance use prevention and treatment, which could increase the risk of duplication. As a follow up to this report, ONDCP undertook an assessment of the extent of overlap, duplication, and coordination. ONDCP found that nearly all of the identified programs serve distinct beneficiaries in distinct settings. In a few cases where overlap could occur, a review of the grantees found duplication did not occur. Further, ONDCP found that the agencies managing these programs have coordinated their programs to achieve the best results. In a few cases, ONDCP found a limited number of programs that would benefit from greater coordination and worked with the programs to enhance it.

ONDCP continues to coordinate with Federal agency partners and lead interagency working groups to prevent program overlap. We appreciate GAO's recognition that ONDCP's actions mean ONDCP "will be better positioned to help ensure that federal agencies undertaking similar drug abuse prevention and treatment efforts better leverage and more efficiently use limited resources."

#### Conclusion

Achieving the Strategy's goals takes extensive effort at the federal, state and local level. ONDCP will continue to lead the Federal Government in addressing drug use and its public health and public safety consequences, including the opioid epidemic. ONDCP's guidance and coordination with our Federal partners maintains focus on the President's policy and funding priorities, and helps states and communities address illicit substance use. Together, we are committed partners, working to reduce the prevalence of substance use disorders through prevention, increasing access to treatment, and helping individuals recover from the disease of addiction. These efforts are also accompanied by a focus on effective law enforcement and supply reduction strategies to interrupt drug trafficking networks. Thank you for the opportunity to testify and for your ongoing commitment to these issues. I look forward to continuing to work with you on these pressing matters.





#### Testimony Before the

U.S. Senate Committee on Homeland Security and Governmental Affairs

Hearing to Examine "America's Insatiable Demand for Drugs: Assessing the Federal Response"

May 17, 2016

Statement of Kana Enomoto

Principal Deputy Administrator

Substance Abuse and Mental Health Services Administration

U.S. Department of Health and Human Services

Good morning Chairman Johnson, Ranking Member Carper, and distinguished members of the Committee. My name is Kana Enomoto, and I am the Principal Deputy Administrator of the Substance Abuse and Mental Health Services Administration (SAMHSA), an agency of the Department of Health and Human Services (HHS). I am pleased to be here, along with my colleagues from the Office of National Drug Control Policy (ONDCP), to discuss the importance of preventing substance misuse and ensuring appropriate treatment and recovery support services for individuals with substance use disorders in America.

The problems of prescription misuse, illicit drug use, and substance use disorders are complex and require epidemiological surveillance, prevention, interventions, policy changes and further research. No organization or agency can address these problems alone; a coordinated response is required. The Federal Government, medical and other health partners, public health officials, state governments, and community organizations all are needed to implement educational outreach and intervention strategies targeted to a range of discrete audiences, including physicians, pharmacists, patients, educators, parents, students, adults at high risk, older adults, and many others.

#### **SAMHSA**

SAMHSA's mission is to reduce the impact of substance misuse and mental illness on America's communities. SAMHSA was established in 1992 and directed by the Congress to target substance use prevention and treatment and mental health services to people most in need of them and to enhance the delivery of behavioral health services to all. Substance misuse, substance use disorders, poor emotional health, and mental illnesses take a toll on individuals, families, and communities. These conditions cost lives and productivity, and strain families and resources in the same way as untreated physical illnesses, yet the majority of those who need treatment do not receive it. SAMHSA strives to close this gap by raising awareness that:

- · Behavioral health is essential to health;
- · Prevention works;
- · Treatment is effective; and
- People recover.

SAMHSA is working with its partners across the Administration to implement the *National Drug Control Strategy*. SAMHSA is participating in various cross-departmental and intra-departmental workgroups to ensure coordination of policy and programs.

SAMHSA also works across HHS through the Behavioral Health Coordinating Council. As a result, SAMHSA has partnerships with the Centers for Disease Control and Prevention (CDC), the Food and Drug Administration (FDA), the National Institutes of Health (NIH), the Centers for Medicare & Medicaid Services (CMS), the Office of the National Coordinator for Health Information Technology (ONC), the Office of the Assistant Secretary for Health (OASH), the Office of the Surgeon General (SG), and the Office of the Assistant Secretary for Planning and Evaluation (ASPE) working to prevent substance misuse and treat substance use disorders.

As you may know, in October, the Surgeon General announced that he would be developing a

report on substance use, addiction and health. SAMHSA is providing technical assistance with the development of this report and we look forward to its release.

#### SAMHSA's Role in the National Drug Control Strategy (Strategy)

In fiscal year (FY) 2017, a total of \$31.1 billion, an increase of more than \$500 million over FY 2016 enacted, was requested by the President to support National Drug Control Strategy (Strategy) efforts to reduce drug use. The Administration's 21st century approach to drug policy works to reduce illicit drug use and its consequences in the United States. This evidence-based plan balances public health and public safety efforts to prevent, treat and provide recovery from the disease of addiction. In FY 2017, for the first time, the Administration proposes more funding for demand reduction than supply reduction. SAMHSA plays a key role in the prevention and treatment aspects of the Strategy, many of which also support HHS Secretary Burwell's initiative to address opioid misuse, abuse, and overdose.

#### SAMHSA's Role in the Secretary's Evidence-Based Opioid Initiative

SAMHSA is a key player in Secretary Burwell's initiative to address opioid misuse, abuse, and overdose. This initiative focuses on three specific areas targeted for their potential to produce the most impact:

- (1) Improving opioid prescribing practices;
- (2) Increasing the use of naloxone; and
- (3) Expanding use of medication-assisted treatment (MAT) and recovery support services for individuals with an opioid use disorder.

According to the 2014 National Survey on Drug Use and Health (NSDUH), which SAMHSA conducts annually, 4.3 million individuals (aged 12 and older) reported non-medical use of prescription pain relievers during the past month and 435,000 reported using heroin. That equals 1.6 percent of the population non-medically using prescription pain relievers and 0.2 percent of the population using heroin. Although reports of heroin use are significantly lower than reported prescription opioid non-medical use, the numbers have been increasing fairly steadily since 2007. In fact, reported heroin use more than doubled in seven years from 161,000 individuals in 2007 to 435,000 in 2014.

Of the 47,055 drug overdose deaths in 2014, heroin was involved in 10,574 drug overdose deaths, while opioid analgesics were involved in 20,808 drug overdose deaths. Among the opioid analgesic category, there were more than 5,544 drug overdose deaths involving synthetic narcotics other than methadone, which includes fentanyl. The number of opioid overdose deaths involving synthetic narcotics more than doubled from two years earlier (2,628 in 2012). <sup>1</sup>

Of the individuals admitted to treatment in 2013, 18.8 percent of admissions were for heroin.

<sup>&</sup>lt;sup>1</sup> Centers for Disease Control and Prevention, National Center for Health Statistics. *Multiple Cause of Death 1999-2014* on CDC WONDER Online Database, released 2015. Data are from the Multiple Cause of Death Files, 1999-2014, as compiled from data provided by the 57 vital statistics jurisdictions through the Vital Statistics Cooperative Program. Accessed at <a href="http://wonder.cdc.gov/mcd-icd10.html">http://wonder.cdc.gov/mcd-icd10.html</a>, December 2015.

Another 9.2 percent of admissions were for other opioids.<sup>2</sup> What these data do not fully reflect is the pain felt at losing a job, a home, or a cherished family member. Opioid and heroin use destabilizes families, disrupts the health care system, and imposes enormous financial and human costs on American society.

#### SAMHSA's Opioid Proposals in the President's FY17 Budget

Addressing the crisis of opioid overdose from prescription pain relievers, heroin, and illicit fentanyl is a major priority for SAMHSA. The President's Budget recognizes the need for immediate action and proposes to address the opioid epidemic with a \$1 billion two-year investment in new mandatory funding. This investment of mandatory funds makes a bold commitment to build the addictions workforce and bolster the continuum of services for prevention, treatment, and recovery.

Of the \$1 billion in new mandatory funding, SAMHSA proposes \$920 million over two years to support cooperative agreements with states to expand access to treatment for opioid use disorders. In each of FYs 2017 and 2018, SAMHSA would provide \$460 million in new mandatory funding toward State Targeted Response Cooperative Agreements for states to help individuals seek and successfully complete treatment and sustain recovery from opioid use disorders. Evidence-based strategies that states might consider include training and certifying opioid use disorder treatment providers and supporting delivery of MAT. Program goals include: reducing the cost of care, expanding access, engaging patients, and addressing the negative attitudes associated with accessing opioid use disorder treatment.

Another component of the Administration's two-year initiative includes \$30 million in new mandatory funding for SAMHSA to implement Cohort Monitoring and Evaluation of MAT, to evaluate the effectiveness of treatment programs employing medication-assisted treatment under real-world conditions. This program will help identify opportunities to improve treatment for patients with opioid use disorders.

In addition to the new mandatory investments, SAMHSA continues and expands existing strategies to address opioid use disorders. SAMHSA is requesting \$50.1 million to double the size of the Medication Assisted Treatment – Prescription Drug and Opioid Addiction (MAT-PDOA) program. The funding will support 23 new MAT-PDOA state grants in providing FDA-approved MAT in conjunction with psychosocial interventions to those living with opioid use disorders.

<sup>&</sup>lt;sup>1</sup> Center for Behavioral Health Statistics and Quality. (2015). Behavioral health trends in the United States: Results from the 2014 National Survey on Drug Use and Health (HHS Publication No. SMA 15-4927, NSDUH Series H-50). Retrieved from <a href="http://www.samhsa.gov/data/">http://www.samhsa.gov/data/</a>

<sup>&</sup>lt;sup>2</sup> Center for Behavioral Health Statistics and Quality. (2015). Behavioral health trends in the United States: Results from the 2014 National Survey on Drug Use and Health (HHS Publication No. SMA 15-4927, NSDUH Series H-50). Retrieved from http://www.samhsa.gov/data/

To help further expand access to treatment, SAMHSA's Budget Request includes a \$10 million pilot project, the Buprenorphine-Prescribing Authority Demonstration, aimed at increasing the types of practitioners able to prescribe buprenorphine, a medication for opioid use disorder treatment, where allowed by state law. This demonstration will test the safety and effectiveness of allowing prescribing buprenorphine by non-physician advance practice providers.

In conjunction with these treatment efforts, SAMHSA is also proposing continued investments to prevent the misuse and overdose deaths related to prescription drugs, heroin, and fentanyl. The FY 2017 Budget maintains investments in the Prevention of Prescription Drug and Opioid Overdose Related Deaths program at \$12 million. This program focuses on overdose death prevention strategies such as naloxone distribution and education of first responders on its use along with other prevention strategies. Additionally, SAMHSA requests continued support (\$10 million) of the Strategic Prevention Framework-Rx program which enables states to enhance, implement, and evaluate strategies to prevent prescription drug misuse. These continued and expanded efforts build upon SAMHSA's numerous activities geared toward preventing prescription drug and opioid misuse and treating opioid use disorders, including: courses for healthcare professionals on prescribing opioids for pain, prescription drug monitoring program interoperability enhancement, development and implementation of the Opioid Overdose Prevention Toolkit, and clarification on the allowable use of SABG funds to support equipping first responders with naloxone.

#### SAMHSA's Ongoing Work to Address the Opioids Epidemic

Improving Prescriber Practices

SAMHSA understands the importance of modifying prescribing behavior and providing prescribers with the information and the tools that are needed to appropriately treat patients with chronic pain.

Since 2007, over 72,000 prescribing primary care physicians and other healthcare professionals have received continuing education credits from SAMHSA's courses on prescribing opioids for chronic pain. This technical assistance is provided through SAMHSA's Providers' Clinical Support System for Opioid Therapies, a free national training and mentoring network that provides clinical support to physicians, dentists, and other medical professionals in the appropriate use of opioids for the treatment of chronic pain and screening and treating opioid use disorder.

SAMHSA has also addressed the issue of prescribing practices through various efforts related to increasing Prescription Drug Monitoring Program (PDMP) interoperability among states and intra-operability among the PDMP, electronic health records (EHR), health information exchanges and pharmacies. The Enhancing Access to PMDPs Project was funded by SAMHSA and managed by ONC in collaboration with SAMHSA, CDC, and ONDCP. SAMHSA also funded the PDMP EHR Integration and Interoperability Cooperative Agreement program in Fiscal Year (FY) 2012 and the Electronic Health Record and PDMP Data Integration Cooperative Agreement in FY 2013. These programs bring funding directly to states to complete integration projects.

Congress recently provided the additional funding SAMHSA requested for opioid misuse prevention that will allow PDMPs to be utilized to target localities where states should focus their prevention efforts. In FY 2016, the Congress appropriated \$10 million for a new initiative, the "Strategic Prevention Framework Rx" (SPF Rx), which will allow states to enhance the use of data from PDMPs by identifying communities by geography and high-risk populations (e.g., age group), including those in need of prevention programs, connect patients to treatment resources, and complement CDC's Prescription Drug Overdose: Prevention for States program, which includes a component focused on enhancing prescription drug monitoring programs and leveraging them as public health tools.

SAMHSA expects grantees to continue to use the Strategic Prevention Framework (SPF) process at both the State/tribal and community levels to meet the goals of the SPF Partnerships for Success (PFS) Program. There are five steps in this process: (1) assess needs; (2) build capacity; (3) plan; (4) implement; and (5) evaluate. Using the SPF process is critical to ensuring that states/tribes and their communities work together to use data driven decision making processes to develop effective prevention strategies and sustainable prevention infrastructures. The SPF PFS grantees are using these funds to target two priorities: (1) underage drinking among persons aged 12-20; and (2) prescription drug misuse among persons aged 12-25. At their discretion, states/tribes may also use their SPF PFS funds to target an additional data driven priority (e.g., heroin, marijuana use). States and tribes developed an approach to funding communities of high need that ensures all funded communities will receive ongoing guidance and support from the state/tribe, including technical assistance and training for the duration of the SPF PFS project.

Another core aspect of the Secretary's initiative is to provide guidance on opioid prescribing practices focusing on inappropriate or excessive prescribing. Recently, CDC released the *Guideline for Prescribing Opioids for Chronic Pain*, to guide primary care providers in appropriate prescribing of opioids to improve pain management and patient safety. SAMHSA supports CDC in this effort and will help disseminate and encourage uptake of the new guideline.

Opioid Overdose Prevention - Expanding the Use of Naloxone

SAMHSA is also working to carry out a significant portion of the Opioid Initiative's second priority area – preventing opioid overdoses by expanding the use and distribution of naloxone. When administered in a timely manner, naloxone rapidly restores breathing to a victim in the throes of an opioid overdose. Because police are often the first on the scene of an overdose, local law enforcement agencies can train their personnel on overdose prevention and equip them with naloxone as a means of improving response.

In 2014, SAMHSA clarified that at the state's discretion its Substance Abuse Prevention and Treatment Block Grant (SABG) funds may be used to support first-responder naloxone initiatives. For example, SABG primary prevention set-aside funds may be utilized to support overdose prevention education and training. Additionally, SABG funds other than primary prevention set-aside funds may be used to purchase naloxone and materials to assemble overdose kits as well as to cover the dissemination of such kits. However, SAMHSA encourages public and private insurers to pay for this medication for those at risk or for those living with people at risk

SAMHSA also published an Opioid Overdose Prevention Toolkit to educate individuals, families, first responders, prescribing providers, persons in recovery from substance use disorders (SUD), and community members about steps to take to prevent opioid overdose and respond to overdoses (including the use of naloxone). The toolkit is the most downloaded document on the SAMHSA website, and SAMHSA continues to promote its availability through various social media outlets to reach a wide range of populations. SAMHSA also offers a naloxone and overdose prevention course for prescribers and pharmacists.

The Congress provided SAMHSA an additional \$12 million in FY 2016 to initiate a Prevention of Prescription Drug/Opioid Overdose-Related Deaths grant program, which will provide funds to states for the purchase of naloxone and for training first responders in communities of high need.

#### Expanding MAT and Recovery Services

MAT is an evidence-based approach which combines behavioral therapy with medications to treat SUDs, including opioid use disorders. Research shows that medications are effective for decreasing opioid craving and withdrawal symptoms, blocking euphoria if relapse occurs, and augmenting the effect of counseling.<sup>3</sup>

SAMHSA has a key role in ensuring access to MAT for opioid use. In FY2016, Congress appropriated \$12 million for a new initiative at SAMHSA, the "Grants to Prevent Prescription Drug/Opioid Overdose Related Deaths" (PDO), which allows states to reduce the number of prescription drug/opioid overdose-related deaths and adverse events among individuals 18 years of age and older by training first responders and other key community sectors on the prevention of prescription drug/opioid overdose-related deaths and implementing secondary prevention strategies, including the purchase and distribution of naloxone to first responders and others in high-need communities.

In FY 2016, Congress appropriated \$25 million for MAT-PDOA, an increase of \$13 million over FY 2015. The FY 2016 funding will increase the number of states receiving funding from 11 to 22, and will serve an additional 24 high-risk communities.

The President's FY 2017 budget requests \$1 billion in mandatory funding over two years to expand access to treatment, and requests more than \$90 million in additional discretionary funds that will support targeted enforcement activities and help the federal government to continue and expand current efforts across the Departments of Justice (DOJ) and HHS to expand state-level prescription drug overdose prevention strategies, increase the availability of medication-assisted treatment programs, improve access to the overdose-reversal drug naloxone, and support targeted enforcement activities. As stated above, this epidemic requires a comprehensive approach, which includes funding to expand access to treatment and help individuals who seek treatment to successfully complete it and sustain recovery. We look forward to working with Congress to make the much needed investments to tackle this crisis.

A number of other SAMHSA programs enhance access to opioid use disorder treatment, including MAT. Through the Pregnant and Postpartum Women's (PPW) initiative, SAMHSA encourages grantees to accept pregnant women with opioid use disorders into residential treatment settings, and in recent years many of the PPW treatment providers have begun administering MAT onsite

to the women admitted to their programs due to an opioid use disorder. As a result, pregnant women recovering from opioid use disorders are remaining in treatment longer, resulting in healthier births.<sup>4</sup>

SAMHSA's budget request for FY 2017 includes innovation grants through the PPW program, which will test different models for family-centered treatment programs, including outpatient treatment programs. Outpatient services are not currently an allowable use of funds, and would offer substance use disorder treatment for pregnant and postpartum women, without separating them from their minor children and other family members in the home.

SAMHSA has also worked with ONDCP and DOJ to expand access to MAT for justice-involved individuals with opioid use disorders by adding language to our drug court grant applications ensuring clinically beneficial MAT with FDA-approved medications is not denied or restricted. However, a judge retains judicial discretion to mitigate/reduce the risk of misuse or diversion of these medications. These Drug Court program grantees are encouraged to use up to 20 percent of their grant awards for MAT.

SAMHSA also funds the Providers' Clinical Support System for Medication Assisted Treatment which provides technical assistance on proper dispensing and prescribing of FDA-approved medications for opioid use disorders. Recognizing that there is a need to further educate providers regarding the use of injectable extended-release naltrexone in addition to the more heavily regulated opioid agonist therapies, methadone and buprenorphine, SAMHSA has developed a wide variety of guidelines. These include "Clinical Use of Extended-Release Injectable Naltrexone in the Treatment of Opioid Use Disorders: A Brief Guide" released in January 2015. SAMHSA also plans to convene a meeting on the use of opioid antagonist therapies, like naltrexone, in May to bring together researchers, clinicians, and others specifically to review the literature and clinical experiences with naltrexone.

SAMHSA also has primary responsibility for regulating Opioid Treatment Programs (OTPs). OTPs provide all three FDA-approved opioid use disorder medications (methadone, buprenorphine and naltrexone) and counseling services for opioid use disorders directly to their respective patients. OTPs must maintain certification with SAMHSA in order to operate. SAMHSA cooperates with state agencies, the Drug Enforcement Administration (DEA) and approved accrediting organizations to accomplish this. Currently there are 1,402 OTPs in operation, with an additional 51 pending SAMHSA certification.

<sup>&</sup>lt;sup>3</sup> Catherine Anne Fullerton, M.D., M.P.H.; Meelee Kim, M.A.; Cindy Parks Thomas, Ph.D.; D. Russell Lyman, Ph.D.; Leslie B. Montejano, M.A., C.C.R.P.; Richard H. Dougherty, Ph.D.; Allen S. Daniels, Ed.D.; Sushmita Shoma Ghose, Ph.D.; Miriam E. Delphin-Rittmon, Ph.D. (2/1/2014), Medication-Assisted Treatment With Methadone: Assessing the Evidence, Psychiatric Services 2014 Vol 65, No. 2; and Catherine Anne Fullerton, M.D., M.P.H.; Meelee Kim, M.A.; Cindy Parks Thomas, Ph.D.; D. Russell Lyman, Ph.D.; Leslie B. Montejano, M.A., C.C.R.P.; Richard H. Dougherty, Ph.D. allen S. Daniels, Ed.D.; Sushmita Shoma Ghose, Ph.D.; Miriam E. Delphin-Rittmon, Ph.D. (2/1/2014), Medication-Assisted Treatment With Buprenorphine: Assessing the Evidence, Psychiatric Services 2014 Vol 65, No. 2, & Kraus et al., 2011; NIDA, 2012.

Consistent with the Controlled Substances Act, as amended by the Drug Addiction Treatment Act of 2000 (DATA 2000), physicians wishing to treat opioid use disorders with buprenorphine in a practice setting not subject to OTP regulations, such as a private practice or non-OTP treatment program, must submit a notice of intent to SAMHSA. Initially physicians in these settings are restricted to treating a maximum of 30 patients at a time. After one year of experience, physicians desiring to increase their patient limit to 100 may submit a second notification to SAMHSA of the need and intent to treat up to 100 patients. SAMHSA coordinates processing of these notifications with DEA. Of the approximately 1,189,000 physicians registered with DEA to prescribe controlled substances, there are currently 32,243 physicians with a waiver to prescribe buprenorphine for opioid dependence. Of these, 10,473 are authorized to treat up to 100 patients.

SAMHSA is working to find other ways to expand access to MAT. On March 30, 2016, we released a Notice of Proposed Rulemaking (NPRM) that would increase the patient limit for certain qualified physicians that have a waiver to prescribe buprenorphine. The NPRM would allow a waivered practitioner to increase their patient base from 100 to 200 if they request approval for the higher patient limit and fulfill several additional requirements. We believe the NPRM will achieve the goals of expanding access to buprenorphine, increasing the quality of treatment for opioid use disorders, and limiting the diversion of buprenorphine. In addition, to ascertain if allowing additional categories of prescribers to obtain DATA 2000 waivers would help address provider shortage while maintaining safety and quality of care, the President's FY 2017 Budget is proposing a pilot study in states where practice laws already provide advanced practice registered nurses and physician's assistants the necessary practice scope and prescribing authority to provide office-based opioid treatment.

Finally, SAMHSA has done significant work to ensure that behavioral health treatment is appropriately financed and implemented to support integrated care across an array of health systems and programs. SAMHSA's report, "Medicaid Coverage and Financing of Medications to Treat Alcohol and Opioid Use Disorders," provides clinicians and policy makers a resource guide for developing beneficial medication coverage and financing policies. The report presents innovative coverage and financing approaches that are being used to ensure cost-effective and treatment-effective outcomes. To complement this effort, SAMHSA engaged with its Federal partners (CMS, CDC, NIDA, and the National Institute on Alcohol Abuse and Alcoholism) to issue a CMS Informational Bulletin on MAT to inform states and other stakeholders about effective practices for identifying and treating mental and substance use disorders covered under Medicaid. Additionally, CMS and SAMHSA jointly issued an Informational Bulletin on coverage of behavioral health services for youth with substance use disorders to assist states in designing a benefit that meets the needs of youth with substance use disorders and their families and to help states comply with their obligations under Medieaid's Early and Periodic Screening, Diagnostic, and Treatment requirements. The services described were designed to enable youth to address their substance use disorders, to receive treatment and continuing care, and participate in recovery services and supports.

SAMHSA, Retrieved March 21, 2016, from <a href="http://www.samhsa.gov/programs-campaigns/medication-assisted-treatment/physician-program-data">http://www.samhsa.gov/programs-campaigns/medication-assisted-treatment/physician-program-data</a>

#### **Criminal Justice Activities**

A public health approach to addressing substance use disorders is vital. At the same time, public health agencies and organizations understand the importance of working with our public safety colleagues in the criminal justice field. SAMHSA's criminal justice portfolio includes several grant programs that focus on diversion, alternatives to incarceration, drug courts, and re-entry from incarceration for adolescents and adults with substance use disorders, and/or co-occurring substance use and mental disorders.

#### Drug Courts

SAMHSA's adult drug court programs support a variety of services, including treatment for diverse populations at risk; wraparound/recovery support services designed to improve access and retention; drug testing for illicit substances required for supervision, treatment adherence, and therapeutic intervention; education support; relapse prevention and long-term management; MAT; and HIV testing conducted in accordance with state and local requirements.

SAMHSA's treatment drug court grant programs focus on Tribal Healing to Wellness Courts, Juvenile Treatment Drug Courts, and SAMHSA's collaboration with DOJ's Bureau of Justice Assistance. In FY 2015, SAMHSA supported the continuation of 103 drug court grants, and provided funding to 35 new adult and family drug court grants and 10 new BJA jointly funded drug court grants. Congress expanded this provision – new in FY 2015 – from \$50 million for Drug Courts to a new total of \$60 million in FY 2016.

#### Offender Reentry Program

In addition to SAMHSA's drug court portfolio, criminal justice funds also support Offender Reentry Program (ORP) grants, which provide screening, assessment, comprehensive treatment, and recovery support services to offenders reentering the community, as well as offenders who are currently on or being released from probation or parole. Funding for ORP may be used for a variety of services, including but not limited to screening, comprehensive individual assessment for substance use and/or co-occurring mental disorders, case management, referrals related to substance abuse treatment for clients, alcohol and drug treatment, wrap-around services, drug testing, and relapse prevention and long-term management support.

In FY 2015, SAMHSA supported 30 three-year ORP grant continuations, and up to 18 new ORP grants, which will have a particular emphasis on opioid overdose prevention.

#### Conclusion

On behalf of SAMHSA, I appreciate the opportunity to testify today and share with you our prevention, treatment and recovery support strategies. We look forward to partnering with you as well and thank you for your leadership on this issue.

I welcome any questions that you may have.



United States Government Accountability Office
Testimony
Before the Committee on Homeland
Security and Governmental Affairs,
U. S. Senate

For Release on Delivery 2:30 p.m ET Tuesday, May 17, 2016

# OFFICE OF NATIONAL DRUG CONTROL POLICY

Progress toward Some National Drug Control Strategy Goals, but None Have Been Fully Achieved

Statement of Diana C. Maurer, Director, Homeland Security and Justice

## GAO Highlights

engrages of CEST, of REST, of enclosing but as the Carmittee as triumbed ! Becarby and three on enal ! Book 1) to the en

#### Why GAD Old This Study

Purk-yenakara, handir cara providens and the public are mannered about the redictic operate thus employed earlier described as the offects as the public operation of public surpassed ruth incidents as the leading outles of death or ripay in mount years. To implications noticeasly drug downs youtless of facts for ripay in mount years. To implications on place and the possibility of the public of the public

progress has been reade toward addresses has been produced addresses the produced addresses to the produced addresses and the produced addresses to the produced addresses to the produced addresses and the produ

This obtainment is bessel upon findings CAO appealed in Nurth 2013 and December 2015, stopping of CAECUP's Budget and Parthermentor Sturments and December 2015, notification of CAECUP's Budget and December 1998 to 2016. For the upone is 1999 to 1

#### Wish EQUIROS mesquis

GAO made a pilo recommendation to CACCP to assess exertise in this private for each treatment programs. CACCP consistent and test implemental 2. GAO to not making new recommendations in the POSTACE.

other Total STATE SET For each processors, contact Comments were \$1222 STE-9777 or other settings.

#### May 17, 2016

# OFFICE OF NATIONAL DRUG CONTROL POLICY

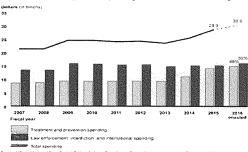
#### Progress toward Some National Drug Control Strategy Goals, but None Have Been Fully Achieved

#### What GAO Found

The Office of National Drug Control Policy (ONDCP) and federal agencies have made mixed progress toward achieving the goals articulated in the 2010 National Drug Control Strategy (Strategy) and ONDCP has established a mechanism to monitor and assess progress. In the Strategy, ONDCP established seven goals related to reducing illicit drug use and its consequences by 2015. As of May 2016, our analysis indicates that ONDCP and federal agencies have made moderate progress toward achieving one goal, limited progress on three goals, and no progress on the three other three goals. Overall, none of the goals in the Strategy have been fully achieved. In March 2013, GAO reported that ONDCP established the Performance Reporting System to monitor and assess progress toward meeting Strategy goals and objectives. GAO reported that the system's 26 new performance measures were generally consistent with attributes of effective performance management. A 2015 ONDCP report on progress towards these measures similarly identified some progress towards overall achievements—some of the measures had met or exceeded targets, some had significant progress underway, and some had limited or no progress.

Federal drug control spending increased from \$21.7 billion in fiscal year (FY) 2007 to approximately \$30.8 billion in allocated funding in FY 2016 as shown in figure 1. Although total federal drug control spending increased from FY 2007 through FY 2016, spending on supply reduction programs, such as domestic law enforcement, interdiction, and international programs remained relatively constant at \$13.3 billion in FY 2007 and \$15.8 billion allocated in FY 2016. However, federal spending for—treatment and prevention has steadily increased from FY 2007 through FY 2016 and spending in these two programs went from \$8.4 billion in FY 2007 to \$14.7 billion allocated in FY 2016.

Figure 1: Federal Drug Control Spending for Fiscal Years 2007 through 2016



Stance: Office of National Brog Control Policy's National Drug Control Budges Funding Reprogres for Plater Years 2016 and 2017; CACL to Figur.

.... United States Government Accountability Office

Chairman Johnson, Ranking Member Carper, and Members of the Committee:

I am pleased to be here today to discuss the Office of National Drug Control Policy's (ONDCP) efforts to implement the National Drug Control Strategy. In recent years, policy makers, health care providers, and the public at large are turning their attention to the current drug epidemic and its impact on our nation. Deaths from drug overdose rose steadily over the past two decades to become the leading cause of injury or death in the United States, surpassing the annual number of traffic crash fatalities in recent years. In 2013, approximately 120 people died every day from drug overdoses. ONDCP is responsible for, among other things, overseeing and coordinating the implementation of national drug control policy across the federal government to address illicit drug use. In this role, the Director of ONDCP is required annually to develop a National Drug Control Strategy (the Strategy), which is to set forth a comprehensive plan to reduce illicit drug use through programs intended to prevent or treat drug use or reduce the availability of illegal drugs. ONDCP is also responsible for developing a National Drug Control Program Budget proposal for implementing the Strategy. In fiscal year 2017, a total of \$31.1 billion was requested to support the Strategy. This represents an increase of more than \$500 million over the enacted fiscal year 2016 level of \$30.6 billion.

Today, I will discuss (1) what progress has been made toward achieving National Drug Control Strategy goals and how ONDCP monitors progress and (2) trends in federal drug control spending. My remarks today are based on findings from our March 2013 report on progress toward Strategy goals and ONDCP mechanisms to monitor progress, our December 2015 testimony statement on these areas, updates to our analysis and findings in the report and testimony statement, and our analysis of ONDCP's Budget and Performance summaries.<sup>4</sup>

<sup>&</sup>lt;sup>1</sup>Illicit drug use includes the use of marijuana (including hashish), cocaine (including crack), heroin, hallucinogens, and inhalants, as well as the nonmedical use of prescription drugs, such as pain relievers and sedatives.

<sup>&</sup>lt;sup>2</sup>For the purposes of this statement we refer to the National Drug Control Strategy as 'the Strategy' mirroring the reference commonly used by ONDCP.

<sup>&</sup>lt;sup>3</sup>21 U.S.C. §§ 1703(b)-(c), 1705(a). Under 21 U.S.C. § 1701(7), the term "National Drug Control Program agency" means any agency that is responsible for implementing any aspect of the National Drug Control Strategy, including any agency that receives federal funds to implement any aspect of the National Drug Control Strategy, subject to certain exceptions regarding intelligence agencies.

<sup>&</sup>lt;sup>4</sup>See GAO, Office of National Drug Control Policy: Office Could Better Identify Opportunities to Increase Program Coordination, GAO-13-333 (Washington, D.C.: Mar. 26, 2013) and Office of National Drug Control Policy: Lack of Progress on Achieving National Strategy Goals, GAO-16-257T (Washington, D.C.: Dec. 2, 2015).

In performing the work for our March 2013 report, we analyzed the 2010 National Drug Control Strategy; available data on progress toward achieving Strategy goals, and documents about ONDCP's monitoring mechanisms. In March 2013 we made a recommendation to ONDCP to assess overlap in drug prevention and treatment programs. ONDCP concurred and has implemented it. For our December 2015 testimony statement, we analyzed ONDCP's reported progress on Strategy goals in its 2015 Strategy and performance report. More detail on our scope and methodologies can be found in our March 2013 report and December 2015 statement. For updates to these reports, we analyzed publically available data sources, ONDCP reports on progress toward the Strategy's goals and objectives, and reviewed ONDCP's Fiscal Year 2015 and Fiscal Year 2016 Budget and Performance reports, and interviewed ONDCP officials.<sup>5</sup> We previously reported on progress toward meeting Strategy goals in our December 2015 testimony based on results provided in ONDCP's 2015 Strategy and performance report, which were issued in November 2015. To assess progress on Strategy goals, we updated results for the goals using publically available data sources as of May 2016. The data sources for the goals were determined by ONDCP when developing the 2010 Strategy, based on their availability and quality. We used the same data sources that ONDCP uses to assess progress on Strategy goals to update results and did not independently assess the reliability of these data.

This statement is based on our prior work issued from July 2012 through December 2015, with select updates as of May 2016. The work upon which this testimony is based was conducted in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

<sup>&</sup>lt;sup>5</sup>Office of National Drug Control Policy FY 2015 and FY 2016 Budget and Performance Summaries Companion to the National Drug Control Strategy, July 2014 and November 2015; and National Drug Control Budget FY 2017 Funding Highlights, February 2016.

#### **Background**

ONDCP was established by the Anti-Drug Abuse Act of 1988 to, among other things, enhance national drug control planning and coordination and represent the drug policies of the executive branch before Congress. In this role, the office is responsible for (1) developing a national drug control policy, (2) developing and applying specific goals and performance measurements to evaluate the effectiveness of national drug control policy and National Drug Control Program agencies' programs, (3) overseeing and coordinating the implementation of the national drug control policy, and (4) assessing and certifying the adequacy of the budget for National Drug Control Programs.

The 2010 National Drug Control Strategy is the inaugural strategy guiding drug policy under President Obama's administration. According to ONDCP officials, it sought a comprehensive approach to drug policy, including an emphasis on drug abuse prevention and treatment efforts and the use of evidence-based practices—approaches to prevention or treatments that are based in theory and have undergone scientific evaluation. Drug abuse prevention includes activities focused on discouraging the first-time use of controlled substances and efforts to encourage those who have begun to use illicit drugs to cease their use. Treatment includes activities focused on assisting regular users of controlled substances to become drug free through such means as counseling services, inpatient and outpatient care, and the demonstration and provision of effective treatment methods.

ONDCP established two overarching policy goals in the 2010 Strategy for (1) curtailing illicit drug consumption and (2) improving public health by reducing the consequences of drug abuse, and seven subgoals under them that delineate specific quantitative outcomes to be achieved by 2015, such as reducing drug-induced deaths by 15 percent. To support the achievement of these two policy goals and seven subgoals (collectively referred to as goals), the Strategy

<sup>&</sup>lt;sup>6</sup>See 21 U.S.C. § 1702. ONDCP was created and authorized through January 21, 1994, by the National Narcotics Leadership Act of 1988, which was enacted as title 1 of the Anti-Drug Abuse Act of 1988. Pub. L. No. 100-690, 102 Stat. 4181 (1988). ONDCP has continued to operate since the conclusion of its first authorization through multiple reauthorizations or as a result of legislation providing continued funding.

<sup>&</sup>lt;sup>7</sup>Department of Agriculture; Court Services and Offender Supervision Agency for the District of Columbia; Department of Defense; Department of Education; Federal Judiciary; Department of Health and Human Services; Department of Homeland Security; Department of Housing and Urban Development; Department of the Interior; Department of Justice; Department of Labor; Office of National Drug Control Policy; Department of State; Department of Transportation; Department of the Treasury; and Department of Veterans Affairs.

included seven strategic objectives and multiple action items under each objective, with lead and participating agencies designated for each action item. Strategy objectives include, for example, Strengthen Efforts to Prevent Drug Use in Communities and Disrupt Domestic Drug Trafficking and Production. Subsequent annual Strategies provided updates on the implementation of action items, included new action items intended to help address emerging drug-related problems, and highlighted initiatives and efforts that support the Strategy's objectives.

ONDCP is required annually to develop the National Drug Control Strategy, which sets forth a plan to reduce illicit drug use through prevention, treatment, and law enforcement programs, and to develop a Drug Control Budget for implementing the strategy. 8 National Drug Control Program agencies follow a detailed process in developing their annual budget submissions for inclusion in the Drug Control Budget, which provides information on the funding that the executive branch requested for drug control to implement the strategy. 9 Agencies submit to ONDCP the portion of their annual budget requests dedicated to drug control, which they prepare as part of their overall budget submission to the Office of Management and Budget for inclusion in the President's annual budget request. ONDCP reviews the budget requests of the drug control agencies to determine if the agencies have acceptable methodologies for estimating their drug control budgets, and includes those that do in the Drug Control Budget. 10 In FY 2016, the budget contains 38 federal agencies or programs.

There are five priorities for which resources are requested across agencies: substance abuse prevention and substance abuse treatment (both of which are considered demand-reduction areas), and drug interdiction, domestic law enforcement, and international partnerships (the

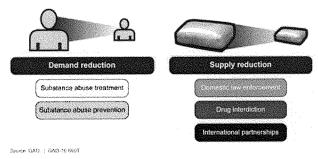
<sup>&</sup>lt;sup>8</sup>In 2008, the National Academy of Public Administration's report entitled *Building the Capacity to Address the Nation's Drug Problem* recommended that ONDCP develop a comprehensive budget to ensure policymakers and the public have a full understanding of the federal drug control expenditures. In response to this recommendation, ONDCP undertook a review of the National Drug Control Budget to determine which agencies and programs should constitute the National Drug Control Budget. As a result, it decided to restructure the budget.

<sup>&</sup>lt;sup>9</sup>See 21 U.S.C. § 1703(c).

<sup>&</sup>lt;sup>10</sup>An acceptable methodology relies on availability of empirical data at the agencies for estimating their drug control budgets. These data include determining which portion of an agency's funding is for drug control programs or activities versus non-drug control programs. See GAO, Office of National Drug Control Policy: Agencies View the Budget Process as Useful for Identifying Priorities, but Challenges Exist, GAO-11-261R (Washington, D.C.: May 2, 2011). Agencies may administer programs that include drug abuse prevention and treatment activities but do not meet ONDCP's standards for having an acceptable budget estimation methodology. Such programs are not represented in the Drug Control Budget.

three of which are considered supply-reduction areas) as shown in figure 1. ONDCP manages and oversees two primary program accounts: the High Intensity Drug Trafficking Areas (HIDTA) Program and the Other Federal Drug Control Programs. ONDCP previously managed the National Youth Anti-Drug Media Campaign which last received appropriations in fiscal year 2011.

Figure 1: Federal Drug Control Program Priority Areas



ONDCP and Other Federal Agencies Have Not Fully Achieved 2010 Strategy Goals; ONDCP Has Established a Mechanism to Monitor Progress

Although Limited Progress Has Been Made for Some Goals, None of the National Drug Control Strategy Goals Have Been Fully Achieved

In the 2010 National Drug Control Strategy, ONDCP established seven goals related to reducing illicit drug use and its consequences to be achieved by 2015. As of May 2016, our analysis indicates that ONDCP and federal agencies have made moderate progress toward achieving one goal, limited progress on three goals, and no demonstrated progress on the remaining three goals. <sup>11</sup> ONDCP officials stated that they intend to report on updated progress

<sup>11</sup> Three of the Strategy's goals have multiple sub-measures. Limited progress indicates that progress has been made toward goals on at least one of these measures but not all. We previously reported on progress toward meeting Strategy goals in our December 2016 testimony based on results provided in ONDCP's 2015 Strategy and performance system report, which were issued in November 2015. See GAO-16-257T. We updated results for five of the seven goals based on available data sources as of May 2016.

toward meeting the strategic goals in summer 2016. As of May 2016, overall, none of the goals in the Strategy have been fully achieved. Table 1 shows the 2010 Strategy goals and progress toward meeting them.

2010 Strategy goals	2009 (baseline)	Progress to date	2015 (goal)
Curtail illicit drug consumption in America			
1. Decrease the 30-day prevalence of drug use among 12- to 17-year-olds by 15 percent <sup>b</sup>	10.1 percent	9.4 percent (2014)	8.6 percent
2. Decrease the lifetime prevalence of eighth graders who have used drugs, alcohol, or tobacco by 15 percent			
Illicit drugs <sup>c</sup>	19.9 percent	20.5 percent(2015)	16.9 percent
Alcohol	36.6 percent	26.1 percent (2015)	31.1 percent
Tobacco	20.1 percent	13.3 percent (2015)	17.1 percent
Decrease the 30-day prevalence of drug use among young adults aged 18-25 by 10 percent <sup>d</sup>	21.4 percent	22.0 percent (2014)	19.3 percent
Reduce the number of chronic drug users by 15 percent <sup>e</sup>			
Cocaine	2.7 million	2.5 million (2010)	2.3 million
Heroin	1.5 million	1.5 million (2010)	1.3 million
Marijuana	16.2 million	17.6 million (2010)	. 13.8 million
Methamphetamine	1.8 million	1.6 million (2010)	1.5 million
Improve the public health and public safety of the Am of drug abuse	erican people	by reducing the con	sequences
5. Reduce drug-induced deaths by 15 percent	39,147	49,714 (2014)	33,275
6. Reduce drug-related morbidity by 15 percent			
Emergency room visits for drug misuse and abuse	2,070,452	2,462,948 (2011)	1,759,884
HIV infections attributable to drug use	5,799	3,852 (2014)	4,929
7. Reduce the prevalence of drugged driving by 10 percent <sup>9</sup>	16.3 percent (2007)	20.0 percent (2013)	14.7 percent

Source: GAO analysis of ONDCP's 2015 Performance Reporting System report and data from (1) Substance Abuse and Mental Health Services Administration's (SAMHSA) National Survey on Drug Use and Health (NSDUH); (2) National Institute on Drug Abuse's Monitoring the Future; (3) What America's Users Spend on lilegal Drugs. (4) Centers for Disease Control and Prevention's (CDC) National Vital Statistics System; (5) SAMHSA's Drug Abuse Warning Network drug-related emergency room visits; (6) CDC's HIV Surveillance Report-Diagnoses of HIV Infection in the United States; and (7) National Highway Traffic Safety Administration's National Roadside Survey. | GAO-16-660T

Page 6

Year for which the most recent data were available is in parenthesis.

bAccording to the 2014 NSDUH, 7.4 percent of 12- to 17-year-olds reporting having used marijuana in the past month and 3.6 percent reported having used Illicit drugs other than marijuana.

<sup>\*</sup>According to the 2015 Monitoring the Future survey, 15.5 percent of eighth graders reported having used marijuana in their lifetimes and 10.3 percent reported having used any illicit drug other than marijuana.

<sup>&</sup>lt;sup>9</sup>According to the 2014 NSDUH, 19.6 percent of 18- to 25-year-olds reported having used marijuana in the past month and 6.4 percent reported having used illicit drugs other than marijuana.

<sup>&</sup>lt;sup>1</sup>The data source for this measure is a report entitled What America's Users Spend on Illegal Drugs, which is sponsored by ONDCP and prepared by RAND Corporation. As of May 2016, the most recent report had been released in February 2014 and provided data from 2000 through 2010.

According to ONDCP's 2015 Performance Reporting System report, the data source for this measure—the Drug Abuse Warning System—was discontinued by SAMHSA in 2011, and SAMHSA and CDC are currently working to implement a replacement system to provide data on drug-related emergency department visits.

<sup>&</sup>lt;sup>a</sup>The primary data source for this measure is the National Roadside Survey conducted by the National Highway Traffic Safety Administration. The baseline survey was conducted in 2007. The NSDUH, which also measures the prevalence of drugged driving, serves as a secondary data source to the National Roadside Survey. ONDCP reported that the drugged driving goal was met when 2013 data from the NSDUH source is used.

ONDCP and federal drug control agencies have made mixed progress but have not fully achieved any of the four Strategy goals associated with curtailing illicit drug consumption. For example, progress has been made on the goal to decrease the 30-day prevalence of drug use among 12- to 17-year-olds by 15 percent. The data source for this measure—SAMHSA's National Survey on Drug Use and Health (NSDUH)—indicates that in 2014, 9.4 percent of 12- to 17-year-olds reported having used illicit drugs in the past month. This represents a 7 percent decrease from the 2009 baseline for this measure. However, progress has not been made on the goal to decrease the 30-day prevalence of drug use among young adults aged 18 to 25 by 10 percent. Specifically, the rate of drug use for young adults increased from 21.4 percent in 2009 to 22 percent in 2014, moving in the opposite direction of the goal. This increase was primarily driven by marijuana use. According to the 2014 NSDUH, 19.6 percent of young adults reported having used marijuana in the past month and 6.4 percent reported having used illicit drugs other than marijuana. The rates of reported marijuana use for this measure increased by 8 percent from 2009 to 2014 while the rates of reported use of illicit drugs other than marijuana decreased by 24 percent.

Progress has also been mixed on the remaining three Strategy goals associated with reducing the consequences of drug use. For example, the goal to reduce drug-related morbidity by 15 percent has two measures, and progress has been made on one but not the other. Specifically, HIV infections attributable to drug use decreased by 34 percent from 2009 to 2014, exceeding the established target. However, the number of emergency room visits for substance use disorders increased by 19 percent from 2009 to 2011. The data source for this measure—SAMHSA's Drug Abuse Warning Network—indicates that pharmaceuticals alone were involved in 34 percent of these visits and illicit drugs alone were involved in 27 percent of them. <sup>13</sup>

According to the 2013 Drug Abuse Warning Network report, the increase in emergency room visits for drug misuse and abuse from 2009 to 2011 was largely driven by a 38 percent increase in visits involving illicit drugs only. In addition, progress has not been made on the goal to reduce drug-induced deaths by 15 percent. According to the CDC's National Vital Statistics System, 49,714 deaths were from drug-induced causes in 2014, an increase of 27 percent

<sup>&</sup>lt;sup>12</sup>Marijuana includes marijuana and hashish. Illicit drugs other than marijuana include cocaine (including crack), heroin, hallucinogens, inhalants, or prescription-type psychotherapeutics used nonmedically.

<sup>&</sup>lt;sup>13</sup>These numbers do not include visits that involved a combination of illicit drugs, pharmaceuticals, and/or alcohol, which accounted for 35 percent of emergency room visits for substance use disorders.

compared to 2009. This represents a significant departure from the 2015 goal. The CDC's January 2016 Morbidity and Mortality Weekly Report stated that 47,055 of these deaths were from drug overdoses, the majority of which (61 percent) involved opioids.

#### ONDCP Established a System to Monitor Progress toward Strategy Goals

In March 2013, we reported that ONDCP established the Performance Reporting System (PRS) to monitor and assess progress toward meeting Strategy goals and objectives and issued a report describing the system with its 2012 Strategy. <sup>14</sup> The PRS includes interagency performance measures and targets under each of the Strategy's seven objectives, which collectively support the overarching goals discussed above. For example, one of the six performance measures under the Strategy's first objective—Strengthen Efforts to Prevent Drug Use in Our Communities—is the average age of initiation for all illicit drug use, which has a 2009 baseline of 17.6 years of age and a 2015 target of 19.5 years of age. These PRS measures were established to help assess progress towards each objective. According to ONDCP, they are a tool to help indicate where the Strategy is on track, and when and where further attention, assessment, evaluation, and problem-solving are needed.

As part of our review for our March 2013 report, we assessed the PRS measures for the Strategy's seven objectives and found them to be generally consistent with attributes of effective performance management identified in our prior work as important for ensuring performance measures demonstrate results and are useful for decision making. <sup>15</sup> For example, we found that the PRS measures for the objectives were clearly stated, with descriptions included in the 2012 PRS report, and all 26 of them had or were to have measurable numerical targets. In addition, the measures were developed with input from stakeholders through an interagency working group process, which included participation by the Departments of Education, Justice, and Health and Human Services, among others. The groups assessed the validity of the measures and evaluated data sources, among other things. At the time of our review, the PRS was in its early stages and ONDCP had not issued its first report on the results of the system's performance measures.

<sup>&</sup>lt;sup>14</sup>See GAO-13-333.

<sup>&</sup>lt;sup>15</sup>See GAO, *Tax Administration: IRS Needs to Further Refine Its Tax Season Performance Measures*, GAO-03-143 (Washington, D.C.: Nov. 22, 2002).

ONDCP released its most recent annual PRS report in November 2015. The 2015 report assesses progress on the Strategy's goals and the 28 performance measures and submeasures related to each of the Strategy's seven objectives, which support the achievement of the goals. <sup>16</sup> For each objective, the report classifies results on performance measures into five categories and identifies areas of progress on and challenges with achieving objectives. <sup>17</sup> For example:

- Objective 1—Strengthen Efforts to Prevent Drug Use in Our Communities. The report
  indicates that sufficient progress has been made on reducing the average age of initiation
  for all illicit drugs to enable meeting the 2015 target. However, it notes that accelerated effort
  is needed to prevent youth marijuana use and counter youth perceptions that marijuana
  (including synthetic marijuana) use is not harmful. The report shows that the percent of
  respondents aged 12 to 17 who perceive a great risk in smoking marijuana once or twice a
  week decreased from 2009 to 2013, moving in the opposite direction of the 2015 target.
- Objective 3—Integrate Treatment for Substance Use Disorders into Health Care and Expand Support for Recovery. The report shows that the percent of treatment facilities offering at least four specified recovery support services, such as child care, employment assistance, and housing assistance, increased from 2008 to 2013 and exceeded the 2015 target. However, the report states that challenges persist in the integration of substance abuse treatment services into mainstream health care. For instance, the percent of the Health Resources and Services Administration's Health Center Program grantees providing substance use counseling and treatment services decreased from 2009 to 2013. According to the report, implementation of the Affordable Care Act presents opportunities to provide greater access to treatment for substance use disorders by, for example, efficiently integrating such treatment into the health care system and providing non-discrimination for coverage for preexisting conditions.
- Objective 5—Disrupt Domestic Drug Trafficking and Production. According to the report, progress is being achieved in domestic law enforcement and efforts to disrupt or dismantle

<sup>&</sup>lt;sup>16</sup>ONDCP included new submeasures for one of the performance measures in the 2015 PRS report, which accounts for the difference in the number of measures between the 2012 and 2015 reports.

<sup>&</sup>lt;sup>17</sup>The categories are (1) target met or exceeded, progress should be maintained through 2015; (2) progress sufficient to enable meeting 2015 target; (3) progressing, accelerated progress required to meet 2015 target; (4) no progress to date, accelerated progress required to meet 2015 target; and (5) significant (or considerable) progress required to meet 2015 target;

domestic drug trafficking organizations. The 2015 targets for both measures related to these efforts have been exceeded. The report also indicates that progress has been made on reducing the number of methamphetamine lab seizure incidents (a proxy for lab activity) from 2009 to 2013 but accelerated progress is needed to meet the 2015 target.

Objective 6—Strengthen International Partnerships and Reduce the Availability of Foreign
Produced Drugs in the United States. According to the report, key source and transit
countries continue to demonstrate increased commitment to reducing drug trafficking and
use through demand and supply reduction efforts. The targets for the two measures related
to such commitments have both been met. However, the report states that accelerated
progress is needed in working with partner countries to reduce the cultivation of drugs and
their production potential in Afghanistan, Burma, Laos, Mexico, and Peru.

See attachment I for performance measures under each Strategy objective, progress toward 2015 targets, and ONDCP's assessment categorizations. ONDCP officials stated that actions taken in response to PRS results include Department of Education grants for school-based prevention activities to help educate students on the risks of using marijuana and increased funding to expand access to treatment to help address the rise in drug-induced deaths from opioid use, as discussed below.

#### Total Federal Spending for Drug Control Programs Has Increased since FY 2007

Federal Drug Control Spending on Treatment and Prevention Increased, While Law Enforcement and Interdiction Spending Remain Relatively Constant

According to ONDCP, federal drug control spending increased from \$21.7 billion in FY 2007 to approximately \$30.6 billion that was allocated for drug control programs in FY 2016 as shown in figure 2.18 Though, total federal drug control spending increased from FY 2007 through FY

<sup>&</sup>lt;sup>18</sup>We reviewed the fiscal year 2017 National Drug Control Budget Funding Highlights that describes fiscal year 2016 allocations. ONDCP refers to these funds as enacted in the National Drug Control Budget, while we use the term allocated funding. All FY 2016 funding is considered allocated funding for purposes of this statement. At the beginning of a fiscal year, agencies may allocate certain amounts from available appropriations for specific programs. However, to the extent that an appropriation has not identified a particular amount for a specific program, an agency may reallocate unobligated funds from that program to another during the course of a fiscal year. To the extent other statutory authority results in making mandatory funding for programs that may include drug abuse prevention and treatment, such as Medicare and Medicaid, we also include these as allocated funds.

2016, spending on supply reduction programs, such as domestic law enforcement, interdiction, and international programs remained relatively constant at \$13.3 billion in FY 2007 and \$15.8 billion in FY 2016.<sup>19</sup> However, federal spending for demand programs—treatment and prevention steadily increased from FY 2007 through FY 2016 and spending in these two programs went from \$8.4 billion in FY 2007 to \$14.7 billion in FY 2016. As a result, the proportion of funds spent on demand programs increased from 39 percent of total spending in FY 2007 to 48 percent in FY 2016.

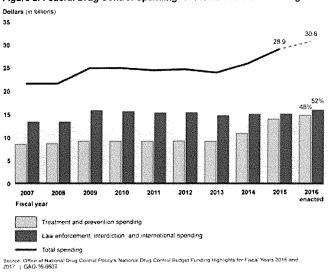


Figure 2: Federal Drug Control Spending for Fiscal Years 2007 through 2016

According to ONDCP's Fiscal Year 2016 Budget and Performance Summary, ONDCP has prioritized treatment and recovery support services stating that they are essential elements of the Strategy's efforts to support long-term recovery among people with substance use

disorders. Allocated funding for treatment increased in FY 2016 to approximately \$13 billion, a 5 percent increase over FY 2015. These funds are used for early intervention programs, treatment programs, and recovery services. For example, according to ONDCP, approximately \$8.8 billion

Page 11

<sup>&</sup>lt;sup>19</sup>All FY 2016 funding is considered allocated funding for purposes of this statement.

was the amount estimated for benefit outlays by the Department of Health and Human Services' (HHS) Centers for Medicare and Medicaid Services for substance use disorder treatment in both inpatient and outpatient settings for FY 2016. ONDCP also stated that preventing drug use before it starts is a fundamental element of the Strategy. Funding for prevention increased in FY 2016 to about \$1.5 billion, a 10 percent increase from FY 2015, as shown in figure 3. Funding for treatment also increased from \$12.5 billion in FY 2015 to \$13.2 billion in FY 2016 in allocated funding. Figure 3 shows the increase in treatment and prevention spending for fiscal years 2007 through 2016.

Dollars (in bit ons)

14

12

10

8

6

14

2

2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 (ehacted)

Fiscal year

Treatment spending

Figure 3: Federal Spending for Drug Treatment and Prevention for Fiscal Years 2007 through 2016

Additionally, in FY 2017, HHS' Substance Abuse and Mental Health Services Administration (SAMHSA) requested \$460 million for a new program (State Targeted Response Cooperative Agreements) to help expand access to treatment for opioid use disorders, as well as \$15 million for evaluating the effectiveness of medication-assisted treatment programs to improve service delivery and decrease the incident of opioid-related overdose and death (Cohort Monitoring and

Source of Nancoal Down Control Print's National Drug Central Budget Forcing Harborits for Fingal Years 2016 and 2017. 4 GAO 16-6601

Evaluation of Medication Assisted Treatment Outcomes).<sup>20</sup> These programs could result in increasing SAMHSA's budget request for treatment programs to approximately \$3 billion in FY 2017 from \$2.5 billion enacted in FY 2016.

Addressing the drug supply is categorized by three main functions, which are Domestic Law Enforcement, Interdiction, and International. For Domestic Law Enforcement, ONDCP noted that federal, state, local, and tribal law enforcement agencies play a key role in the Administration's approach to reduce drug use and its associate consequences. ONDCP also stated that interagency drug task forces, such as the High Intensity Drug Trafficking Areas (HIDTA) program, are critical to leveraging limited resources among agencies. Allocated funding for domestic law enforcement in FY 2016 is approximately \$9.7 billion, a 4 percent increase from FY 2015 funding. Regarding Interdiction, the United States continues to face a serious challenge from the large scale smuggling of drugs from abroad which are distributed to every region in the Nation. These funds support collaborative activities between federal law enforcement agencies, the military, the intelligence community, and international allies to interdict or disrupt shipments of illegal drugs, their precursors, and their illicit proceeds.

Allocated funding in support of Interdiction for FY 2016 is approximately \$4.5 billion, an increase of 12 percent from FY 2015. International functions place focus on collaborative efforts between the U.S. Government and its international partners around the globe. According to ONDCP, illicit drug production and trafficking generate huge profits and are responsible for the establishment of criminal networks that are powerful, corrosive forces that destroy the lives of individuals, tear at the social fabric, and weaken the rule of law in affected countries. In FY 2016, approximately \$1.6 billion was enacted, a 0.4 percent decrease from FY 2015. Figure 4 shows federal drug spending for Domestic Law Enforcement, Interdiction, and International activities.

<sup>&</sup>lt;sup>20</sup>SAMHSA's FY 2017 request proposed a 2-year \$920 million support cooperative agreements with states to expand access to treatment for opioid use disorders. In each of FY 2017 and 2018, SAMHSA would provide \$460 million in new mandatory funding toward State Targeted Response Cooperative Agreements.

Dollars (in billions)

10

9

8

7

6

5

4

3

2

10

2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 (enacted)

Fiscal year

Comestic taw enforcement spending Interdiction spending

Figure 4: Federal Spending for Drug related Domestic Law enforcement, Interdiction, and International Activities for Fiscal Years 2007 through 2016

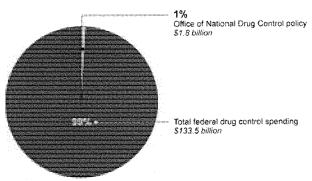
Source: Office of National Drug Control Policy's National Drug Control Budget Funding Highlights for Fiscal Years 2016 and 2017. 🛊 GAO-16-6607

International spending

## ONDCP Spending Account For One Percent of Total Federal Drug Control Spending

In addition to advising the President on drug-control issues and coordinating drug-control activities and related funding across the Federal government, ONDCP also directly oversees two drug-related functions for which it receives federal drug control funding —HITDAs and other federal drug control programs, such as the Drug Free Community (DFC) coalition grant program. Based on ONDCP's spending in FY 2012 through its allocated funding in FY 2016 for these two functions, ONDCP's drug-related spending account for 1 percent of the total federal drug control spending in the federal government. ONDCP's requested funding for FY 2017 is 1 percent of the total federal drug control request. See figure 5 for allocated percentages.

Figure 5: ONDCP Spending Fiscal Years 2012 through 2016



Source: Office of National Drug Control Poliny's National Drug Control Budget Funding Highlights for Fiscal Years 2016 and 2017. | GAQ-16-0607

Chairman Johnson, Ranking Member Carper, and Committee members, this concludes my prepared statement. I would be happy to respond to any questions you may have.

Attachment I: ONDCP 2015 Performance Reporting System Report—Performance Measures for Strategy Objectives, Progress toward 2015 Targets, and Assessment Categorizations

Measure	Baseline	Progress to date	2015 Target	ONDCP assessment
Objective 1—Strengthen Efforts to	A HILLIAND CO.		Andrew Manager	
Measure 1.1: Percent of	49.0	39.5	51.2	Significant progress required
respondents, ages 12–17, who	percent	percent	percent	to meet 2015 target
perceive a great risk in smoking	(2009)	(2013)	percent	to most 2010 target
marijuana once or twice a week.	(2005)	(2010)		
Measure 1.2: Percent of	65.5	64.3	68.0	No progress to date.
respondents, ages 12–17, who	percent	percent	percent	accelerated progress required
perceive a great risk in consumption	(2009)	(2013)	porconi	to meet 2015 target
of one or more packs of cigarettes	()	(,		
per day		1		
Measure 1.3: Percent of	39.6	39.0	41.4	No progress to date,
respondents ,ages 12-17, who	percent	percent	percent	accelerated progress required
perceive a great risk in consuming	(2009)	(2013)	1	to meet 2015 target
four or five drinks once or twice a			1	
week				
Measure 1.4: Average age of	17.6 years	19.0 (2013)	19.5	Progress sufficient to enable
initiation for all illicit drugs	(2009)		years	meeting 2015 target
Measure 1.5: Average age of	16.9 years	17.3 (2013)	21.0	Progressing, accelerated
initiation for alcohol use	(2009)		years	progress required to meet
				2015 target
Measure 1.6: Average age of	-			
initiation for tobacco use				
- Cigarettes	17.5 years	17.8 (2013)	18.0	Progressing, accelerated
	(2009)	, ,	years	progress required to meet
	1		1	2015 target
- Cigars	20.7 years	21.6 (2013)	18.0	Target met or exceeded,
3	(2009)		years	progress should be maintained
	1		1	through 2015
- Smokeless tobacco	18.9 years	18.4 (2013)	18.0	Target met or exceeded,
	(2009)	(===,	years	progress should be maintained
	, ,			through 2015
Objective 2—Seek Early Intervention	n Opportunit	ies in Health (	Care	<u> </u>
Measure 2.1: Percent of Health	10.3	16.9	15.0	Target met or exceeded.
Center Program grantees providing	percent	percent	percent	progress should be maintained
SBIRT services	(2009)	(2013)		through 2015
	1	l` '		
Measure 2.2: Percent of	7.7	5.8 percent	6.5	Target met or exceeded,
respondents in the past year using	percent	(2013)	percent	progress should be maintained
prescription-type drugs non-	(2009)			through 2015
medically, age 12–17				
Measure 2.3: Percent of	15 percent	12.2	12.8	Target met or exceeded,
respondents in the past year using	(2009)	percent	percent	progress should be maintained
prescription-type drugs non-		(2013)		through 2015
medically, age 18-25	<del> </del>	1.		1
Measure 2.4: Percent of	4.7	4.8 percent	4.0	No progress to date,
respondents in the past year using	percent	(2013)	percent	accelerated progress required
prescription-type drugs non-	(2009)			to meet 2015 target
medically, age 26+	<u> </u>		L	L
Objective 3Integrate Treatment fo	r Substance	Use Disorders	s into Healtl	n Care and Expand Support for
Recovery				

		T 0	2015	
Measure	Baseline	Progress to date	Target	ONDCP assessment
Measure 3.1: Percent of treatment plans completed	45.1 percent (2007)	43.7 percent (2011)	50.0 percent	Significant progress required to meet 2015 target
Measure 3.2: Percent of Health Center Program grantees providing substance use counseling and treatment services	21.6 percent (2009)	20.0 percent (2013)	23.0 percent	Significant progress required to meet 2015 target
Measure 3.3: Percent of treatment facilities offering at least 4 of the standard spectrum of recovery services (child care, transportation assistance, employment assistance, housing assistance, discharge planning, and after-care counseling)	35.5 percent (2008)	41.0 percent (2013)	39.0 percent	Target met or exceeded, progress should be maintained through 2015
Objective 4—Break the Cycle of Dru	ıg Use, Crim	e, Delinquenc	y, and Incai	rceration
Measure 4.1: Percent of residential facilities in the juvenile justice system offering substance abuse treatment	38.8 percent (2008)	45.3 percent (2012)	42.7 percent	Target met or exceeded, progress should be maintained
Measure 4.2: Percent of treatment plans completed by those referred by the criminal justice system	48.8 percent (2007)	47.5 percent (2011)	51.0 percent	Progressing, accelerated progress required to meet 2015 target
Objective 5—Disrupt Domestic Dru	g Trafficking	and Production	חכ	
Measure 5.1: Number of domestic Consolidated Priority Organization Targets linked organizations disrupted or dismantled*	296 (2009)	473 (2013)	380	Target met or exceeded, progress should be maintained through 2015
Measure 5.2: Number of Regional Priority Organization Targets linked organizations disrupted or dismantled	119 (2009)	153 (2014)	120	Target met or exceeded, progress should be maintained through 2015
Measure 5.3: Methamphetamine lab activity (as measured by number of methamphetamine lab seizure incidents)	12,852 (2009)	11,329 (2013)	9,639	Progressing, accelerated progress required to meet 2015 target
Objective 6—Strengthen Internation Drugs in the United States	nal Partnersh	ips and Reduc	ce the Avail	ability of Foreign Produced
Measure 6.1: Percent of selected countries that increased their commitment to supply reduction	2009 or earliest available [Baseline not provided in PRS report]	100 percent (progress to date)	100 percent	Target met or exceeded, progress should be maintained through 2015
Measure 6.2: Percent of selected countries that increased their commitment to demand reduction	2009 [Baseline not provided in PRS report]	100 percent (progress to date)	100 percent	Target met or exceeded, progress should be maintained through 2015
Measure 6.3: Percent of selected countries showing progress since 2009 in reducing either cultivation or drug production potential	2009 [Baseline not provided	29 percent (progress to date)	100 percent	No progress to date, accelerated progress required to meet 2015 target

Page 17

	i con uso con constante de la	C TO CONTRACT OF THE CONTRACT		
Measure	Baseline	Progress to date	2015 Target	ONDCP assessment
Measure	in PRS	to uate	iaiyet	ONDOI RESERVANTE
	report]			
	Topong			
Measure 6.4: Number of	65	72 (2014)	60	Target met or exceeded,
international Consolidated Priority	(2009)	1 - ()		progress should be maintained
Organization Targets linked	1 '			through 2015
organizations disrupted or				
dismantled				
Objective 7—Improve Information S	ystems for A	Analysis, Asse	ssment, and	d Local Management
Measure 7.1: Increase timeliness	17.5	23.5 (2011)	16	Significant progress required
(year-end to date-of-release) of	Months		Months	to meet 2015 target
select Federal data sets above their				:
baseline by 10percent—Treatment	}			
Episode Data Set(TEDS)				
Measure 7.2: Increase the utilization	1		ļ	
(number of annual web hits, or	1			
number of documents referencing	1			
the source) of select Federal data	į.		İ	
sets by 10percent from the baseline - Substance Abuse and Mental	200.000	937.643	220,000	Target met or exceeded,
Health Data Archive (SAMHDA)	200,000 web	(2014)	web hits/	progress should be maintained
Health Data Archive (SAMINDA)	hits/year	(2014)	year	through 2015
- National Survey of Drug Use and	37 per	113 (2014)	41 per	Target met or exceeded,
Health (NSDUH) (Journal articles	year	113 (2014)	year	progress should be maintained
referencing NSDUH)	, can		yea.	through 2015
Measure 7.3: Increase Federal data	0	1 (progress	1	Target met or exceeded,
sets that establish feedback	"	to date)	ļ .	progress should be maintained
mechanisms to measure usefulness	1			through 2015
(surveys, focus	1			_
groups, etc.)—SAMHSA Funded	ļ		1	
Data Sets				

Source: ONDCP 2015 Performance Reporting System report.

# **GAO Contact and Staff Acknowledgements**

If you or your staff members have any questions about this testimony, please contact Diana Maurer at (202) 512-8777 or maurerd@gao.gov. Contact points for our Offices of Congressional Relations and Public Affairs may be found on the last page of this statement. Other contributors included Kevin Heinz, Assistant Director, Aditi Archer, Lyle Brittan, Eric Hauswirth, Justin Snover, and Johanna Wong.

(100835)

Page 19

GAO-16-660T Office of National Drug Control Policy

ONDCP INSERT TO PAGE 50 OF MAY 17, 2016, SENATE COMMITTEE ON HOMELAND SECURITY AND GOVERNMENTAL AFFAIRS HEARING TRANSCRIPT

# Impact on Federal Hiring in States with Legalized Marijuana Use

With respect to the question of whether there has been any impact on Federal hiring in those states that have legalized marijuana use, there is no reliable data thus far. When the Office of National Drug Control Policy (ONDCP) looked at the workforce drug testing data we receive from Quest Diagnostic (about three-quarters of which are for pre-employment tests), there appears to be an increasing trend in marijuana positives from 2012 to 2016 (first quarter), but the Office has no information on whether the person was hired even if the person tested positive for illegal drugs. ONDCP also contacted the Department of Transportation (DOT) and the Substance Abuse and Mental Health Services Administration (SAMHSA) within the Department of Health and Human Services to see if they had data on the Federal programs they oversee. DOT does not have such data, and SAMHSA reported that they had so few marijuana positives in the relevant states that no conclusions could be drawn about legalization's impact on Federal hiring.

ONDCP INSERT TO PAGE 54 OF MAY 17, 2016, SENATE COMMITTEE ON HOMELAND SECURITY AND GOVERNMENTAL AFFAIRS HEARING TRANSCRIPT

# Drug-Free Communities Support Program Outreach to Tribal Areas

The Drug-Free Communities (DFC) Support Program, created by the Drug Free Communities Act of 1997, is the Nation's leading effort to mobilize communities to prevent youth drug use. Directed by the Office of National Drug Control Policy (ONDCP), in partnership with the Substance Abuse and Mental Health Services Administration (SAMHSA). The DFC Program provides grants to local drug-free community coalitions to increase collaboration among community partners and to prevent and reduce youth substance use.

Recognizing the fundamental concept that local problems need local solutions, DFC-funded coalitions engage multiple sectors of the community and employ a variety of strategies to address local drug problems. Coalition members conduct ongoing community assessments to prioritize efforts to prevent and reduce youth drug use. These assessments are used to plan and implement data-driven, community-wide strategies.

The DFC Program requires funded coalitions to employ environmental strategies in broad initiatives aimed at addressing the entire community through the adaptation of policies and practices related to youth substance use. In so doing, coalitions can address the environment as a whole and get the most out of available resources.

The DFC Program has had a special interest in providing training and technical assistance to Tribal communities:

<u>DFC Applicant Workshops</u>: Since 2007, after the release of each DFC Funding Opportunity Announcement (FOA), the DFC Program has conducted DFC Applicant Workshops to assist interested community coalitions successfully apply to the DFC Program. The day-long training provides technical assistance to help applicants better understand the DFC Program's goals, the DFC Statutory Eligibility Requirements, and the ability to ask questions. In addition, for applicants unable to attend to the DFC Applicant Workshops, DFC staff have recorded the DFC Applicant Workshop and posted the web address on the DFC website. Specifically related to Tribes:

- In 2007 DFC had a full day of training and technical assistance dedicated to the Native American applicants.
- In 2008 DFC had a full day of training and technical assistance dedicated to the Native American applicants.
- In 2009 DFC Staff traveled to Native American communities to answer questions about forming community coalitions.
- In 2010, in Utah, DFC offered a session for Native American Coalitions.
- In 2011, DFC offered a session for Native American Coalitions.

 In 2012-2016 DFC offered sessions for Native American Coalitions in all locations where workshops were held.

Support of CADCA's National Youth Leadership Initiative: ONDCP and the Community Anti-Drug Coalitions of America (CADCA) collaborate on the implementation of directed outreach to Tribal Youth through the National Youth Leadership Initiative. The goal is develop a toolkit that includes fact sheets, webinars, and the creation of key resources with specific messaging to Tribal Youth to encourage their participation in substance use prevention efforts in their communities. An Engaging Tribal Youth webinar was conducted in May 2016.

<u>Collaboration with DOJ:</u> For the last two years, the DFC Program has collaborated with the Department of Justice (DOJ)'s Justice Programs Council on Native American Affairs on several webinars to assist Tribes as they prepare for, write, and submit their Federal grant applications. The focus of the webinars has focused on discussing the goals of the DFC Program, the DFC Statutory Eligibility Requirements, and shared best practices for successful submission of a DFC Application.

ONDCP INSERT TO PAGE 61 OF MAY 17, 2016, SENATE COMMITTEE ON HOMELAND SECURITY AND GOVERNMENTAL AFFAIRS HEARING TRANSCRIPT

# Percentage of Individuals with Alcohol Usc Disorders Who Seek Treatment

According to the 2014 National Survey on Drug Use and Health conducted by the Substance Abuse and Mental Health Services Administration within the Department of Health and Human Services, 17.7 million people aged 12 or older were classified as needing treatment for an alcohol problem, meaning they met at least one of three criteria during the past year: (1) dependence on alcohol; (2) abuse of alcohol; or (3) received treatment for alcohol use at a specialty facility (i.e., drug and alcohol rehabilitation facility [inpatient or outpatient], hospital [inpatient only], or mental health center). Of these individuals, nine percent felt the need for treatment and received treatment in a specialty facility, and an additional one percent felt the need for treatment and made the effort to get treatment but did not receive treatment.

# Post-Hearing Questions for the Record Submitted to Hon. Michael Botticelli From Senator Ron Johnson

"America's Insatiable Demand for Drugs: Assessing the Federal Response"

May 17, 2016

1.	What is the cost and success rate of treatment for drug addiction? Is it a cost effective solution?
	Agency responses to questions submitted for the record were not received.

#### Post-Hearing Questions for the Record Submitted to Hon. Michael P. Botticelli From Senator Rob Portman

# "America's Insatiable Demand for Drugs: Assessing the Federal Response"

# May 17, 2016

GAO's previous reports and written statement for the hearing cast doubt on the Administration's ability to achieve the seven strategic goals set forth in the 2010 Strategy.

- 1. Based on your experience, is there anything that the Federal Government is not doing now that it needs to start doing?
  - a. If so, what is it?
  - b. Does the Office of National Drug Control Policy have the legal authority and appropriations to do it?

Agency responses to questions submitted for the record were not received.

#### Post-Hearing Questions for the Record Submitted to Mr. Michael Botticelli From Senator Kelly Ayotte

"America's Insatiable Demand for Drugs: Assessing the Federal Response"

## May 17, 2016

(1) According to results from the 2010 National Survey on Drug Use and Health, an estimated 2.4 million Americans used prescription drugs non-medically for the first time within the past year, which averages approximately 6,600 initiates per day. About one-third of this group is between 12 and 17 years of age. Sixty-two percent of kids say opioids are "easy" to get from medicine cabinets. Seventy percent of medications obtained by teens are acquired by family, friends, and relatives. The last major technological advancement in prescription drug safety was the child-resistant cap instituted in 1970. Additional anti-pilfering technologies exist, but are not yet in use.

What is the federal government doing to test technologies, such as lockable vials for prescription medications?

What role, if any, do you believe ONDCP can take in further studying whether benefits could be derived from dispensing schedule II-IV drugs in lockable vials?

Agency responses to questions submitted for the record were not received.

#### Post-Hearing Questions for the Record Submitted to the Honorable Michael Botticelli From Senator Claire McCaskill

#### "America's Insatiable Demand for Drugs: Assessing the Federal Response" May 17, 2016

In 2010 I chaired a hearing on our counter-narcotics efforts in Latin America. Through the Merida Initiative and Plan Colombia, we have spent billions of dollars on counter-narcotics activities in the region, with much, if not most of the money going to contractors. However, those contracts did not have effective performance management systems and lacked oversight in general, so it was impossible to determine the effectiveness of these contracts. The Office of National Drug Control Policy has been around since 1988, long before I held hearings on the issues of coordination and oversight of our counternarcotics efforts. Yet the lack of coordination among federal agencies does not seem to have improved much.

1) What is ONDCP doing differently than it was 5 years ago when I held my hearing to provide coordination and oversight over these contracts?

As of my hearing 6 years ago, the United States had spent almost \$7 billion in Latin America over the prior 10 years just on counter-narcotics efforts, over half of that was spent on contractors

2) Do you have an updated figure on how much we have spent on counter-narcotics efforts in Latin America in the last 10 years?

Some of this funding has undoubtedly had an effect. Colombia, as General Kelly testified before this committee a few weeks ago, has made incredible progress in their security situation, strengthening their government institutions, reducing corruption, and improving their economy. However, he also pointed out that 100% of the heroin and cocaine and 90% of the methamphetamines coming into the U.S. are coming from Latin America, and seizures of drugs at the border have remained about constant overall, with only the mix of drugs coming in changing. He also noted that the network that supplies these drugs starts in Colombia. Simply put, demand in this country is as high as ever and the supply of drugs from Latin America continues to meet our insatiable demand.

- 3) What are the metrics we have been using to measure the effectiveness of our multi-billion dollar investment, and are those the right metrics to use if both the supply of and demand for drugs are as high as ever?
- 4) Have the metrics to measure our success changed over time, and, if so, can you provide some examples of how these metrics have evolved?

According to the Department of Defense, in FY 2010, we had 188 contractors supporting our counter-narcotics efforts in Colombia. Part of the plan involved turning over these operations to the Colombians.

- 5) Do you have a sense of how many U.S. contractors are still in Colombia?
- 6) Is there a plan to eventually get to zero U.S. contractors or is that unrealistic?

In the 2010 National Drug Control Strategy, ONDCP established seven goals related to reducing illicit drug use and its consequences to be achieved by 2015. As of March 2013, GAO's analysis showed that primary data and results were only available for five of them. There was no data available for the goal of reducing the number of chronic drug users by 15 percent or for reducing the prevalence of drugged driving by 10 percent.

What is causing the delay and when can we expect data on these two goals?

Of the five goals for which primary data on results were available, one showed progress and four showed no progress.

GAO also reported that ONDCP established a new monitoring system intended to provide information on progress toward Strategy goals and help identify performance gaps and options for improvement. At that time, the system was still in its early stages, and GAO reported that it could help increase accountability for improving progress.

In November 2015, ONDCP issued its annual Strategy and performance report, which assess progress toward all seven goals. The Strategy shows progress in achieving one goal, no progress on three goals, and mixed progress on the other three goals. Overall, none of the goals in the Strategy have been fully achieved.

- 8) How much has ONDCP spent in those 5 years on achieving these goals?
- 9) How much better is the data that you are getting now with the new monitoring system, and how has it shaped any changes to the strategy?

It is our natural instinct to tackle the largest parts of this problem because they're the most visible. We spend billions on irradiation efforts in Central America and on border technology. But I wonder if we are missing some small, incremental efforts we might try that can chip away at these issues. For example, we know that addiction, particularly among younger people, often starts with access to a parent's prescription drugs in the medicine cabinet. Yet, the last time we did anything on prevention of access to prescription medications was back in 1970 when we required child-proofing medicine bottles. Obviously that's not going to stop a 15-year old from popping open their parent's Percocet bottle, but there are companies that are making medicine bottles with little combination locks on the bottle cap.

That is not going to solve this epidemic, but it's a lot cheaper than building a wall, and possibly more effective, too.

10) Is ONDCP looking at piloting anything like this or other smaller efforts?

Agency responses to questions submitted for the record were not received.

#### Post-Hearing Questions for the Record Submitted to the Honorable Michael Botticelli From Senator Heidi Heitkamp

"America's Insatiable Demand for Drugs: Assessing the Federal Response"

### May 17, 2016

- 1. When reading your prepared testimony and then listening to your statements during the course of the hearing on Tuesday, May 17, 2016, I was dismayed by the lack of attention concerning the federal response to demand and abuse of illicit drugs within our Native communities and in Indian Country. I believe Sen. Tester made this point as well at the hearing and that you promised to follow-up as to the federal response on Montana's Indian reservations. I would also like a detailed response as to what ONDCP has done or plans to do to respond to the drug epidemic on North Dakota's Indian reservations. Can you please provide me with that information?
  - a. In addition, if there is a national or broader strategy within your office aimed specifically at addressing the unique challenges of the drug epidemic in Indian Country and Alaska Native Villages, can you please provide further information on what the strategy is and whether or not you think it has been successful up to this point?
  - b. If such a strategy does exist, was it put together in consultation with tribal leaders and experts?
- 2. In your testimony, you mentioned the formation, last October, of the National Heroin Coordination Group a multi-disciplinary team put together to focus specifically on a concerted Federal effort to reduce the availability of heroin and fentanyl in the United States. Since the Group's formation, have any action items or recommendations been put forward and if so what are they and have they been acted upon?
  - a. Are you able to provide tangible statistics regarding actions that have been taken as a result of this collaborative effort?
  - b. If no recommendations have been made or no actions taken to date by the Group or member agencies as a result of directive from this Group – why not? What more can be done to make this Group – and its member agencies – function better and react more rapidly and effectively to the heroin and fentanyl crisis?
  - c. Has the Group looked at the delivery of fentanyl through the mail and if so, have they come up with recommendations or methods to stem the delivery of these lethal drugs through the mail system?

Agency responses to questions submitted for the record were not received.

#### Post-Hearing Questions for the Record Submitted to Ms. Kana Enomoto From Senator Ron Johnson

"America's Insatiable Demand for Drugs: Assessing the Federal Response"

#### May 17, 2016

# 1. What is the cost and success rate of treatment for drug addiction? Is it a cost effective solution?

Response: There are a variety of treatments available for substance use disorders. The majority of individuals who enter and remain in treatment are able to successfully stop using drugs, although there is some variability based on patient characteristics and treatment type. 1234 Like other chronic illnesses, relapsing is not uncommon, but these recurrences can be addressed with additional treatment. Among the most effective treatments is medication assisted treatment (MAT) which is the provision of medication alongside behavioral health services for opioid or alcohol use disorder. MAT has been shown to be associated with increased treatment retention, decreases in opioid misuse, decreases in criminal activity, increases in employment, and decreases in drug overdose. 5

In 2009, approximately \$24 billion were spent on substance use disorder treatment. SAMHSA estimates that that number will increase to \$42 billion by 2020. Public funding sources account for nearly three-quarters of this spending. In total, roughly one percent of all health care spending is for substance use disorder treatment.<sup>6</sup>

Despite the costs associated with the provision of substance use disorder treatment, there are indications of economic benefits. In one state, for every dollar spent on treatment, societal costs associated with substance use disorder decreased by seven dollars – even excluding improved

<sup>&</sup>lt;sup>1</sup> National Institute on Drug Abuse. Principles of Drug Addiction Treatment: A Research-Based Guide. HHS Publication No. 12-4180. Bethesda, MD. Available at

https://www.drugabuse.gov/sites/default/files/podat\_1.pdf

<sup>&</sup>lt;sup>2</sup> Hubbard, Robert L.; Craddock, S. Gail; Flynn, Patrick M.; Anderson, Jill; Etheridge, Rose M. Psychology of Addictive Behaviors, Vol 11(4), Dec 1997, 261-278. <a href="http://dx.doi.org/10.1037/0893-164X.11.4.261">http://dx.doi.org/10.1037/0893-164X.11.4.261</a>.

<sup>&</sup>lt;sup>3</sup> Dutra, L., Stathopoulou, G., Basden, S. L., Leyro, T. M., Powers, M. B., & Otto, M. W. (2008). A metaanalytic review of psychosocial interventions for substance use disorders. American Journal of Psychiatry.

<sup>&</sup>lt;sup>4</sup> Journal of clinical psychopharmacology, 24(1), 24-29.)( Marsch, L. A. (1998). The efficacy of methadone maintenance interventions in reducing illicit opiate use, HIV risk behavior and criminality: a meta-analysis. Addiction, 93(4), 515-532.

<sup>&</sup>lt;sup>5</sup> Medication and Counseling Treatment. (2015, September 28). Retrieved from <a href="http://www.samhsa.gov/medication-assisted-treatment/treatme

<sup>&</sup>lt;sup>6</sup> Substance Abuse and Mental Health Services Administration. Projections of National Expenditures for Treatment of Mental and Substance Use Disorders, 2010–2020. HHS Publication No. SMA-14-4883. Rockville, MD. Available at <a href="http://store.samhsa.gov/shin/content/SMA14-4883/SMA14-4883.pdf">http://store.samhsa.gov/shin/content/SMA14-4883/SMA14-4883.pdf</a>

quality of life for patients.  $^7$  This decrease resulted in savings from decreased medical expenses, reduced crime, and increased employment.

<sup>&</sup>lt;sup>7</sup> Ettner SL, Huang D, Evans C, Ash DR, Hardy M, Jourabchi M, Hser YI. (2006). Benefit-cost in the California treatment outcome project: does substance abuse treatment "pay for itself"? *Health Serv Res*, 41(1)192-213.

#### Post-Hearing Questions for the Record Submitted to Ms. Kana Enomoto From Senator Kelly Ayotte

"America's Insatiable Demand for Drugs: Assessing the Federal Response"

#### May 17, 2016

(1) Along with colleagues from both sides of the aisle, I urged the Senate Appropriations Committee to boost funding across key federal agencies, including at SAMHSA, in order to assist in the fight against opioid abuse. I was pleased that the omnibus passed last year included a 284 percent increase for programs at SAMHSA and the Centers for Disease Control and Prevention focused on combatting opioid abuse.

As you can imagine, people in New Hampshire who are grappling with the opioid abuse crisis on a daily basis are interested in accessing some of these newly available funds so that they can better assist their neighbors who are struggling with substance use disorders.

As you are aware, the funding appropriated through the omnibus includes a mix of grant programs, some which are formula funded but others that are competitive grants. As a small state, New Hampshire may be at a disadvantage when applying for competitive grants because they may not have the resources that larger states are able to commit to the grant-writing process.

After the passage of the omnibus, I wrote to Secretary Burwell to ask her to expedite the disbursement of these funds and to request that she consider designating a coordinator who would serve as a central point of contact within the Department and assist states with identifying grant opportunities, streamlining the application process, and providing technical assistance.

Do you think this is an idea that would have merit and could potentially assist small states like New Hampshire that are trying to navigate the competitive grant process?

Are there currently similar resources available at SAMHSA?

For my constituents who are interested in utilizing some federal dollars to assist them in their work to treat and support individuals with substance use disorders, can you assure me that you and your staff will work with them to navigate the grant application process and be available to answer any questions or concerns they may have?

**Response:** SAMHSA values its partnership with New Hampshire and wants all potential applicants in the state to have every opportunity to compete for funding to advance the

behavioral health of our nation. SAMHSA realizes the importance of assisting states to help identify potential grant opportunities. As such, SAMHSA will continue to hold conference calls at the beginning of each fiscal year with state behavioral health officials to present the expected Funding Opportunity Announcements (FOAs) for which state applicants are eligible to apply for that fiscal year. The calls include descriptions of each program, award size, number of awards expected for each program, and proposed release dates of the FOAs.

SAMHSA has undertaken other methods to ensure all applicants can navigate the grant application process. For instance, potential applicants can access the grant forecast on the SAMHSA grant website. The forecast provides information on SAMHSA's upcoming FOAs, with information about each program, eligibility information, award size, number of awards anticipated for each program, and the proposed release date. Also, SAMHSA staff provides preapplication deadline technical assistance to potential applicants for FOAs that have been announced. The technical assistance can come in the form of a webinar which explains the FOA in detail and allows for questions from potential applicants, and also in the form of a Frequently Asked Questions document that potential applicants can use as a resource when applying for a particular grant. In addition, each FOA includes contact information for SAMHSA staff members that applicants are instructed to contact if they have any questions about programmatic, grants management, and application process related issues. Potential applicants can contact SAMHSA Division of Grants Management at 240-276-1400 with general eligibility questions.

Over the years, SAMHSA has incorporated changes to the application process in order to streamline the process for applicant organizations. This includes moving to an electronic application platform that helps applicants coordinate and complete the process, as well as a waiver process for applicant organizations that encounter technical difficulties and are unable to submit an application electronically by the deadline. In addition to these changes, at the end of the review process each applicant organization (both funded and unfunded) is provided a detailed summary statement which includes reviewer comments and the organization's priority score. SAMHSA has made changes to the summary statement in order to enhance the type of information each organization receives. This was done to provide each applicant further insight into the strengths and weaknesses of their application so that they can make adjustments and improvements to applications they submit for future funding opportunities. It is by providing the above mentioned resources that SAMHSA will continue to work with states and applicant organizations to help navigate the grant application process, and to ensure that all applicants receive the support and guidance they need to submit a successful application.

(2) The last two years, I have joined Senator Kaine in writing to the Senate Appropriations Committee to ask that they include the highest possible level of funding for SAMHSA's Substance Abuse Prevention and Treatment Block Grant. As you know, this critical program provides formula funded grants to states to assist with substance use disorder treatment, prevention, and recovery services.

I was pleased that the omnibus included an increase of more than \$38 million for the Block Grant. However, as I understand it, because of the formula used to determine grant amounts, New Hampshire will only see a slight increase in its Block Grant funding in fiscal year 2016.

I am a cosponsor of the Mental Health Reform Act of 2016, which in addition to a number of other priority items, includes a required study on the distribution formula for the Block Grant. Among other components, the study would require an analysis of whether the Block Grant distributions accurately reflect the need for services.

When was the last time that SAMHSA reviewed the distribution formula?

Do you believe that changes should be made to the formula?

Is there a way that the formula can more accurately reflect the individual needs of states—especially those like New Hampshire that are facing especially significant challenges with substance abuse?

**Response:** The Block Grant formula is established in statute. A study of the formula was authorized as part of the ADAMHA Reorganization Act of 1992 (Pub. L. 102-321) under Title VII, Section 707, Report on Allotment Formula. The report was published in 1997.

While any changes to the formula would require a statutory change, there is a "hold harmless" provision in the Substance Abuse Prevention and Treatment Block Grant (SABG) that benefits lower-population states like New Hampshire. Without that provision, New Hampshire and other similarly populated states would receive significantly smaller SABG distributions.

(3) We know that opioid misuse and addiction has become a national crisis, resulting in over 28,000 overdose deaths in 2014 (CDC, 2015). New Hampshire's publicly-funded treatment system serves over 6,000 individuals with a substance use disorder every year, almost 40 percent of whom have an opioid use disorder. In New Hampshire, Nashua has the State's only residential facility that exclusively serves pregnant and parenting women and their children. The family-centered services offered at the residential program are crucial not only for the treatment and recovery of the women served there, but also for the wellbeing of their children and families.

I introduced the Improving Treatment for Pregnant and Postpartum Women Act (S. 2226), which reauthorizes SAMHSA's grant program for residential treatment services for pregnant and postpartum women. It also creates a pilot program for SAMHSA's Center for Substance Abuse Treatment to make grants to State substance abuse agencies to support non-residential family-centered services for pregnant and postpartum women. SAMHSA has proposed for FY 2017 a similar pilot program that would allow up to 25 percent of the Pregnant and Postpartum Women funding to be used for a subset of new grantees to pay for family-centered intensive outpatient and outpatient services. The key difference between my bill and SAMHSA's proposal is that SAMHSA does not require grants for the pilot program to go to the State substance abuse agencies. As you know, these State

agencies oversee the publicly-funded substance use disorder delivery system, and they recognize the service gaps that may exist in their own State systems.

Will SAMHSA ensure that the pregnant and postpartum women pilot program makes competitive grants available to the State substance abuse agencies?

Response: Under SAMHSA's proposed pilot program, eligibility for the innovation grants would be limited to the lead state/territorial/Tribal entity within the respective state/territory/Federally-recognized American Indian/Alaska Native Tribe or Tribal organization, which is responsible for leading substance use disorder treatment and recovery support services for pregnant and postpartum women and their minor children and other family members. The innovation grants would be a combination of infrastructure development or improvement at the state/territorial/Tribal level and direct treatment services at the community-based-provider level. Additionally, SAMHSA anticipates a second Pregnant and Postpartum Women's (PPW) program funding opportunity in FY 2017 to provide residential treatment for pregnant and postpartum women and their minor children and other family members. Eligibility will include a wide range of entities, including but not limited to states, territories, Tribes, community-based organizations, and universities.

#### Post-Hearing Questions for the Record Submitted to Kana Enomoto From Senator Heidi Heitkamp

"America's Insatiable Demand for Drugs: Assessing the Federal Response"

May 17, 2016

 Many people in my state of North Dakota have to travel significant distances away from their families and support network to obtain treatment. What does a successful treatment model look like in rural and isolated areas?

Response: Rural populations face the same behavioral health problems as other populations. There may be regional or demographic differences that skew toward the predominance of particular disorders or conditions, but this occurs in urban and suburban areas as well. A major distinguishing factor for rural populations is the isolation caused by great geographic distances and the lack of available behavioral health services. Consequently, any successful treatment model must take these two factors into consideration and recognize challenges related to transportation and access.

Given the difficulty in attracting an adequate number of trained and qualified health professionals to rural areas, the provision of telehealth and/or e-therapy can be an alternative approach. Behavioral health service delivery in rural areas that use telehealth/e-therapy networks in addition to the existing brick and mortar service system can increase access to services including services available at all times of day and night and support in emergency situations.

SAMHSA's Targeted Capacity Expansion (TCE) through the Use of Technology Assisted Care (TAC) in Targeted Areas of Need grants fund 48 programs that use technology to address rural access challenges, including one in North Dakota. The Heartview Foundation in Bismarck has implemented a multi-faceted program that uses several types of technology to expand and offer services to the Coal Country Community Health Center, the Standing Rock Sioux Day Treatment Program, and providers in the North Dakota Rural Behavioral Health Network. Through the use of secure telehealth technology Heartview has improved communication between treatment programs, including patient evaluations and training/consultation for rural communities.

Programs that integrate behavioral health care capacity into primary care are another possible approach. While increasing the behavioral health workforce or the capacity of existing primary care providers to provide in-person care is the ideal solution, this integration can also be achieved through telehealth programs and through the use of remote behavioral health consultants. Screening, Brief Intervention, and Referral to Treatment (SBIRT) is an example of a service that can be integrated into primary care. SBIRT can help to identify and address problems with substance and alcohol use, and can also effectively be administered via tele/etherapy services. SBIRT is not effective treatment for some drug use disorders but it can be the

start of effective treatment when paired with evidence-based treatment—for example MAT—offered in primary care clinics.

Telehealth also allows for the engagement of family members in care. Family members may be given appropriate consent procedures and receive remote support from professionals as they care for their loved ones. The use of peer-to-peer support services can also broaden the reach of treatment services to rural areas. SAMHSA plans to continue the Providers' Clinical Support System for Medication Assisted Treatment (PCSS-MAT), a national training and mentoring project to support professional development and expansion of a well-trained workforce, capable of delivering high quality MAT for all FDA-approved medications.

In addition to our work at SAMHSA, we note that our sister agency HRSA also administers rural programs, such as the Rural Health Care Services Outreach Program (Outreach), and offers evidence-based toolkits (one of which specifically addresses mental health and substance use disorders) through its Federal Office of Rural Health Policy.

In short, attention to coordination, overlay of telehealth procedures over existing services systems, co-location of behavioral health providers in medical settings, use of SBIRT as a first response and early detection methodology, family involvement, and effective integration of peer support services are all strategies that can be used to strengthen rural systems.

2. Many of the federal efforts discussed at the hearing address the symptoms of addiction, which I believe is critical. How is SAMHSA looking "upstream" of this epidemic to disseminate evidence-based models and best practices for prevention?

Response: SAMHSA's Center for Substance Abuse Prevention (CSAP) disseminates information on evidence-based models and best practices for prevention through its Center for the Application of Prevention Technologies (CAPT). Recent resources developed and distributed by the CAPT include "Preventing Prescription Drug Misuse: Programs and Strategies," which provides brief summaries of prevention strategies that have been evaluated to determine their effects on non-medical use of prescription drugs, and "Prevention Programs that Address Youth Marijuana Use: Using Prevention Research to Guide Prevention Practice," which provides summaries of interventions that have been shown to prevent or reduce marijuana use among youth populations.

SAMHSA also maintains the National Registry of Evidence Based Programs and Practices (NREPP), which is an evidence-based repository and review system designed to provide the public with reliable information about interventions that address mental and substance use disorders, including prevention interventions. In 2014 we began a major redesign of NREPP and re-launched it in 2015. NREPP reviewers evaluate interventions by rating each outcome associated with the program as effective, promising, ineffective, or inconclusive. Between 2015 and 2018, all programs reviewed under the previous NREPP criteria are being rereviewed. The re-designed NREPP provides clearer information to the public on the effectiveness of various prevention interventions and provides an accessible means for SAMHSA to disseminate evidence-based models and best practices for prevention.

<sup>&</sup>lt;sup>8</sup> http://www.samhsa.gov/capt/sites/default/files/resources/preventing-prescription-drug-misuse-strategies.pdf

<sup>9</sup> http://www.samhsa.gov/capt/sites/default/files/resources/prevention-youth-marijuana-use.pdf

Finally, CSAP strongly encourages states that receive Substance Abuse Prevention and Treatment Block Grants (SABG) and states and Tribes that receive Partnerships for Success (PFS) grants to maintain Evidence-Based Workgroups intended to review prevention research and help communities identify and select appropriate evidence-based strategies.

3. I understand part of SAMHSA's FY2017 budget request includes innovation grants to test models for family-centered treatment programs, including outpatient treatment. How can we better support caregivers, family and children of those working through addiction and treatment today?

**Response:** SAMHSA's Pregnant and Postpartum Women's (PPW) program uses a family-centered approach that provides comprehensive substance use disorder treatment, prevention, and recovery support services for pregnant and postpartum women, their minor children, and other family members (e.g., fathers of the minor children, caregivers). Services include screening, educational services (academic, therapeutic, and parenting skills, etc.), relapse prevention, childcare, transportation, primary and pediatric healthcare, social services, and case management.

Under the innovation grants, these comprehensive services would be provided in a variety of treatment settings based on the needs of the pregnant and postpartum women. Potential treatment settings include residential and outpatient programs.

- 4. When reading your prepared testimony and then listening to your statements during the course of the hearing on Tuesday, May 17, 2016, I was dismayed by the lack of attention concerning the federal response to demand and abuse of illicit drugs within our Native communities and in Indian Country. I understand that Sen. Tester made this point as well and that you promised to follow-up as to the federal response on Montana's Indian reservations. I would also like a detailed response as to what SAMHSA has done or plans to do to respond to the drug epidemic in North Dakota's Indian reservations. Can you please provide me with that information?
  - a) In addition, if there is a national or broader strategy within your office aimed specifically at addressing the unique challenges of the drug epidemic in Indian Country and Alaska Native Villages, can you please provide further information on what the strategy is and whether or not you think it has been successful up to this point?
  - b) If such a strategy does exist, was this put together in consultation with tribal leaders and experts?

Response: SAMHSA created the Office of Tribal Affairs and Policy (OTAP) in 2014 to address high rates of substance use and mental disorders among American Indians and Alaska Natives. OTAP is charged with leading development of policies, priorities, and actions to improve the behavioral health of Tribal communities in collaboration with Tribes, SAMHSA's centers and offices, and Federal partners. OTAP works to improve agency-wide coordination and action through the SAMHSA Tribal Technical Advisory Committee comprised of Tribal leaders

and the SAMHSA American Indian and Alaska Native Team (SAIANT)—a chartered committee composed of executives and staff from SAMHSA's centers and offices and chaired by OTAP.

The Office of Indian Alcohol and Substance Abuse, which was established by the Tribal Law and Order Act of 2010 (TLOA), now is a component of OTAP and is working with Federal partners to support the development of Tribal action plans (TAP) by Tribes. TAPs are comprehensive strategies focused on reducing and preventing alcohol and substance use disorders and other misuse in Tribal communities. TAPs are instrumental in helping Tribes identify existing strengths and resources within their communities; assessing prevention and treatment needs; coordinating available resources and programs; identifying gaps in services; and working with their community to identify and address their urgent or emerging substance use issues. It is important to underscore that a TAP is an individualized strategy for a specific Tribe based on the unique behavioral health-related circumstances of the Tribe and supported through a coordination of resources.

SAMHSA programs support some of the activities that Tribes may identify as part of their TAPs. For example, Tribes and Tribal Organizations are eligible to apply for a range of programs that support development of targeted, data-driven prevention strategies to address drug misuse:

- The Strategic Prevention Framework Partnerships for Success (SPF-PFS) grant program addresses the Nation's two top prevention priorities: underage drinking among youth and young adults ages 12 to 20 and prescription drug misuse among individuals ages 12 to 25. Applicants to this program have the ability to identify another data driven priority; such as heroin or marijuana, that may be affecting their community. Tribes must develop an approach to funding and implementing strategies that ensures ongoing guidance, support and technical assistance and training to Tribal communities. SAMHSA has awarded SPF-PFS funding to 13 of the 19 Tribes and Tribal Organizations that have completed the SPF process.
- The Tribal Behavioral Health Grant program (TBHG/Native Connections) is a joint Center for Substance Abuse Prevention and Center for Mental Health Services program. The purpose of the TBHG program is to prevent and reduce suicidal behavior and substance misuse and promote mental health among American Indian/Alaska Native young people up to and including age 24. SAMHSA anticipates awarding up to 94 applications in FY 2016.
- The SPF for Prescription Drugs (Rx) program is designed to assist in developing capacity and expertise in the use of data from state-run prescription drug monitoring programs (PDMP). This grant program provides an opportunity for a Tribal entity that has completed an SPF State Incentive Grant (SIG) to target the priority issue of prescription drug misuse. The SPF Rx program will allow grantees to develop comprehensive plans to strategically address the emergent issue by using epidemiological data combined with PDMP data to improve understanding of prescription drug misuse in their communities and target primary and secondary prevention activities. SAMHSA anticipates awarding up to 25 applications in FY 2016. States and Tribes are eligible for these grants.

In response to discussions with the Tribal Technical Advisory Committee (TTAC), SAMHSA initiated collaboration with the Indian Health Service (IHS) and the National Indian Health Board (NIHB) to develop the National Tribal Behavioral Health Agenda (TBHA). The TBHA addresses TTAC and other Tribal leader requests for Tribes and Federal agencies to work differently together in tackling behavioral health issues that are impacting their communities. The TBHA was draft based on the voices and recommendations of Tribal leaders and representatives—it acknowledges the importance of Tribal wisdom in developing cultural practices that best meet the needs of Tribal communities; provides a clear, national statement about prioritizing behavioral health as an essential component to improving overall health and wellness; facilitates Tribal/Federal collaboration on common behavioral health issues; and supports opportunities for improving behavioral health-related policies and programs focused on Tribal communities.

Over the course of approximately 18 months, SAMHSA, IHS, and NIHB engaged in discussions and received comments from Tribal leaders and representatives on the TBHA. Tribal priorities were developed that focus on healing from historical and intergenerational trauma, using a socioecological approach to addressing behavioral health, directing appropriate attention and support on prevention and recovery, improving behavioral health systems and supports, and improving national awareness and visibility on the behavioral health of Tribal communities.

SAMHSA and IHS will send a "Dear Tribal Leader" letter to all Tribes in the coming weeks to review and provide comment on the full draft of the TBHA. Resolutions supporting the TBHA as a collaborative approach for targeting improvements in behavioral health have been passed by the National Congress of American Indians, the Board of Directors for the National Indian Health Board, and the Tohono O'odham Nation.

SAMHSA has provided funding to Tribes and Tribal Organizations in North Dakota such as the Standing Rock Sioux Tribe through Project LAUNCH (to promote wellness of young children through development of networks that coordinate child-serving systems and integrate behavioral health and physical health) and the TBHG program; Turtle Mountain Band of Chippewa Indians through the TBHG program; and Cankdeska Cikana Community College through the Garrett Lee Smith State/Tribal Suicide grant program to address suicide prevention for Spirit Lake Nation youth. SAMHSA has arranged for the Three Affiliated Tribes to receive technical assistance from the Centers for Medicare & Medicaid Services to address reimbursement for behavioral health services. The SAMHSA Tribal Training and Technical Assistance Center also is working with the Great Plains Tribal Chairman's Health Board to plan a TAP training for Tribes in the area.



July 1, 2016

The Honorable Ron Johnson Chairman The Honorable Rob Portman

"America's Insatiable Demand for Drugs: Assessing the Federal Response." Post Hearing Questions for the Record

Dear Chairman Johnson and Senator Portman:

On May 17, 2016, I testified before the United States Senate Committee on Homeland Security and Governmental Affairs on the Office of National Drug Control Policy and its progress towards achieving the goals articulated in the 2010 National Drug Control Strategy and federal drug control spending. This letter responds to the questions for the record that you posed. The responses are based on our previously issued products. Your questions and my responses are enclosed.

If you have any questions about this letter or need additional information, please contact me at (202) 512-9627 or maurerd@gao.gov.

Sincerely yours,

Diana C. Maurer, Director

Homeland Security and Justice Team

Tiang Mauren

Enclosure

#### Question submitted by Chairman Ron Johnson

1. What is the cost and success rate of treatment for drug addiction? Is it a cost effective solution?

The Office of National Drug Policy (ONDCP) reported that from fiscal year (FY) 2007 through FY 2015, the federal spending on treatment for drug addiction has consistently increased and, during this time, the federal government spent approximately \$73.3 billion on drug treatment programs. According to ONDCP in FY 2015, drug addiction treatment spending was \$12.5 billion; and in FY 2016, the enacted amount for drug treatment spending is \$13.2 billion, a 6 percent increase over FY 2015. The FY 2017 treatment funding request is \$14.3 billion, an increase of \$1,033.0 million (7.8 percent) over the FY 2016 allocated amount. According to ONDCP's *Fiscal Year 2016 Budget and Performance Summary*, ONDCP has prioritized treatment and recovery support services, stating that they are essential to supporting long-term recovery among people with substance use disorders. Drug treatment funds are used for early intervention programs, treatment programs, and recovery services.

In 2013, we found that the federal drug control agencies we reviewed had conducted few studies since 2007 to assess the effectiveness of the programs they funded. We reported that ONDCP and agency officials said they have collected and analyzed other program performance information or required or encouraged the programs to use evidence-based interventions. These approaches to prevention or treatment are based in theory and have undergone scientific evaluation in order to determine effectiveness. GAO has not conducted work on the success rates and cost effectiveness of programs for treatment for drug addiction.

Since our 2013 report, ONDCP is taking steps towards cost effectiveness through coordination of drug abuse and treatment programs. In July 2014, ONDCP published its assessment of the

<sup>&</sup>lt;sup>1</sup>According to ONDCP, the largest federal contributions included in the drug treatment budget for prevention and treatment reflect Medicare and Medicaid benefit costs and estimated costs associated with Substance Abuse and Mental Health Services Administration's substance abuse prevention and treatment block grants. According to ONDCP's 2016 Budget and Performance Summary, combined costs associated with provisions of the TRICARE and Veteran's Affairs benefits for substance treatment and substance use disorders also have large contributions.

<sup>&</sup>lt;sup>2</sup>There are numerous types of drug treatment programs that federal funds support, such as substance use disorder treatment services for inpatient and outpatient settings, medical treatment settings to provide early identification and intervention to at-risk individuals, and treat short- and long-term consequences of alcohol misuse in youth populations, among other things.

<sup>&</sup>lt;sup>3</sup>Office of National Drug Control Policy, National Drug Control Budget: FY 2017 Funding Highlights (Washington D.C.: February 2016)

<sup>\*</sup>GAO, Office of National Drug Control Policy: Office Could Better Identify Opportunities to Increase Program Coordination, GAO-13-333 (Washington D.C.: March 26, 2013).

#### Enclosure

extent of overlap, duplication, and coordination of federal funding of drug control programs, including drug abuse prevention and treatment programs in its *Fiscal Year 2015 Budget and Performance Summary* released with the annual National Drug Control Strategy. The assessment found that nearly all of the programs serve distinct beneficiaries in distinct settings, which helps prevent overlap and duplication. In the cases where overlap could occur, ONDCP's review of grant awards made under the programs determined that duplication did not occur over a 3-year period ending in 2013. Further, according to the assessment, the agencies managing overlapping programs have effectively coordinated through interagency collaboration, coordinated grant applications, and other activities. However, ONDCP found that a limited number of programs that provide drug abuse prevention and treatment services to support efforts to address homelessness would benefit from greater coordination. According to ONDCP, it is working to ensure additional coordination in this area by, for example, providing advice and oversight to relevant agencies on improving coordination of drug programs that offer similar treatment and recovery support services to homeless clients.

Enclosure

#### Question submitted by Senator Rob Portman

- 2. You indicated in your written statement that the Office of National Drug Control Policy (ONDCP) has not achieved one of the seven strategic goals since ONDCP's 2010 release of its Strategy. What has been the greatest impediment to achieving these strategic goals?
  - a. Are the internal or external impediments to ONDCP?
  - b. Are the goals achievable and/or realistic?
- a. As of May 2016, ONDCP and federal agencies had not fully achieved any of the seven 5-year goals established in the 2010 National Drug Control Strategy. In our 2013 report, ONDCP officials noted that a variety of factors—both internal and external— could affect achievement of these goals, such as worsening economic conditions, changing demographics, or changing social or political environments; the passage of state laws that decriminalize marijuana use or allow its use for medical purposes; failure to obtain sufficient resources to address drug control problems; insufficient commitment from agency partners; and the need for new initiatives or activities beyond those that are under way or planned.

We also reported in 2013 that ONDCP established the Performance Reporting System (PRS) to monitor and assess progress toward meeting Strategy goals and objectives. We found that the 26 new performance measures established in the PRS were generally consistent with effective performance management and useful for decision-making. For example, the PRS report includes a dashboard with meaningful indicators of progress and clear targets. According to ONDCP's 2015 PRS report, impediments to achieving the Strategy's goals and objectives include perceptions that marijuana use is not harmful, challenges with integrating substance abuse treatment services into mainstream health care, and challenges with working with partner countries to reduce drug cultivation and production, among others.

Further, based on federal data, the prevalence of marijuana use in comparison to other drugs is a key driver affecting the Strategy's goals related to illicit drug use. For example, according to the Substance Abuse and Mental Health Services Administration's National Survey on Drug Use and Health, the rates of reported past-month marijuana use among 18 to 25 year olds increased by 8 percent from 2009 to 2014, while the rates for illicit drugs

Page 3

<sup>&</sup>lt;sup>5</sup>GAO-13-333

#### Enclosure

other than marijuana decreased by 24 percent. In addition, opioid use—prescription drugs and heroin—is a key driver affecting the goals related to reducing the consequences of drug use. For example, according to the Centers for Disease Control and Prevention, the majority of drug overdose deaths in 2014 involved opioids.

b. We reported in 2013 that ONDCP officials responsible for overseeing the development of the 2010 Strategy stated that they established the Strategy's seven quantitative goals based in part on what they considered could realistically be achieved within designated time frames, among other things. Nonetheless, these officials said that the goals are aggressive given that drug use trends for some of the measures were increasing prior to their establishment. ONDCP officials stated that the office will work with the next administration to develop a new National Drug Control Strategy. It remains to be seen what goals will be established, but making progress towards such goals is a complex and multi-faceted effort that requires changing the behavior of millions of people and involves numerous federal agencies working in the fields of medicine, law enforcement, intelligence, corrections, and diplomacy.

# ROUNDTABLE: EXAMINING ALTERNATIVE APPROACHES

### WEDNESDAY, JUNE 15, 2016

U.S. SENATE,
COMMITTEE ON HOMELAND SECURITY
AND GOVERNMENTAL AFFAIRS,
Washington, DC.

The Committee met, pursuant to notice, at 10:02 a.m., in room SD-342, Dirksen Senate Office Building, Hon. Ron Johnson, Chairman of the Committee, presiding.

Present: Senators Johnson, Portman, Lankford, Ayotte, Sasse,

Carper, Tester, and Peters.

#### OPENING STATEMENT OF CHAIRMAN JOHNSON

Chairman Johnson. Good morning. This roundtable will begin. The reason we are having this roundtable, of course, is that the scourge of drug abuse is an incredibly serious, but also an incredibly difficult problem. There is a somewhat unusual path that really led to today. When I took over the Chairmanship, working with Ranking Member Carper, the first thing we did was develop a mission statement for the Committee: to enhance the economic and national security of America. And, then we laid out some priorities.

On the homeland security side, the prorities are: border security, cybersecurity, protecting our critical infrastructure, and countering Islamic terror. We have really focused an awful lot on border security. We have held 18 hearings on different aspects of it and published an approximately 100-page report.

I think, Senator Carper, you are at least sympathetic to what I have come up with as the primary reason—the primary root cause—of our unsecured border: America's insatiable demand for drugs.

Now, trust me, I did not go into those hearings thinking that would be my conclusion. Again, there are many causes, but this is

a primary cause.

I did a national security swing through Wisconsin in early January. Every public safety official I talked to—whether it was State, local, or Federal—I always asked them the question, "What is the biggest problem you are dealing with here in your communities?" Communities large and small—without exception—said that the biggest problem was drug abuse, because of the crime it creates, the broken families, the broken lives, and the overdoses that we are seeing.

And so, if you take a look at the nexus of so many problems facing this Nation, our unsecured border—which is a problem, not

only in terms of us being able to try and figure out how to solve the immigration problem, but also for public health and safety as well as for national security. And then, you take a look at how, in every city—certainly in Wisconsin's cities—I will say in America, it is true—and I think it is probably pretty universally true—that the number one issue that public safety officials are grappling with is drug abuse. That is a big problem.

Now, we are going to have a pretty broad spectrum of ideas and different approaches as to how to address this unbelievably difficult problem. I will just finish with a little story here and then I will

turn it over to Senator Carper.

This never came up when I was running in 2010—what my thoughts are on the legalization of marijuana—or the decriminalization of marijuana. It never came up during the campaign. About 2 years into my term, I was in front of a group of a couple hundred seventh grade kids. And, one of these seventh graders stood up and said, "Senator Johnson, would you support the legalization of marijuana?"

We are holding this hearing because this is a very complex issue. And, like Prohibition, which fueled the gangs back then, what we are doing right now is fueling the drug cartels, which is the reason

why we have an unsecured border.

So, I am sympathetic to the broad spectrum of arguments here, but, at that moment, while I could have punted—I could have kicked the can down the road—I could have dodged the question, but I decided to make a decision in front of that audience. I said, "No, because of the terrible signal it would send to kids your age." And, there is the dilemma.

So, again, I am looking forward to a good discussion here to laying out the realities. I talked a little bit before I struck the gavel here. Let us talk about the significant problem. Let us talk about what the reality of the situation is and let us try and move forward with some approaches that make some sense.

With that, I will turn it over to Senator Carper.

### OPENING STATEMENT OF SENATOR CARPER

Senator Carper. Thank you, Mr. Chairman. We are delighted to see you all. Thank you so much for coming. Thank you for what

you do with your lives.

I come at this issue with a variety of hats on. I am a retired Navy captain and I spent a long time in the military. And, we focused a good deal, in those years, on drugs and trying to make sure that the folks that are serving us—in my case, in airplanes—were not using drugs that are illegal. And, if they were, we had a policy that basically said that, if you are doing drugs, you are out of here. So, I come at this as a recovering Governor, who focused a fair amount on trying to make sure that kids were born to parents who were ready to raise them and to be good parents with high expectations involved in the education of their children—and that kids had good role models, mentors and stuff like that. So, I think one of the reasons why people end up using drugs—and I spent plenty of time in prison—just as a visitor—but I have been to every prison in Delaware and talked to inmates. And, I asked every one of them, "How did you end up here?" For the most part, their stories are

similar: "I was born and I never knew my dad. My mom was young when I was born. I started school behind. I started kindergarten behind everybody else who could read. They knew letters, I did not. And, I just fell further and further behind and ended up dropping out of school. And, I cannot support"—they would say, "I want to be happy. I want to feel good about myself. How do I do that? I got involved with drugs. I got caught and I went to prison." Again and again and again, that is the way it happens in my State.

People serve their time, they get out, and they go through, maybe, work release. Eventually, they are back in their communities and back in their neighborhoods, with the same influences, and then, the same problems. So, it is a familiar story. And, it is

not just in Delaware. It is across the country.

I have taken a special interest in three countries in Central America: Honduras, Guatemala, and El Salvador. Some of us have been down there together. The Chairman and I have been to at least a couple of those countries together. And, I started focusing on them when I would go to the border to see what was going on, with respect to all of these tens of thousands of folks coming into our country illegally. And, what do we need to do to keep them out? And, we have built walls and we have built fences. We have over 20,000 U.S. Customs and Border Patrol (CBP) agents arrayed along the border. We have drones in the air. We have aerostatstethered aerostats. We have P-3 airplanes, we have helicopters, and we have boats. You name it. We have spent a quarter of \$1 trillion to keep people out over the last 10 years—to keep them from coming, mostly, from those three countries into the United States. A quarter of \$1 trillion. We spent less than 1 percent of that in order to address the root causes of their misery, which we are complicit in creating.

So, for me, a root cause was really addressing the lack of rule of law in these countries, the lack of opportunity, the lack of entrepreneurial spirit, and the lack of a workforce. So my focus was: How do we address those countries, kind of like a Plan Colombia, if you will, for those three countries? And, they created something for themselves called the "Alliance for Prosperity." It is being funded, rather significantly, with our support and the support of the President and the Vice President.

But, as the Chairman suggests, that is not really the root cause. The root cause is our insatiable appetite for drugs. So, we are complicit in their misery. How do we reduce that complicity? We do that by reducing our demand for the drugs that travel through those countries.

So, this is something we all have—everybody on this Committee has thought a lot about it and we are interested in finding out what works and doing more of that—and what does not work, doing less of that.

Thank you so much for being here today and for being an important part of this conversation.

Chairman JOHNSON. Thank you, Senator Carper.

One thing I missed in my opening statement—I just wanted to lay out a couple of facts. The United States has spent an estimated \$1 trillion on the War on Drugs over the last 40 years. There are, roughly, 27 million illegal drug users in the United States. In 2014,

there were 47,000 drug overdoses—an average of 129 people per day. So, that gives you kind of a sense of the magnitude of the problem. On an annual basis, we probably spend about \$31 trillion on the War on Drugs. And, certainly, my conclusion would be that we are not winning that war. So, this is really about looking at different approaches. I had a nephew die of a fentanyl overdose in January. So, this affects every community in America.

With that, again, I want to thank the witnesses. I know this has been kind of an on-again, off-again process. I know, Dr. Mac-Donald, you probably had a pretty fun flight. I love those red-eye flights myself. I truly appreciate you doing that. We will start off with Dr. MacDonald. We would like to give you guys about 5 minutes to do an opening statement, then we will kind of get into a

free-flowing discussion.

Our first witness is Dr. Scott MacDonald. He is a lead physician at the Providence Crosstown Clinic in downtown Vancouver, British Columbia. Crosstown is the only clinic in North America that provides opiate-assisted treatment for people with severe opiate use disorders. Dr. MacDonald.

Senator CARPER. Did you fly in this morning?

## TESTIMONY OF D. SCOTT MACDONALD, M.D.,¹ PHYSICIAN LEAD, PROVIDENCE CROSSTOWN CLINIC

Dr. MACDONALD. Yes, I flew in this morning.

At Providence Crosstown Clinic, 140 people are receiving daily treatment with injectable opioids, an intensified form of medication-assisted treatment (MAT). And, I want to thank the Government of British Columbia for supporting our clinic and making the delivery of this treatment possible in Vancouver. About half of the patients are receiving treatment with hydromorphone, a widely available licensed pain medication. The remainder receive diacetylmorphine.

Our patients can come up to three times a day for treatment. Half come twice per day and the other half come three times a day. About a third take a small dose of methadone with their last session at night. All of these patients have a chronic disease—a medical condition for life that can be successfully managed. Treatment prevents withdrawal and stabilizes their lives. Here, they have an opportunity to deal with underlying psychological and mental health issues. In time, some will step down to less intensive treat-

ments or gradually wean themselves off.

These patients were all participants in the Study to Assess Longterm Opioid Medication Effectiveness (SALOME). SALOME was a follow-up to the North American Opioid Medication Initiative (NAOMI), which showed that diacetylmorphine, or prescription heroin, is superior to methadone in that group of patients that continue to use illicit heroin despite attempts at the standard treatments. A small group of NAOMI folks received hydromorphone and, in a surprise finding, these experienced drug users could not distinguish which treatment they received—and the beneficial treatment effect was preserved in the hydromorphone arm.

<sup>&</sup>lt;sup>1</sup>The prepared statement of Dr. MacDonald appears in the Appendix on page 403.

Some people suffering from severe opioid use disorder need an intensified treatment like this. While methadone and buprenorphine are effective treatments for many people and should remain the first-line responses, no single treatment is effective for all individuals. Every person left untreated is at high risk for serious illness and premature death.

Despite the positive results for diacetylmorphine, as published in the New England Journal of Medicine (NEJM), only Denmark acted on these results and incorporated prescription heroin into

their health system.

But, it did lead to our follow-up study and testing of hydromorphone, or Dilaudid, as a potential treatment. And, hydromorphone has the advantage, over diacetylmorphine, of al-

ready being a licensed pharmaceutical.

The SALOME group underwent stringent testing and controls to show the need for treatment. For them, the standard treatments, Suboxone and methadone, had not worked and most had multiple prior attempts at treatment. They had used injectable opioids for at least 5 years and, on average, for 15 years. They had medical and psychological health problems. They had nearly universal involvement in the criminal justice system. In short, we were able to recruit the appropriate patients for an intensified treatment like this.

At the start of the study, they were using illicit opioids every day. By 6 months, their use was down to just 3 to 5 days per month. Nearly 80 percent were retained in care and that high rate continues to this day. At the outset, they were engaged in illegal activities, on average, 14 days per month. With treatment that reduced to less than 4 days. This study was published this past April in the Journal of the American Medical Association (JAMA) Psychiatry and I would like to acknowledge Health Canada for allowing us to investigate this important scientific question and for allowing a number of our patients to continue on diacetylmorphine, those who need it, on a compassionate0use basis.

Supervised use of injectable hydromorphone is indicated for the treatment of severe opioid use disorder. And, we are using injectable hydromorphone as a medication-assisted treatment, an intensified medical intervention as a part of the treatment continuum. Severe opioid use disorder is a chronic disease that needs to be managed long term, just like Type 2 diabetes or hypertension. Without our treatment, this group's only option would be illicit

opioids through the narco-capitalist networks.

We still have people who use drugs on the street in Vancouver, but we have another option, in addition to needle exchanges: supervised consumption rooms or injection sites. These are legally protected places where drug users consume pre-obtained illicit drugs in a safe, nonjudgmental environment. Vancouver has two such sites. These sites provide an important entry point for people into medical care and substance use treatment. They also provide value over needle exchanges, alone, as needles and equipment are all contained onsite and needles will not end up in playgrounds or schoolyards, where they could cause injury.

To contrast with these harm-reduction interventions, at our clinic, Crosstown, we are providing a medical treatment. Providing

injectable medication in a specialized opioid clinic, under the supervision of medical professionals who are not only ensuring the safety of the patients and the community, but are also providing com-

prehensive care.

We are able to use hydromorphone "off-label" in Canada for the treatment of substance use disorders, but some jurisdictions restrict its use to pain. I have seen remarkable transformations in our patients. Some of our patients have already returned to work or school

Supervised injectable hydromorphone is safe, effective, and costeffective. It is a useful tool when the standard treatments are not effective. Treatments are dispensed within our opioid treatment clinic and prescribed on a "dispensing basis" onsite. In this setting, hydromorphone is not susceptible to diversion and an exemption for its use could be considered in jurisdictions where its use to treat substance use disorders is prohibited by law.

In British Columbia, we need every tool in the toolkit to rise to the challenge of the opioid epidemic. Injectable opioid-assisted treatment in supervised clinics is one effective approach. Supervised consumption rooms, like Insite, in Vancouver, are valuable for public health. Of course, we would like to see an end to people's dependence on heroin but, for those already suffering, it is essential to provide care—and care based on evidence.

Chairman JOHNSON. Thank you, Dr. MacDonald.

Our next witness is Dr. Ethan Nadelmann. Dr. Nadelmann is the founder and executive director of the Drug Policy Alliance (DPA), the leading organization in the United States promoting alternatives to the War on Drugs. Dr. Nadelmann.

# TESTIMONY OF ETHAN NADELMANN, PH.D., 1 EXECUTIVE DIRECTOR, DRUG POLICY ALLIANCE

Mr. Nadelmann. Thank you, Senator Johnson, for initiating this roundtable and for inviting me. I have been waiting a long time for the opportunity to share some of my thoughts with members of the U.S. Senate.

Let me just be frank. I fundamentally believe that the War on Drugs, in this country and around the world, has been a monumental disaster. It has been a disaster in public health terms. It has been a disaster in fiscal terms. And, it has been a disaster in human rights terms.

I appreciate you bringing up the analogy to alcohol prohibition before because, if you look back at alcohol prohibition, some of what led the Nation to embrace the 18th Amendment, back then, was the notion that alcohol was a horrific drug that was causing immense devastation in this country and what have you. And, people embarked upon the experiment of national Prohibition. What happened? We saw Al Capone and rising levels of organized crime. We saw all sorts of violence and bootleggers at the borders with Canada and Mexico—and all around the country. We saw overflowing jail cells and courthouses. We saw hundreds of thousands of Americans being blinded, poisoned, and killed by bad bootleg liquor—liquor that was more dangerous because it was illegal. We

<sup>&</sup>lt;sup>1</sup>The prepared statement of Mr. Nadelmann appears in the Appendix on page 410.

saw people talking about nullifying elements of the Bill of Rights to the U.S. Constitution. We saw levels of corruption that were unparalleled, in many parts of the country. We saw Chicago and other towns essentially taken over by the narco-traffickers of the day the alcohol bootleggers. And, we saw a rising level of cynicism and disregard for the law.

Do you know what else we saw? We did not see any reduction in alcohol consumption. At the beginning, it looked like it was going to drive down alcohol use, but, by the end of alcohol prohibition, alcohol use was as high as it had been at the beginning. And, the major switch was that people had shifted from beer and wine to hard liquor—oftentimes underground hard liquor that was more dangerous. That is when the country came to its senses and said,

"Enough of this. We are repealing alcohol Prohibition."

At the same time, many countries in Europe that were flirting with Prohibition, they looked at us—they saw Al Capone, they saw all of the money going down the drain, they saw all of the failures, and they saw all of the hypocrisy. They said, "We are not going to do that. We are going to crack down on booze with higher taxes, tougher licensing restrictions, and public education campaigns." you know what happened in Europe with that? Without prohibiting alcohol, they drove alcohol use and alcohol abuse down further than we did at the beginning of alcohol Prohibition in the United States. And, rather than putting billions of pounds or guilders—or whatever it might be—into the hands of traffickers and gangsters, they put it into government treasuries. It seems to me, that was the better approach then. There is a lot to be learned.

Fast forward to right now. Drug prohibition has been a monumental disaster. You mentioned what is going on in Mexico and places like that—in Afghanistan—what is going down in Colombia and parts of Central America. They are like Al Capone and Chicago

times 50. It is the result of a failed Prohibitionist policy.

Then, you look at what is happening in American prisons. What are we, less than 5 percent of the world's population? But, we are almost 25 percent of the world's incarcerated populations—the highest rate of incarceration in the history of a democratic society—a rate of incarcerating black people, in this country, that puts South Africa—during apartheid—or the Soviet gulags to shame. It is nothing to be proud of and it turned out to be remarkably inef-

fective in dealing with the problems of drug abuse.

Then, you look at the public health side. When human immunodeficiency virus (HIV) started to spread among injecting drug users back in the 1980s, those countries—not just Australia and the Netherlands, but Prime Minister Margaret Thatcher's Britain—decided that needle exchange programs were the right thing to do. They succeeded in keeping their HIV rates among injecting drug users to under 5 percent. In America, we said, "No way, no way, no way." And, we ended up killing 100,000 to 200,000 people in this country—not just injecting drug users but their lovers and their kids as well. That was a disaster as well.

So, I think that this "War on Drugs" has just served this country so poorly. I think what happened is that we developed an addiction. It was an addiction to "drug-war" thinking, "drug-war" ideology, and "drug-war" policies. And, right now, finally, thankfully-the country is finally in recovery from the "drug-war" addiction of our

Now, that said, in making the analogy to alcohol prohibition, I think it applies mightily to the issue of marijuana prohibition. And, if I had been coaching that student who asked you that question the day that you spoke in that school, I would have said, "Senator, let me tell you something. Marijuana—I do not see any evidence that the marijuana laws are preventing young people from getting it or any evidence that they are preventing older people from getting it. All that I see is evidence that it is putting a lot of people in jail and costing the government a lot of money. Do you still support a marijuana prohibition policy, knowing that it has been totally ineffective?"

But, with the other drugs, I think this is the way to think about it—and I am going to conclude my comments with this: I think what the best drug policy tries to do is it starts with the understanding that there has never been a drug-free society, more or less, in human history—and there is never going to be a drug-free society. If anything, we are going to see more drugs—legal, illegal, in between, and gray market-in the future-from pharmaceutical companies and underground manufacturers—you name it. Therefore, our challenge is not to try to keep drugs at bay or to build a wall or a moat between this country and others-between our schools and what have you. That has failed. The evidence is in.

What we have to do is to accept the fact, sadly, that drugs are here to stay and that our great challenge is to learn how to live with this so that they cause the least amount of harm possible and, in some cases, the greatest possible good. Therefore, we need to think about drug policy in the following two ways:

First, the optimal drug policy should try to do two things: It should seek to reduce the negative consequences of drug use—the death, the disease, the crime, the suffering, and the devastation of families, individuals, and communities. It should seek to reduce the harms of drugs. And, second, it must seek to reduce the harms of government policies, reduce the mass incarceration, reduce the drug gangs abroad, reduce all of the negative health consequences, and reduce violations of civil and human rights. The optimal drug policy is the one that most successfully reduces both the harms of drugs and the harms of government policies.

And, the second frame—and I will finish with this—I think it is

helpful, because all change, essentially, is incremental in these areas-and most others-to think about our options as arrayed along the spectrum, from the most punitive drug policies, on the one hand, as in Saudi Arabia, Singapore, and Malaysia—cut off your hands, execute you, lock you up, drug test you without cause, and throw you into what are called "treatment camps" that are really prisons—all of the way down to the most free-market, "Milton Friedman-esque," policies with no restrictions, except to keep

The way that we need to think about drug policy is by moving down this spectrum, from the highly punitive overreliance on criminal law and criminal justice institutions, moving incrementally, step-by-step, down this spectrum, but stopping short at the point at which going any further would actually entail real risks to public health or public safety. And, it means being driven by the type of evidence that Dr. MacDonald just made reference to.

When the evidence shows that mandatory minimum sentences are not having an effective deterrent impact, then it is time to reform and repeal those.

When the evidence shows that marijuana has useful medical pur-

poses, it is time to acknowledge that.

When the evidence shows that providing sterile syringes to injecting drug users, through pharmacies and needle exchange programs, reduces the spread of Human Immunodeficiency Virus/Acquired Immunodeficiency Syndrome (HIV/AIDS) as well as hepatitis C—without increasing drug use, it is time to do that.

When the evidence shows that methadone maintenance and buprenorphine maintenance are successful in reducing the harms of addiction and in helping people get their lives together, it is time

to do that.

When the evidence shows that heroin maintenance and safe injection sites reduce all sorts of harms and produce a net benefit, it is time to do that.

With marijuana legalization, we will see. My judgment is that the net benefits of moving in the direction of the sensible regulation of marijuana exceed the risks. That is a judgment and we will see how that works out. But, I think that the evidence, overwhelmingly, suggests it is the right way to go. With the other drugs, we need to move toward the decriminalization and public health approach, focusing—and this is what I will do in my comments later—on reducing the demand and the magnitude for the demand of these drugs. So long as there is a demand, there will be a supply. Pouring money into supply just pushes it from one place to another—like trying to bang down on mercury or step down on a balloon. It is about reducing demand in ways that are driven by the evidence and a respect for basic human decency.

Thank you.

Chairman JOHNSON. Thank you, Dr. Nadelmann.

Now for a slightly different perspective, Dr. David Murray served for nearly 13 years in President Bush's and President Obama's Administrations as Chief Scientist and Associate Director of Supply Reduction in the White House Office of National Drug Control Policy (ONDCP). He is currently Senior Fellow at the Hudson Institute. Dr. Murray.

### TESTIMONY OF DAVID W. MURRAY, 1 SENIOR FELLOW, HUDSON INSTITUTE

Mr. Murray. Thank you, Senator. I, certainly, want to take a moment to give my appreciation for each of you that is persisting in this issue and this problem. It is an urgent issue and it does not get the attention it deserves. And, I want to commend you Senators, who have persisted in careful attention to this issue and are probing for answers for what is, as you identified, the cause of 47,000 deaths of Americans a year—and overwhelming morbidity that is an additional toll.

<sup>&</sup>lt;sup>1</sup>The prepared statement of Mr. Murray appears in the Appendix on page 433.

My perspective, from having worked inside of the government and having looked at the biomedical literature, is that we need to approach drug policy somewhat differently than we have most recently—but, that it can work—that we can save lives and that we can, effectively, transition people into more secure and better lives. The underlying role of substance abuse—of drug use—in driving American pathologies is extraordinary. From homelessness to domestic violence to law enforcement difficulties to national security risks to education failure to the death of our beloved fellow citizens and family members, this is an extraordinary cancer that has been eating at us for a long time.

You will hear arguments—and have heard some of them already—I will probably be an outlier—a resister with regard to certain claims. It is not so much that I do not share the goals of lower amounts of drug use or of a safer, healthier society. It is that I am not convinced that the evidence is as strong as it is sometimes portrayed as, for these methodologies that are sometimes referred to as "harm reduction."

There are claims made about impact that, when you look more carefully, the evidence is actually very weak and relies on self-report and on methodological studies that are very difficult to validate—very difficult to see the actual replicability of them. The evidence is much weaker than you might anticipate, with regard to moving in the direction that has been counseled.

I would point out that we have moved in this direction, in the last  $7\frac{1}{2}$  years, under this Administration. It is a direction that has not strongly applied the strategic lessons of a balanced drug strategy approach and that has weakened and undermined the very office responsible for setting that strategy—and that has moved us down a pathway that approaches harm reduction mentalities. It has led to the enabling of legal marijuana. It has led to discussions about the distribution of harm reduction activities, including supervised injection facilities (SIFs). And, I think we can say that the results that we are seeing are before us and are really quite appalling. The results are disaster, epidemic, and tragedy.

Does the "War on Drugs" work? Well, I would say that that is

contingent on two things.

First, you have to define what is success. And, when you have roughly between a tenth and a sixth of the prevalence rates of illicit substances, such as marijuana—the most widely used—compared to alcohol or tobacco—that is a form of success. You are reducing the disease and its morbidity as well as its impact. When you have one-sixth to one-tenth the prevalence rate, among young people and adults, of the use of a substance, part of that is attributable to the fact that there are social norms against its use and law enforcement sanctions against its use—and that law enforcement can be a powerful partner in referring people into treatment and recovery. And, when we decriminalize or move toward a model of deregulation and so forth, this really does not suffice. It does not answer our needs. It undermines the most effective partner for referring people to treatment. It undermines our hold on prevention, on the norms of non-using of drugs, and, ultimately, it weakens our approach, I believe.

The second contingency is this: drug policy, where it has been effective—and there are models of where it has been highly effective. Reducing the youth use rates of marijuana 25 percent, in the period from 2001 to 2008—that was an achievement. Reducing the use of major drugs, including methamphetamine (meth) and heroin, during that same time period, were major achievements. And, they are almost always attributable to having a bipartisan approach that crosses the aisle, so that it is a unified American understanding

American lives and American risk. At the same time, you cannot be—and my famous story of this, which strikes me as so compelling, is Penelope of Ithaca, the wife of Ulysses. He is sailing for 20 years and she must marry a suitor when she finally finishes a tapestry in front of her. And, when that figure in the tapestry is done, she will be forced to make a decision. But, what does she do every night as she waits for Ulysses? She unravels it, because she does not want it to come to an end.

That is a positive model. But, unfortunately, we have taken the worst of that. We unravel our drug policy almost every 4 or 8 years. We make gains and we have effective strategies. And then, we spend the next period of time reversing ourselves. Under that model, you cannot achieve long-range, sustained goals. We need to

get back to that model of a sustained, bipartisan approach.

So, what am I recommending? We have to acknowledge a couple of things. The urgency before us, at the moment, is opioid overdose deaths. But, we cannot let that drive all of our understanding. It is a, relatively, unique situation because we have, for opioids, methadone-assisted or medication-assisted treatment of various types. We have naloxone, an overdose reversal drug. We have the capacity to do things, like injection facilities, if we move in that direction. I would counsel against it.

These are not available tools for drugs like methamphetamine, cocaine, or cannabis. We do not have the medications. We do not have the methodologies of approach. A comprehensive drug strat-

egy cannot simply focus on the one urgent thing before us.

The second issue is that we have overwhelmingly focused, in the last little while in this discussion today and in the Administration's perspective on the consequences of the opioid epidemic, on those who have the disease—those who need treatment. Those who are suffering already—how are we going to help them? Compassion requires that we do so, but we have to address the principal urgency, if you are thinking medically, thinking epidemiologically, or thinking in terms of sound public policy. You have to shut off the entry into that state by protection—prevention. You have to find the mechanisms of preventing people from falling into the state of addiction and dependency, where we then need to try to rescue them from overdose constantly with naloxone and within treatment facilities. This is too late. We can do things for them. Recovery is possible. But, if we are not urgently addressing the underlying mechanisms that are driving people into this, we are missing our policy opportunity and we are committing a tragedy.

What must we do? Well, one thing would be to not enable the legalization, the normative acceptance, and the reduction in perception of risk regarding drugs. And, that is what legalization precisely does. It undermines the fabric of resistance and the capacity to prevent. And, I would offer—and we will have time to discuss, so I will not put all of the cards on the table at this point. But, I would say that there is a superior means of approaching this and it is the one piece of public policy that was, actually, eliminated—or neglected—in the last 7 years. We have to focus on the drug supply—the availability of the drugs, themselves. The Administration recognizes this, with regard to prescription opiates, which are the number two drug problem in America, in terms of prevalence rates—behind marijuana—which should tell you, by the way, that regulation, legalization, and medical practice are not sufficient to make the problem go away, because we have an enormous problem with regulated, formerly acceptable medical practice prescription opiates. They are killing 18,000 people a year, according to the last count. So, that is not sufficient, somehow.

At the same time, we have seen the supply, as it is being reduced from medical practice, showing up, as this rate is starting to slow. What about cocaine? Cocaine from South America—from Colombia—was reduced 76 percent between around 2003 through around 2010 2011. The consequences were major in the United States. People got better. People got into recovery. Overdose deaths from cocaine dropped significantly.

Well, guess what has happened in the last 2 years in Colombia? Cocaine is taking off again and it is coming right back at us. And, it will soon be right back at our throats. As the supply increased,

overdose deaths are starting to climb once again.

And, the third example—and the one I think that we are not sufficiently paying attention to—is heroin—the illicit opiate. Twenty-six metric tons were produced out of Mexico—our primary source—back in 2013. The assumed need for the use of heroin in the United States was never more than 18 metric tons. What were they doing with this abundance? A year later, it rose to 40 metric tons. That is an extraordinary amount of a deadly substance that is being manufactured and sent across the border. And, as of 2015, it has now skyrocketed up to 70 metric tons. Where is it going? Who is it infecting? Why are we not doing more with international partnerships, interdiction, and border protection? If you are thinking epidemiologically—and this is a disease—you have to drive down the presence of the pathogen—the thing that infects people. It is a behavioral disease and the pathogen, in this instance, is the illicit market of heroin that killed 10,500 people in 2014.

And, now, I hate to make a worse statement, but there is worse. We are not done yet. The deaths that we have seen, which have driven the news coverage and have driven our urgencies and concerns are based on 2013 and 2014 production. It has already surpassed that. It is already coming now at a 170 percent increase and it is being added to by synthetic opioids. Look out. Hang on to your

hat. They are going to kill many more.

The fentanyl seizures at the border—fentanyl is measured in micrograms for a dose. When first responders open a package, they are at risk for dying. It is that potent—that lethal. And, it is growing in the tens to hundreds of pounds, which are now showing up at our border as illicitly manufactured and it is being laced into heroin. I am sorry to say this, but next year's death toll will prob-

ably be worse—and the year after, because we have not sufficiently applied the measures that are absolutely requisite to shut off this pathogen that is killing many Americans. We need a balanced strategy. We need to have treatment and recovery. We need to have prevention in our schools for young people. But, we have to address the sheer magnitude of the deadly supply that is driving this engine. And, I would argue—and I will end with this—when we do approach supply and reduce its capacity to entangle us, we thereby give power to treatment and recovery as well as to prevention. We make them more possible and stronger—and in the presence of law enforcement and drug courts and referrals to treatment, we have a powerful partnership that we unfortunately let slip through our grasp—and we are now paying the price.

Chairman JOHNSON. Thank you, Dr. Murray.

Our final witness is Chief Frederick Ryan. Chief Ryan has been a police officer since 1984 and has served as Chief of Police in Arlington, Massachusetts since 1999. Thank you for your service and thank you for coming here.

### TESTIMONY OF FREDERICK RYAN,¹ CHIEF OF POLICE, ARLINGTON, MASSACHUSETTS

Chief Ryan. Good morning, Senator and honorable Members of the Committee. Thank you for having me. Again, my name is Frederick Ryan. I am Chief of Police in Arlington, Massachusetts. I also serve as the vice president of the Massachusetts Major City Chiefs of Police Association (MMCC), and I am on the board of the Police Assisted Addiction Recovery Initiative (PAARI), which was founded out of Gloucester, Massachusetts.

I am here to talk about the opiate epidemic that has swept across America. But, before I get into my prepared comments, I wanted to share with the Committee a text message that I got this morning, while I was in the other room changing into this lovely uniform that I am wearing. That message was from a young man, who our officers had arrested many times for crimes associated with his drug addiction. After affiliating with the Police Assisted Addiction Recovery Initiative, we referred this young man into treatment, rather than to the criminal justice system. He is now coming up on a year of sobriety. And, he texted me to thank me for helping him and for coming here today to speak before this Committee. I think that really illustrates what I am going to talk about, in terms of police referral to recovery.

My views are shaped by what I have seen and done as a police officer on the streets of the Commonwealth of Massachusetts for more than 30 years and by what I have learned from individuals suffering from the disease of addiction. I will summarize my points as follows:

We, as law enforcement, cannot solve this problem alone—and we must stop telling America that, with just some more resources, we can do so. In fact, a strategy that relies largely on law enforcement and arrest, especially aimed at low-end users, only fuels the epidemic and complicates the chances for long-term recovery.

<sup>&</sup>lt;sup>1</sup>The prepared statement of Mr. Ryan appears in the Appendix on page 470.

Every dealer we arrest and take off of the streets is quickly replaced by one or more rivals who sometimes compete for that territory by cutting their prices, increasing the supply, and marketing new and even more dangerous products, such as fentanyl-laced heroin. This often makes the situation worse than it was before the arrest.

Every person with a substance abuse problem that I have talked to has said that arrest and prosecution has never been a deterrent. The physical and psychological need for the substance was far stronger than any seemingly rational deterrent that the police and the criminal justice system posed.

Those suffering from substance use disorders are not our enemies. They are our sons, our daughters, our neighbors, and our nephews. And, this notion that we are at war with them must be abandoned.

The solution to the epidemic relies on reducing the demand for opiates and other substances. This epidemic was built one drug-dependent victim at a time. And, the solution, while complex and multidisciplinary, needs to be heavily based on modern evidence-based treatment options. There are really only two choices here: long term treatment or death.

Police officers and Chiefs of Police, throughout our country, are stepping forward to call for change. Through the leadership of my dear friend and colleague, Chief Campanello up in Gloucester, Massachusetts and businessman John Rosenthal, from Boston, the Police Assisted Addiction Recovery Initiative was founded as a private nonprofit.

And, by the way, as an aside, after it was founded by businessman John Rosenthal, he lost a nephew to the epidemic as well.

To date, we have more than 120 police departments that have affiliated with PAARI. And, we have treatment providers, in 28 States, that are offering scholarships to those suffering from substance use disorders. These police departments, and many others, are joining PAARI every day and have stopped arresting and criminalizing addiction and incarcerating people merely because they suffer from a substance use disorder.

I want to tell you how and why I came to these conclusions. You probably expect that a 30-year cop might have a different perspective on these matters. Simply stated, we are not at war with our communities—nor should we be.

The epiphany, for me, that we had to have a philosophical change, came when I was being briefed by our crime analyst on trending overdose fatalities in our jurisdiction. She displayed it on a spreadsheet for us. One very young lady, who, by all standards of measure, was an American success story—college educated—her mom a school teacher and her dad a firefighter—overdosed on heroin. Police and emergency medical services (EMS) responded, reversed the overdose with nasal naloxone, and she was transported to a Boston hospital. One week later, the same young lady overdosed—a 911 call, police and EMS response, naloxone reversal and transportation to a Boston area hospital. Seven hours later, she overdosed. Fatality. If that does not illustrate that these deaths are not only predictable, but also preventable, nothing does. This overdose death was predictable and, therefore, preventable. And, it

highlighted the fact that we, the police department, possess the identities of those at the highest risk of a fatal overdose-those who have previously overdosed—and that, with every non-fatal overdose, there is an opportunity to do an inventory, to get individuals into recovery, and to get the family and their loved ones the resources they need to ensure survival.

Further, this death depicted the real fact that many emergency rooms (ERs) in America do not have the desire or the capacity to treat overdose victims in any meaningful way. Medical and substance use disorder treatment programs cannot be allowed to continue discharging, to the street, sick people at risk of immediate death. We would not tolerate this for any other chronic disease,

such as cancer, heart disease, or diabetes.

This experience led the Arlington Police Department to be the first in the Nation to affiliate with PAARI. What was a desperate response to an epidemic threat in two distinct communities in Massachusetts—Gloucester way up on the north shore and Arlington in the metropolitan Boston area—resonated swiftly and broadly across the region and, indeed, the Nation. And, legislation is moving rapidly through many State legislatures, empowering police-assisted recovery initiatives and focusing on reducing the demand for opiates by increasing access to treatment and prevention.

Essentially, there are two models: the Gloucester and the Arlington model. The Gloucester model invites those suffering into the police department. And, they connect them with a volunteer "angel" that helps them navigate the system in recovery. The Arlington model—we have a social worker who does outreach to the known population of people suffering from substance use disorders and works with them and their loved ones to put in place an intervention plan to plan for the next overdose, so that we can prevent it from being a fatality. And, I will talk, in a minute, about the

early data trending.

In 2014 and early 2015, in our jurisdiction, we were averaging one fatality per month on heroin overdoses-many more non-fatal overdoses and reversals. Following the implementation of our program, on July 1, 2015, we went 8 months with only one fatal overdose. Sadly, while I was preparing the testimony that I am speaking about today, in my office on Sunday morning, the radio call went out and our officers responded to an overdose, while I was typing this testimony. And, I listened to the radio carefully and, at that scene, a family member had dispensed nasal naloxone and saved their family member. Likely, the naloxone was dispensed by the Arlington Police Department.

Through the Boston University (BU) School of Public Health, we are tracking all of our program participants. And, although it is early, we are seeing significantly lower relapse rates among the participants in our pre-arrest diversion programs, both in Glouces-

ter and Arlington.

The Arlington and the other police-assisted recovery initiatives are only a year old—and it is far too early to draw conclusions. After all, the disease of addiction is a chronic condition that often involves relapsing. I think, maybe, we will talk later about what success looks like, but we have to prepare for relapse. Nevertheless, there are important markers that demonstrate we are on the right

We are saving lives and we are reducing crime—crimes that are often associated with drug addiction—burglary, shoplifting, and other quality-of-life crimes. Some jurisdictions are reporting as

much as a 25-percent reduction for those crimes.

Our new approach is restoring and building the community's trust in police—and this is of critical importance to your Committee. In this very challenging time in the history of policing in America, where the trust has been lost in many jurisdictions, programs, such as the one I am speaking of, have been incredibly valuable at rebuilding the trust in the community and its police department—and many residents are shaking their head, saying, "Finally, the cops got it." We have to stop arresting people because they have an addiction.

Stigma and shame inhibit patients and their families from seeking treatment and support. The fact that law enforcement is recognizing this as a disease that needs to be treated into remission, rather than a crime that requires arrest and incarceration, has had

a positive impact in communities throughout America.

To that end, I do not, personally, respond to fatal overdoses. We had the brother of one of our police officers fatally overdose. I went out to the scene to offer my condolences to his mom and the family. The young man was, literally, dead on the other side of the wall and his mom looked at me and told me, "Thank you for what you are doing around addiction in the community. We were just too ashamed to reach out for help." And, it is that shame and that stig-

ma, which is killing people, that we have to set aside.

You will notice that, in my testimony, I never labeled those suffering from substance use disorders as "junkies" or "addicts." And, I otherwise refrained from labeling these people—these members of our community. The very real stigma associated with addiction is among the greatest barriers to success and it has inhibited the power and the might of the U.S. Government from bringing a real sense of urgency to the opioid addiction epidemic and from adopting meaningful and effective policy changes to address the demand side of this public health crisis.

Today, in Massachusetts, we lose an average of four people a day to opiate overdoses—and it is projected that more people will die this year from overdoses than from automobile accidents. It is time that we bring a true sense of urgency to this public health epidemic and that we unleash the might of our government to address the demand side of the opiate crisis. And, municipal police departments and PAARI partners across this country are willing partners in that solution. As I stated earlier, there are only two choices: longterm treatment or death. Clearly, we all know the answer that we want. I look forward to getting started on this work with the Committee, today. And, I thank you for the invitation to speak here, today.

Thank you, Senator.

Chairman JOHNSON, Thank you, Chief Ryan,

Obviously, we have some effective advocates for the various positions here. And, I truly appreciate the excellent testimony here.

I am going to be here for the entire roundtable, so I guess what I would like to do is to turn it over to my colleagues. And, we can do it—again, I want this to be a free-flowing discussion. I do want to keep answers relatively short. It looks like all of us—our witnesses can, certainly, again, be effective advocates, but let us keep the conversation and discussion relatively short. Let us keep the answers clipped—and the questions as well.

We will start with Senator Portman.

### OPENING STATEMENT OF SENATOR PORTMAN

Senator Portman. Thank you. And, first, thank you for having the roundtable. And, to all four of you, thank you for your important work in this field. As you know, the Senate has been grappling with this. We spent  $2\frac{1}{2}$  weeks on the floor with this legislation, called the Comprehensive Addiction and Recovery Act (CARA). We spent 3 years putting it together. We had five conferences here, in Washington. Some of you participated in those. We brought in experts, in various areas, to try to figure out how to get at the very issues you are talking about—dealing with this, not as a drug problem, but as a public health problem, acknowledging that this is an illness, this is to be treated as a disease—trying to take away the stigma, which, Chief Ryan, you have talked about—which I agree with you is part of the reason people are not seeking treatment. There are other reasons as well.

I am someone who is frustrated, because I have been at this a long time. Twenty-two years ago, a constituent came to me, when I was in the House of Represenatives, and said, "My son just died. What are you going to do about it?" And, I was fully armed with all of the statistics—\$15 billion a year on interdiction and eradication of drugs as well as on prosecutions and incarceration. And, she said, "What are you doing for me in my neighborhood?" And, that led to a whole series of thinking and, frankly, to a different position on my part, in terms of focusing more on the demand side. And, we did pass a number of bills, the Drug-Free Workplace Act of 1988, the Drug-Free Media Campaign which I was proud to be the author of—but also the Drug-Free Communities Act of 1997. We sent out \$1.3 billion, supplying 2,000 community coalitions around our country, including one I chaired in my hometown for 9 years—and, which I was on the board of before I ran for this job. I am still very involved with it.

I think CARA addresses much of what you are talking about. It will not solve the problem. Washington is not going to solve this problem. But, it does focus on, primarily, four things. One is the notion of placing much more emphasis on prevention and education. And, David, you talked a little about that—the importance of not taking your eye off of the ball—and, I think, that is one of the problems we have had. When we solve a problem—we had cocaine solved, you will recall, back in the 1980s. And, thanks to a basketball player at the University of Maryland (UMD), everybody thought, "Cocaine is the issue, we are going to focus on this." When Len Bias died, there was a lot of emphasis and focus. As soon as you take your eye off of the ball, it is something else.

You mentioned methamphetamines here today. You mentioned cocaine coming back. I would tell you that overdoses in my home

State of Ohio, we are starting to see more cocaine, we are starting to see more meth coming back. And, we thought we had sort of turned the corner there. So, every time you take your eye off the ball—I agree with what was said here today—something will crop

back up again.

So, I think there is a growing consensus around this issue of treating addiction like a disease—removing the stigma, so people get treatment—and focusing more on demand, rather than just focusing on the supply side. And, by the way, look at where the money has gone. The Drug-Free Communities Act of 1997 is part of this, but there has been more money placed on the demand side. I would say that it is still not enough, because I think this will—unfortunately, it is not going to be solved at the border. If it is not, in my view—and I am not, necessarily, speaking for my colleagues here, on either side of the aisle, but we are not going to be able to solve this problem by building a bigger wall or by stopping it at the border—because methamphetamines can be made in the basement—by the way, so can fentanyl. Fentanyl is a synthetic form of heroin that can be made by a chemist—and is.

So, I have three questions for you. One is with regard to medication-assisted treatment. It sounds like, Dr. MacDonald, you have had some success in, essentially, using synthetic heroin to keep people stabilized—and they have gone back to work. You did not mention what your percentage is. I would love to hear that. You did say that, by dealing with the underlying psychological and mental health issues, some will step down to less intensive treatments and gradually wean themselves off. And, some are back at work and back with their families—and, I assume, into a life where the drugs are not everything. Can you give us some sense of what the percentage is there? And then, also my question to you all is: What are some other potential medical breakthroughs, here? The one that we are using a lot in Ohio—we have 12 pilots right now—is Vivitrol. And, the notion is that you have this blocking of the craving, rather than a synthetic form of an opioid—or an opioid, in the case of methadone or Suboxone. What else do you see out there? And, what do you think about Vivitrol or the other drugs coming on?

And then, finally, how about pain medications? Four out of the five heroin addicts, in Ohio, started on prescription drugs. And, prescription drugs, as was said by all of you, are legal, prescribed drugs. I could not agree more with what David Murray said about the perception of harm. All of the evidence shows this. If you show there is a perception of harm, you will have fewer, particularly young people, getting into this. But, what is the perception of harm when a doctor gives you 80 Percocets after you get your wisdom teeth taken out? And, I know two parents back home—two parents who lost their child, because a child went in, as a teenager, to get their wisdom teeth taken out and ended up getting addicted to prescription drugs—and they moved to heroin and overdosed.

So, how about pain medication? When was the last time there was a new pain medication to come on the market? Why are we using prescription narcotic drugs to deal with things like the extraction of a wisdom tooth or even a sports injury, when there has

to be much more targeted ways in which to deal with that pain and pain management in general?

So, those are the questions I have. And, I would open it up to

everybody.

Dr. MACDONALD. We have only had a treatment program, in Vancouver, for about 2 years. So, it is in the early days. We are still learning and still studying our patients. Our patients that are working or that have found work are a small number. It is, probably, about 5 percent. That is still significant and, hopefully, it will grow.

The other side of that equation is, our patients have been using illicit heroin for 15 years, on average—or longer. Ideally, I would like to engage those folks earlier—not wait 15 years before we in-

tensify their treatment.

With regard to pain medications, I think there is overuse of opioids for pain medication. And that needs to be reduced. But, when it comes to people with severe opioid use disorders, that need to access care, we need to increase access to opioids and to treatment for them. So, there are two sides to that solution.

Mr. NADELMANN. If I could just add to that, Senator Portmanand I also want to thank you for your leadership on CARA. I think that there are many elements in there, especially expanding access to methadone and buprenorphine, making naloxone easier to get, and opening up the possibility for funding more diversion programs by law enforcement. They are really wonderful elements and really

an important part of the solution to this.

Let me just say, with respect to what Dr. MacDonald talked about—about heroin maintenance—it did not start in Vancouver. It started in Switzerland, back in the early 1990s. First, it was on an experimental basis. And, once the results were found to be successful, it was then implemented, first city by city, and then, on a national basis. It is now a part of Swiss national drug policy.

Then, the Dutch did the same, and then the Germans did the same, and then the British did the same, and then Montreal and Vancouver proceeded. And then, Denmark was considering doing experiments—trials, with respect to heroin maintenance—and they looked at the extensive research that had already been published. They realized that most of the people in Denmark, who were addicted to heroin, were no different from people elsewhere in Europe. And, they just proceeded right to go ahead and start imple-

menting these programs as well.

So, I think you should be aware there is now 20 years of research, including research published in the New England Journal of Medicine, and all of the top European journals, showing that prescribing heroin to those people, who have tried every other form of treatment—drug-free, in jail, methadone, and buprenorphine that it, actually, reduces their illicit heroin use. It pulls them out of the illicit drug markets and thereby reduces their other illicit drug use. It reduces their risk of contracting HIV and hepatitis C. It results in fewer arrests, less crime, and more people reuniting with family, because, keep in mind, when you have been using heroin for 10 years or 15 years, you are not getting so high anymore when you use it. You are, basically, using it to keep from getting sick, right? And, the fact of the matter is, heroin addicts—unlike

being an alcoholic, where you are still getting drunk or cocaine users, where it is still messing you up in different ways—when you have stabilized, whether it is on methadone, buprenorphine, or-Germany used to have codeine maintenance-or, for that matter, heroin maintenance, you actually can hold a job. You can operate as a normal human being. It is hard for people to believe that, but that is what the evidence shows.

I think your other question about the pain medicine—it is a

great question. Let me say a few things about that.

There are a few things that I think are really seriously missing here. The first one is more of an understanding of what is going on with all of these people getting in trouble with pain medicine and heroin and overdosing and all of this sort of stuff. What I would recommend is, if you are looking at the budget of the National Institute on Drug Abuse (NIDA), it is all well and good that they are doing all of this brain disease stuff—and I am sure something will come of it—but I would encourage you to do a more rigorous analysis of what has really come of the multi-billion-dollar investment in that. But, I would hire an army-an army of ethnographers and other researchers to hit the ground and find out what is going on. Whether it is the kid who got addicted to it from a football injury going in, or whether it is somebody struggling with mental illness or with depression, what is going on with each one of these things? Why are people using these drugs? How are they using them? What do they know and what do they not know?

When the word hits the streets that there is some dope that is laced with fentanyl, does that make people want to search it out

or run away? And, if so, why?

With respect to the people dealing, as responders to this thing, what do they know? Do they know that, for example, a fentanyl overdose may require a higher level of naloxone? Do they know

how to administer it?

One of my greatest frustrations is that, if you look at the majority of overdose fatalities in this country, you know what you find. The majority of them did not solely involve the use of heroin or a pharmaceutical opiate. Right? The majority involved the use of opialcohol sometimes tranquilizer with ordrugs benzodiazepines. The fact that using opiates and alcohol is, oftentimes are most of what-called overdoses are, in fact, fatal drug combinations. And, I think that information is not known—not known by young people, not known by active drug users, and not known by all sorts of people.

The other thing I would say is that what we are really dealing with here is an epidemic of pain in this country. It is physical pain, it is psychological pain, it is emotional pain, and it is existential pain. And, we then try to deal with all of this, with opiates, in a

way that is incredibly inappropriate.

The "New York Times" had an amazing story, a few days ago, on the front page. It was about a hospital—an emergency room at St. Joseph's Hospital, in Paterson, New Jersey, that has reduced its use of prescriptions and use of opioids in the emergency room by almost 40 percent since last year. Now, what are they doing? They are trying whatever works—from new-agey alternative stuff to feedback to using ketamine for a pain issue—whatever it might be. You have to be innovative on this stuff. But, I think finding out the research really truly committing to the research—do not act and do not put on new criminal penalties before we really know what is

going on.

I will conclude with this: I actually think that, when Len Bias died 30 years ago, if, somehow, there had been a prohibition on Congress and State legislatures adding in any new criminal laws and any new criminal penalties as well as a simple requirement that every dollar that you wanted to spend on law enforcement had to be spent on treating drug addiction and drug use as a health issue—if we had been obliged to spend those hundreds of billions of dollars, in recent years—or the \$1 trillion on public health, instead of on law enforcement—I think the evidence, overwhelmingly, indicates that our drug problems in America would be dramatically less than they are today—that the number of people alive would be far greater.

Chairman JOHNSON. OK. Again, I would like to kind of—

Mr. Nadelmann. I apologize.

Chairman JOHNSON. That is fine. I want a free-flowing discussion. And, by the way, when we are on a particular topic, you do not have to sit and wait for your turn. OK? But, let us go on to-Senator Lankford came in next, but, again, I want this to be a discussion and to have a little bit shorter answers—a little bit shorter questions.

### OPENING STATEMENT OF SENATOR LANKFORD

Senator Lankford. There has been a lot of conversation about the demand side of this—and the supply side as well. You need me to get a little closer?

Chairman Johnson. Yes.

Senator LANKFORD. OK. The supply side and the demand side. Mr. Murray, your conversation as well—about the normalization, somewhat—the more that we talk about decriminalizing and the more that we try to make sure people do not feel the stigma, does it create an environment where people actually feel like, "OK, there is not a real problem and there is not a real threat." I would like to talk about that a little bit more. And, in the interdiction of drugs, actually, coming into the country, when you deal with heroin and the amount of heroin that is coming in, from Mexico, in particular—and the dramatic increase there. Poppy fields are not something you hide in the jungle, like marijuana. They are obvious from the air. They are obvious from a satellite. They can be known. So, some of the interdiction conversations.

Finally, I would say that—just as a statement to be able to throw this out as well—I am concerned that we spend a tremendous amount of time talking about decriminalizing marijuana. And, it sends the wrong message, to people around the country, that drugs are no longer an issue. And, people just transition that from one drug to another and say, "Well, drugs are not the problem if marijuana is not the problem." And so, any comments on that? And, Mr. Murray, I would be interested in your comments.

Mr. Murray. Thank you, Senator. And, again, it is impressive that you are attending and working on this issue. It is deeply appreciated. This has needed leadership for a long time.

Quickly-it is good news that prescription use-opiate misusestarted going down in 2006. It is gradual, but it is going down. Effective interventions, the medical practice changing, and prescriber education—they are taking hold here. And, more responsibility is being shown. The rising ones are heroin and fentanyl now. And, fentanyl presents the new threat of the synthetics—the poppy fields. We used to image, by national technical means, the estimates we would make for production. That is over. Fentanyl and synthetics that are coming along-including new versions that are even more potent than fentanyl—are being made in labs—in urban settings very often. Chemicals coming from China and manufactured, distributed, and arranged in Mexico, are put into the United States as an adulterant to heroin. They have to be—they cannot be perceived, in terms of overhead technology. They cannot be estimated production-wise. It is the methamphetamine model. We have to go after the precursor chemicals. And, it is not just border control. You cannot sit here, without defense in-depth, and think we are going to intercept this, as it comes through the tunnels. What you must do is be forward-leaning into source-country partnerships. You have to work effectively, with leverage, with Mexico and with China. You have to have effective international programs. Budget data shows that this Administration has reduced funding for international drug control programs by the amount of \$952 million, since 2009. That is the wrong direction—the wrong answer. We need to be, effectively, more engaged with reducing the production capacity—the chemicals, in the case of the synthetics, the opiates, in terms of the cultigens, cocaine, and the rest—they have to be done in international partnerships. We have lost our moral leadership in international partnerships. Every international body tells this to us when we allow-enabled highly potent marijuana-and highly potent marijuana, now legal and recreationally availableis, itself, linked to the opiate epidemic. There is a priming gateway dimension to this. An opiate or heroin user is very commonly—the great majority of them use at least three drugs at the same time the polydrug use. Epidemiologically, it starts with a gateway access-alcohol, tobacco, or marijuana. These lead into the accessibility and the vulnerability for subsequent—being captured in more intense drug use as they grow. That is always a concern.

Fentanyl divert—OK. The data that we can see, at the moment,

Fentanyl divert—OK. The data that we can see, at the moment, overdose deaths from prescription opiates were dropping, and then, suddenly, in this last year—2014—unfortunately, we do not have good data—up to date—spiked again. That was fentanyl. It was attributed to prescription overdose problems. It was, probably, rogue illicit production. It caused 5,500 deaths, on top of what had been

a declining——

There are now indications that fentanyl is also being insinuated into counterfeit pills, so that people are purchasing what they think to be a medication. It has gotten micrograms—and the analogy that has been used is, if you are making chocolate chip cookies and you are putting chocolate chips in, one cookie has four chips and one cookie has three. That is the difference between life and death—when it is micrograms of fentanyl. It is that small. And, the people making this—the rogue pharmacists and the rogue chemists—do not have that degree of concern. And, therefore, the vul-

nerability, from these new synthetics, is extraordinary. Naloxone is a terrific response. It does revive people. Naloxone is not enough, if you are not reducing the supply of this pathogen. It gives you a 20-minute bridge to get people into an emergency room. The power of the new synthetics is so great—it occupies the receptors so strongly—that naloxone is losing its effectiveness, in terms of the capacity to overcome these. And, the condition will return.

Media campaigns, Senator Portman—we missed that. My impression was that—sure, prevention happens in the home, in the church, in the synagogue, in the school, and in the community. That has to be done at the local level. But, the government could help with the incredible media outpouring of support for drug use and the pathology, thereof, if there is no counter. We have lost that counter—and my impression is, we really are missing that role.

Chairman Johnson. Let me interject here. One of the reasons—and, again, I want to drive this process, because I want to come out with areas of agreement. The only way we are going to kind of come together and find out where we agree is if we kind of stick to specific issues—specific questions—without broadening—I am being serious about this. The way you solve problems is to find areas of agreement. So, again, I just want to have everybody involved in this discussion. Let us address specific issues and give, relatively, short answers. And, again, I kind of like the nodding of the heads, going, "We all agree on that." And then, where we disagree, I think it will just be a little bit more helpful, in terms of the discussion. Does it make sense? Yes, that is—and, again, I would like to—as long as we are on a particular subject, let us stay on it, until we kind of fully discuss it, figure out where we agree, and figure out where we disagree. And then, we can move on to the next one.

Senator Ayotte. Well, I have been really proud to work with Rob on CARA, so I am hoping that we get to this conference and get

this legislation passed.

I wanted to follow up on the prevention idea. We have had a lot of discussion, in this Committee, about what we have done on smoking. So, I get that, whether it is Drug-Free Community grants, like we have in CARA or local prevention efforts, which are a piece of it. We also have a national campaign. And, it seems to me that we have an opportunity also, in combination with local education efforts—whether it is in schools, churches, or local community organizations that are engaged in this to do that on a very personal level. But, I think we are pretty understanding that, if we were to put our might behind it, on the national level, too, we could change this dialogue on stigma. We could change the dialogue on exactly whether it is connection—the understanding of prescription drugs and heroin—and the devastating impact that this has on people.

So, I would like to get your take on the prevention side—not only local efforts, but could there be something nationally? If we did it, it has to be, obviously, tested and done right. But, we have seen

it work in other contexts.

Mr. NADELMANN. Well, if I could just say that the Centers for Disease Control (CDC) just came out, last month, with its report on trends and the prevalence of drug use—and it was an analysis

of the National Youth Risk Behavior Survey (YRBS), from 1991 to 2015. What they found—this is U.S. Government data—was that the prevalence of marijuana use, by high school students, decreased between 1999 and 2015. And, there was no change in prevalence between 2013 and 2015. OK? This is the period, by the way, during which we went from having half a dozen States with legal medical marijuana to now, with half of the States having legal medical marijuana.

Senator Ayotte. How does this get, though, to my question of—

Mr. NADELMANN. Well, the point I am making is that, at this point—

Chairman JOHNSON. Let me just quickly stop you, because you are quoting a statistic and I am seeing David shake his head. Is

that disputed, what he is saying?

Mr. Murray. Yes, it is highly misleading to characterize it that way. You have a timeframe and you can "data slice" it in terms of what is up and what is down from the 1990s. What happened was, we had a steep decline in youth use and in overall drug use between 2001 and 2008. And then, we had a reversal beginning in 2009, that took it back up again. So, if you draw a straight line from the 1990s across, yes, it is down just a little bit. But, that trajectory is made up of two movements—

Mr. NADELMANN. But, then again—

Mr. Murray [continuing]. One down and one back up—the policies were reversed.

Mr. NADELMANN. David, the same period you are picking up on was a period of massive increase in methamphetamine addiction and things—

Senator Ayotte. I do not want to interrupt, but I want to ask

a question——

What can we do? We are supporting the CARA efforts, which I think we need to expand treatment—and the demand side. But,

Chief, I do not know what your thoughts-

Chief RYAN. Yes, in Massachusetts, under Governor Charlie Baker's leadership, we have the "State Without StigMA" campaign, which has been incredibly effective. One of our treatment providers is the face of the "State Without StigMA" campaign, coming from the Governor's office. That messaging was huge, in terms of us going out and having a dialogue at community meetings—and people saying, "Hey, this is coming from the Governor's office. This is important stuff." And, it further—

Senator Ayotte. Let me say that I admire Governor Baker's

leadership on this.

Chief Ryan. I do, too. He has been incredibly effective. And, he invited Chief Campanello and me when he signed the legislation. But, we cannot keep drugs out of our prisons. If we think we are going to keep it off of the streets of America through heavily-weighted enforcement priorities, we have simply got it wrong. And so, it speaks to the need for treatment and prevention. And, I have learned a lot during this process.

And, the other notion—that we need to have a bed for every-body—that goes with the stigma, too: "I need to be in some bed,

somewhere, in some institution, because I have this substance use disorder."

Senator Ayotte. Do you have a lot of medication-assisted treatment?

Chief Ryan. And, that is where I was going with this. And, the physicians can speak to this better than I can. But, as I understand it, the one addiction that is the most likely to respond to medication-assisted treatment is an opiate addiction. And, we have seen, with Vivitrol—like the Senator mentioned-incredible effectiveness—and we have partnered with a Vivitrol clinic. One of the challenges there and one of the things your Committee might be able to look at is, it is incredibly expensive.

And so, we have patients that we have gotten into a Vivitrol clinic, and they go for many months and they are over the physical addiction. Now, it has become sort of a bit of a crutch. And, weaning them back off of Vivitrol is becoming challenging as well.

Senator Ayotte. We also have caps on certain forms of treatment.

Chief RYAN. Right.

Senator AYOTTE. I just want to make sure that, as I look to your point, Dr. Murray—1 gram of fentanyl is the equivalent, according to the CDC, of 7,000 street doses of heroin. So, this, obviously, is a very powerful synthetic drug. The drug deaths, in my State, are being driven by fentanyl. I mean, that is where we have seen a market—losing a person a day by fentanyl. And, as we talk about increasing the efforts on treatment—and, obviously, I would not have led the effort on CARA with great people like Rob—and prevention, which I think is key—and we have not invested enough in that. We need to invest more.

Chief, I know you want that to be your emphasis—and I am with you. And, I have my local Chief, Nick Willard, who is the Chief in our largest city, Manchester, who is a great guy—and he will say the same thing to me.

But, also, he would say to me, "I do not want you to totally give up on the demand." And so, whether it is the fentanyl piece or—so I hope we are not saying that we are not going to totally abandon our demand efforts—but we need to focus more on the treatment. I just want to make sure we clarify that.

Chief RYAN. Yes, thank you, Senator. And, thank you for putting me in the hot seat on that issue. Absolutely, it is about proportion, right?

Senator AYOTTE. Right.

Chief RYAN. And so, we have drug control officers, but we can be smarter about our enforcement as well.

Senator Ayotte. And, who we are going after, right? The high-level folks.

Chief RYAN. Right. I will give you an example. We had two fatalities and we, quickly put together a case. The drug agents and drug cops do great, courageous work out there and we need to recognize that. And, in this instance, they put together a very good Federal case in a short period of time. And, when I was briefed on the search warrant, the arrest warrant, the tactical briefing, and outstanding law enforcement work—but, I asked two very simple

questions after the briefing: "Tomorrow, when we take this major supplier out of the loop

Senator Ayotte. Who comes next?

Chief RYAN [continuing]. "Do we know who his customers are?" The answer was yes.

Then, my follow-up question: "What are we doing tomorrow"——

Senator Ayotte. To get them into treatment.

Chief RYAN [continuing]. "To get them into treatment and to deal with the public health crisis that we are unwittingly creating in our own community?" We can be smarter about our enforcement. And so, now, any tactical plan, in my jurisdiction, comes with a parallel social service—

Senator Ayotte. And, you also like drug courts? That is a piece

of ours—alternative sentence-

Chief RYAN. The challenge there, Senator, is when you push the button for the criminal justice system, it is incredibly complex and difficult to reverse. And, when you take somebody suffering from a substance use disorder and put them into a complex criminal jus-

tice system, we are finding it creates even more challenges.

Mr. Nadelmann. Senator, can I just also say that I agree with everything the chief just said there. Canada is dealing with a fentanyl crisis right now as well. Mostly, it is stuff being imported illegally from China and then pressed into pills. And, it is across the country—Ontario, Alberta, British Columbia. And, I was just looking at this last night. I saw that just recently the Chief Medical Officer (CMO) of British Columbia, Perry Kendall, issued a public health emergency—it is very rare for somebody to do that. But, it is what you do if there is a huge epidemic of a new disease.

Senator AYOTTE. Right.

Mr. NADELMANN. And, what he said is that the number one thing this means for British Columbia is, we are going to treat this as we would have with what happened with Ebola—or something else. We are going to find out every single thing we can find about what is going on in this. Where are people getting this thing? Why are they using it? What is the drug? His emphasis was, first and foremost, on research—on finding out what is going on, what is going on, what is going on.

My fear here is that we are engaging in interventions without knowing what is really going on. If somehow CARA, or something else, could allocate money for an army of researchers to hit the streets to find out what is really going on, I think policy would be

so much better informed.

Senator Portman. I am going to go to the floor to speak on this very issue and to talk about what Senator Ayotte was just talking about—how do we get this [inaudible]. But, one thing about CARA is, there is money in there for research, specifically [inaudible] look at some of these issues that you are addressing. And, I think you are right. We need to have better information, including on the newest threat of fentanyl and how we deal with that. And, David, I was asking you about whether it is produced in America, because it can be and will be-

Mr. Murray. Pharmaceutically, yes.

Senator Ayotte. We saw it with methamphetamine.

Mr. Murray. Right.

Senator PORTMAN. This is not going to go away. And, Chief, God bless you. Thank you for what you are doing.

Chief RYAN. Thank you, Senator.

Senator PORTMAN. You are a leader on this. And, by the way, your Governor came to testify on CARA and helped us put together the legislation. Charlie Baker did a great job.

Chief RYAN. Thank you, Senator.

Mr. NADELMANN. And, Senator, thank you for your leadership on CARA.

Mr. Murray. Senator, could I just make one comment about something you put on the table a minute ago, which we never quite followed up on? Tobacco is an analogy, because it has been successful. The youth-use rates have gone down fairly dramatically. There are different profiles—not a drug cartel—but, notice what we—

Senator Ayotte. Different physical impact, too, obviously.

Mr. Murray. It is, but the rates dropped. I do not want to be the guy making a case for stigma. Stigma stands in the way of our capacity to get people into treatment and recovery.

Senator PORTMAN. The perception of risk.

Mr. Murray. Recovery is—

Senator Ayotte. It is the perception of risk, exactly.

Mr. Murray [continuing]. Rescue.

Senator Ayotte. Stigma.

Mr. Murray. The Titanic is sinking. OK. Stigma can be used—perception of risk—medical risk—was a major factor in driving down tobacco use and norms of social disapproval: "Losers do this. What are you doing this for?" And, making it stigmatize people, on the loading dock, out in the rain. But, they also—it was not regulation and taxation that did it. Those were high and present when tobacco use was high. It did not change.

Senator Ayotte. Well, I also think——

Mr. Murray. The perception of risk, the stigma, and the driving down its acceptability were useful. Can we borrow some of those

tools with regard to drugs?

Senator Ayotte. Well, I think that what we decide to focus on, nationally, sets the tone, right? So, to the research point, whatever our national campaign is, let us make sure that we are thoughtful about it—that we research and figure out what are the most effective ways to get this message to, obviously, reduce consumption and the number of people who start, in the first instance. I am not an expert on this. I do not know the answer. But, I know we are pretty smart people. And, we are also a very media-centric society—whether we like it or not.

So, it seems to me that there is a role in this. CARA, basically, puts in place the opportunity to do this. It does not say how to do it. It says it has to be evidence-based research—and to the point of what your Governor did. Here is where we are, at a national

level, in terms of what tone we are going to set here.

Chairman JOHNSON. We held a hearing—and we actually addressed the difference between the success we had in tobacco and why the media campaign has not been particularly successful, in terms of drug demand. One of the conclusions—one of the statements was that we have not been graphic enough, in terms of com-

municating that this is squalor. There is nothing glamorous about it.

Senator Ayotte. But, also, the other conclusion that came out of that is that the tobacco campaign was not a totally government-centric model. You actually engaged—because, if you look at the tobacco settlement, it was really done from a separate organization. Sometimes, the government-driven model is going to put you in a box. What we want to do is have the right media campaign that is actually evidence-based—what needs to be done—but is not having all of these—it gets complicated, as you know, with bureaucracy.

Mr. NADELMANN. Yes, I think you are right about the public-private partnership. Also, just a few other things about the tobacco thing.

First of all, unfortunately, the evidence actually shows that the single most effective way of decreasing adolescent tobacco use is through higher taxation. The other factors that David mentioned are also variable.

But, I want to just make two other points here. The other thing we can say about tobacco—nicotine in the cigarettes—smokable particle matter—is, essentially, there is no other substance on Earth which is simultaneously so addictive and so deadly. Right? We know that if you smoke cigarettes for a month or so, you have a very good chance of becoming addicted to it. And, if you smoke cigarettes for years, you have what?—a 30-percent chance of dying prematurely, by 7 to 10 years. It is serious. And, we know that the harms associated with cigarettes—not nicotine, in the form of vaping. That is a very different situation that dramatically reduces the risk. Butm cigarettes are incredibly [inaudible].

The second thing we know about cigarettes is also very interesting. All of the studies—when you interview heroin addicts and you ask them, "What is the toughest drug to quit?", do you know what the majority of heroin addicts say?

Senator CARPER. Cigarettes.

Mr. Nadelmann. Cigarettes. Exactly.

Now, it is also worth noting that we have actually cut cigarette addiction—cigarette use in America by over 50 percent. It has been one of the greatest drug abuse prevention successes in American history. And, you know what? We did it entirely without threatening anybody with jail, incarceration, tobacco courts, or anything like that. We did it through education, through prevention, and through the provision of real information to young people and adults. Stigmatization did play a role. Higher taxation played a role. But, understand, our single greatest success in America, in reducing addiction to a deadly drug, was done entirely without reliance on the criminal justice system.

Chairman JOHNSON. Yes.

Mr. Murray. Which makes it perverse that we are enabling more marijuana—

Senator CARPER. Let me just——

Mr. Murray [continuing]. More widely available, the pathogen. Senator Carper. Let me just jump in, if I can.

Chairman JOHNSON. Sure.

Senator CARPER. I apologize for being in and out. One of our former colleagues, George Voinovich, a great Governor and a great Senator, has passed away. I am trying to figure out how to get my wife and I to the funeral Friday morning, so I apologize for being in and out.

When George Voinovich and I were Governors together, I was asked to be the founding Vice Chairman of something called the "American Legacy Foundation," which focused on how we convince young people who are smoking to stop and how to convince young people who are not smoking not to start. And, we used a multilayered approach, but a big part of it was working with young people, throughout the country, to develop a message to take to folks who were smoking already—young people who were already smoking or were thinking about it, and some of the success you talked about, I think, is directly attributable to the "American Legacy Foundation." We got 41 billion out of the tobacco settlement money, between the States—50 States—and the tobacco industry—and with the help of some great advertising agencies, a lot of kids, and the States, we developed a multilayered media campaign called "The Truth Campaign." Hard-hitting. Very hard-hitting. If you have ever seen these commercials, you remember them: a woman talking through a hole in her throat; huge trucks-tractor-trailers pulling up in front of tobacco headquarters, and people are pulling out hundreds of body bags and laying them out; and bullhorns talking to the tobacco industry people inside of the building. Very hardhitting and very effective.

The woman who helped us put that together, Cheryl Healton, who is now a dean, I think, at New York University (NYU) and doing good work again—we have involved them, and her folks, to help us on another truth campaign—and this is with regards to potential immigrants coming in from Honduras, Guatemala, and El Salvador—as they look, it is not everything it is painted to be—getting here, the United States, is not going to be easy. So, we are using that variation as well. We are creating, through the Department of Homeland Security (DHS), a somewhat similar campaign to counter violent extremism (CVE), by creating a partnership with the Muslim community across the country, and asking young Mus-

lims to help us develop the same kind of truth campaign.

If you look at the meth campaign, in Montana, which had success for a while—I think, maybe, it stopped, and that is why it did not continue. But, talk to us about this kind of approach, particularly, for young people who are thinking of trying heroin or are thinking of trying opioids—to have that countermessage. What role is there for this approach in this multilayered approach, which includes

prevention and a whole lot of other things?

Mr. Nadelmann. Senator, I do not want to—I am skeptical. I think that a basic message for young people about the risks of these drugs—and remember the old days—the Partnership for a Drug-Free America, they were sort of obsessed with the marijuana issue—and that was not the real problem. Alcohol was a major problem—and tobacco. Alcohol and tobacco—the much bigger problems. Now, we have the problem of diverted pharmaceutical drugs—huge numbers of young boys are being prescribed Ritalin and are sharing it with one another. In many communities in

America, more young people are going to use Ritalin—either prescribed or diverted—than are actually going to be using marijuana.

The other thing we found is that even as marijuana use went up and down and up and down over the last 30 years among adolescents, when the question was asked, "Is marijuana easy to get," 80 percent, consistently, throughout the last 30 years, said that it is

easy to get.

So, I think that, on the drug prevention education thing, we need to focus on the bottom line of keeping kids safe. The message "Do not use, do not use, do not use—abstinence only," that is a good starting spot. My message to teenagers is, first, "Do not do drugs." My second message is, "Do not do drugs." My third message is: "But, if you do do drugs, there are some things I want you to know, because my bottom line, as your parent, who loves you to death, ultimately, is not did you or did you not. My bottom line is: Are you going to come home safely at the end of the night, grow up and make me healthy grandkids. That is my bottom line."

So, I am focusing on safety. One of the things about marijuana—

none of us want our kids---

Senator CARPER. I am going to ask you to stop. I appreciate everything you are saying, but I want to make sure I hear from—

Mr. NADELMANN. I am sorry. OK.

Senator Carper. Thank you. I appreciate your passion.

Chief RYAN. Senator, if I may—and I wish I had the Wheaties

he had this morning.

I agree, but, we have to fold the medical profession into this conversation in a meaningful way. We are looking at people in our PAARI program. About 80 percent started with a prescribed opiate, following a traumatic injury. And, here is the pathway that we are seeing in metropolitan Boston. Opiates—a 30 milligram (mg), or 80 mg tablet, with a 90-day prescription. After 90 days, they are buying them on the street. A 30 mg tablet goes for \$30, and an 80 mg tablet goes for \$80. Quickly, they have a \$400-, \$500-, or \$600-aday habit. For somebody, who, before, would never have put an injectable narcotic into their arm, now it becomes a matter of economics. A \$15 bag of heroin, or \$500 worth of pills. They go to heroin.

Chairman JOHNSON. Let me just interrupt quickly. Is that an

agreement that this is really 80 percent started by—

Mr. NADELMANN. I do not know. I do not know if it is 80 percent. I know that is a growing issue and that people are trying to manage pain with other forms of it, but I do not—

Chief RYAN. In the population we are serving, that is what—and there is self—I would agree. You mentioned this earlier, Dave. This

is self-reported.

Mr. Murray. The CDC's most recent—

Chairman Johnson. Again, I really want to get to him, but just

very quickly.

Mr. Murray. Certainly. I am sorry. The issue is about who initiated with either heroin or prescription opiates. And, historically, people who are heroin users, initiated with heroin, but are polydrug users and are at 15-times greater risk if they were adolescent marijuana users. But, today, the most recent initiation numbers—not all of those are heroin users—those who are starting are in-

clined to start with prescription opiates. That is the three out of four. The last few years, those who have initiated have a tendency to start with prescription opiates first.

Chairman JOHNSON. That is the new phenomenon. OK.

Chief RYAN. So, the point is—and we are starting to see—the University of Massachusetts Medical School invited me to speak at their in-service training for their physicians—a cop talking to physicians in their in-service training. So, I think it is some of those things. And, we are starting to fold in the medical profession, in a meaningful way, around prescribing of opiate painkillers.

Dr. MACDONALD. Looking at the demographics at our clinic, we have selected a population that has developed an entrenched, long-term street heroin dependency. It is the separation from family at a young age that is appallingly common. So, I am not sure how you are going to prevent—

Chairman JOHNSON. I actually want to start asking questions. I have not done so. I am going to ask questions, OK? No statements.

Questions.

I remember watching a documentary on heroin addicts and, although the words were different, when they asked the question, "Do you remember the first time you ever took heroin?"—the expression on their faces were almost identical. It was just kind of, "Oh, yes. It was like I finally belonged or I was finally loved." According to testimony, there are about 3 million Americans—about 1 percent of our population—doing the hard drugs in some shape or form. There are 27 million people doing illegal drugs—that is a little less than 10 percent of our population. Has that changed one iota in 30 years, 40 years, or 50 years—I mean, significantly? Or has that just been pretty constant? Just respond really quickly.

Mr. NADELMANN. Yes, I mean, it appears to be fairly constant. It varies, somewhat, by drug. I will just say this: With alcohol—right?—roughly 10 percent of alcohol consumers consume over half

of the alcohol——

Chairman Johnson. Again, I am talking about drugs, right now. Mr. Nadelmann. No, I am making an analogy, here. The same thing is, probably, true of most other drugs as well—that it is the minority of each of the drug users who consume the majority of the drugs.

Chairman Johnson. Again, 1 percent of the population is doing hard stuff and a little under 10 percent is doing marijuana and—

is that——

Mr. Murray. Taking a historical look, one of the problems is that the data sets do not go back far enough to tell us about continuity. We can go back to the mid-1970s—and that was the highest point of drug use in America—in 1979 through 1985. Compared to that period, we are down at least 35 percent, so there has been a major gain, over time, with respect to youth use that then was carried as a lifetime pattern. We have made a difference. It proceeds by sharp decreases and then, gradually, starts picking back up. We forget that it is intergenerational. We turn off the switch, and a new generation comes in, and it comes back at us. We have to continue—it is like using an antibiotic. You have to continue in a sustained fashion.

We have made major gains. We have seen periods when it has been sharply reduced, and we look for the mechanisms that we had—the tools. Media campaigns were part of it. Supply reduction was part of it. Normative participation by American communities was part of it—and we made a difference.

Chairman JOHNSON. So, again, let me ask Mr. Murray. The answer is yes, we can do it.

Chairman JOHNSON. Do you agree that we have gone up and down and that there have been gains made, for whatever reason—

and then, it has kind of come back?
Mr. NADELMANN. Yes, Senator—it depends what you are measuring, right? I mean, 1980 was the high point of the number of Americans who said they had used an illegal drug. Then again, by 1990, the total number of Americans saying that they had used an illegal drug had dropped by half—so you would say that was a suc-

On the other hand, in 1980, nobody had ever heard of crack cocaine. By 1990, it was a national epidemic. In 1980, there were no cases of drug-related AIDS. By 1990, hundreds of thousands were infected. In 1980, we had 50,000 people behind bars. In 1990, a quarter of a million people—or close to that—were behind bars. So, it really depends on what you are measuring. And, I think that focusing on the number of Americans who say yes to a pollster—saying "I used an illegal drug last year," is far less important than looking at the cumulative harms associated with that drug.

Chairman Johnson. Again, my point is—again, as-

Mr. NADELMANN. You are going somewhere

Chairman JOHNSON. No, as a business guy, in manufacturing, you have to solve a lot of problems. So, you have to, first, understand what is the truth, what is the reality, and what are the numbers. Because I have a sense that we have spent \$1 trillion on the "War on Drugs," and we are just not winning it.
Mr. Murray. Right.

Chairman JOHNSON. And, we are funneling tens of billions of dollars to some of the most evil people on the planet, in these drug cartels—and I am not sure that is, necessarily, a good thing.

I think it is interesting—the way you are saying we need research. My point of that little story about the heroin addicts—those 3 million Americans—are they treating their own depression in some way, shape, or form? I mean, do we have any sense of—yes, once you are addicted, you are addicted and you are going back to the heroin, or whatever, to feed that addiction. Why are they first starting it? Do we have some sense of that? Is it, literally, treating depression? You talked about alienation from family. Well, that leads to depression as well. Do we have any kind of research—any kind of sense of why people first take it when—let us face it: people do realize drugs are dangerous, right? Although, in the media,

sometimes, it is viewed as pretty glamorous.

Mr. NADELMANN. Well, Senator, you realize that, for many people, the first time they take heroin, it is, "Yuck." They throw up and they do not like it—whatever. There is a percentage

Chairman JOHNSON. Which was different than that documentary. Mr. NADELMANN. No, but for people who end up getting addicted to heroin, those are, oftentimes, the ones who liked it that first time. Then the question is: Why? Right? We have a sort of myth underlying the notion of a drug-free society, which is that all of us emerge as perfectly balanced chemical creatures from our mothers' wombs. That is not true. Some of us may emerge with an undersupply of endorphins—our own biological natural opioids—and that may incline us to drug addiction later on.

Chairman JOHNSON. I had a spinal tap—and, I think, it was Vicodin. I took one and, literally, woke up kind of gasping for air. I never took another one. But, other people, then—what you are saying is, other people take-what is Vicodin, anyway? Is that an

Mr. Murray. It is hydrocodone.

Chairman JOHNSON. So, that is an opiate.

Mr. MURRAY. Hydrocodone is a Schedule II opiate-

Chairman JOHNSON. So, the fact of the matter is, different people react differently.

Mr. NADELMANN. Exactly—to all drugs—to marijuana, to alcohol,

to opiates, and what have you.

Mr. Murray. There is a body of literature on the risk predisposing factors for drug use—and it is not a magic bullet. You cannot say that it is just those people and not others. Genetic predisposition—yes, it is a big one. And, the reaction is strikingly more vulnerable if they are presented with a challenge from the drug itself.

Early childhood experience, including prenatal behavior—low birth weight children, and children from lower socioeconomic perspectives—where the mother was a substance user—they are born at risk—low birth weight, with extraordinary risk. As they grow up in contexts where they are challenged by drugs early in life, then the risk skyrockets. If they can hold off until they are age 20, 22, 23, or 24, they can be protected for life. There is a study of risk availability and comorbidity.

Chairman JOHNSON. In the hearing in Pewaukee, we had some powerful testimonies. I think one of the most—again, I am not saying this is fact, but, one of the witnesses said that, on average, first-drug use, in whatever form, starts somewhere around the age of 11 or 12?

Mr. Murray. In some communities.

Chief RYAN. And, David, is it not true that, if you can delay that experimentation-

Mr. Murray. Yes.

Chief RYAN [continuing]. The risk of addiction goes down-

Mr. Murray. As the brain matures, if you can hold them through that window of vulnerability, from, basically, age 11 until age 22,

you have a huge capacity to protect them for life.

Chairman JOHNSON. In testimony before this Committee, we had General John Kelly, former head of the U.S. Southern Command (SOUTHCOM), testify that we have visibility for about 90 percent of drug traffic. We just do not have the interdiction capability. I think one of you said that, where there is demand—I agree with this—where there is demand, the supply is going to meet it.

Further in testimony we heard that in inflated dollars—in 1980, a gram of heroin cost \$3,200. In the streets of Milwaukee, we are hearing reports of \$100 a gram or \$10 a dose. And, you talked about that—the difference between the cost of an OxyContin pill and a heroin addiction.

Mr. Nadelmann. Senator, I think you can find other former directors of SOUTHCOM who would say that no amount of money we spend on interdiction is going to keep this stuff from really coming in. Right? That, whatever we spot, they will find another way

Chairman JOHNSON. When we were down in Central America, they were talking about—these are the Drug Enforcement Administration (DEA) guys down there, saying, "Yes, we redirected the flow from Colombia, through the Caribbean, up to Miami, and just, basically, redirected it into Central America. And, truthfully, I mean, the folks there were also saying that their goal was to redirect it someplace else.

Mr. Nadelmann. Back to the Caribbean. Assistant Secretary

William Brownfield-

Chairman JOHNSON. Again, not stopping it, but redirecting it.

Mr. NADELMANN. Assistant Secretary Brownfield just said, recently, he said, "Caribbean, you better watch out," because, the more successful we are in pushing it out of Central America, it is going to push it over there. It is not going to make any difference

for the U.S. addict, who is suffering, which route it is coming by. Mr. MURRAY. Senator, I think that having worked on this, specifically, for 13 years with the ONDCP's Office of Supply Reduction, with SOUTHCOM, and with the Joint Interagency Task Force (JIATF's), there is a narrative of futility: "Nothing has ever worked. It is cheaper than ever. And, it just comes another route trains, boats, or planes. It gets in here. What are you going to do?"

Well, there is something you can do. And, you have to have a chain of interventions that are staged and that work with each other. And, you begin in the source country, by eliminating the production. You drive it down 75 percent. At the same time, you come in with alternative development strategies, establishing the rule of law, in Colombia-

Chairman JOHNSON. But, look at what is happening—again, look at the reality. We do not control Colombia. Look at what is hap-

pening in Colombia. There is different leadership.

Mr. Murray. We went to legalization. And, Colombia and Mexico both called and said, "What are you guys doing?" And, when people said, "Well, we are leading out on this. We are making it recreational," they said, "We have to save ourselves."

Mr. NADELMANN. Right. And, now, Canada is about to legalize marijuana. And, once California votes to legalize it this November, Mexico is going to open up a significant debate. President Enrique Peña Nieto was just at the United Nations (U.N.), talking about-

Mr. Murray. But, interdiction is only part of the-

Mr. Nadelmann. Senator, I have to just say that the evidence powerfully shows that the overwhelming investment in interdiction has been money down the drain. And, when you look at the alternative, which is a focus on the public health approach and on the demand approach—you look at what Europe and Australia and other countries have done—where the large majority of resources have gone into a public health approach—not into interdictionand what you see is, they have been, dramatically, more successful in keeping drug-use rates lower than us—as well as keeping HIV,

hepatitis C, addiction, overdose, and all of those low.

Chairman Johnson. The fact of the matter is that, now, in your testimony, we are laying it out. For a couple of decades, now, different countries and different cities have taken different approaches. Let us face it: we have an experiment going on here, in America, with legalization—full legalization in Colorado, Oregon, and Washington. I was with a group of Chiefs of Police in Wisconsin, talking about a host of issues. But, I brought this one up, because they just attended a national association meeting of Chiefs of Police. I just asked them, "Is anybody reporting on this?" Again, this is just anecdotal, but the response was that this has been a disaster. I do not know. Again, that is just a completely anecdotal comment, but what are you hearing? Are you going to those same type of national meetings? What are you hearing, in terms of what is happening in Oregon, Washington, and Colorado, in terms of legalization and how it is affecting policing?

Chief Ryan. Yes, I mean, there are a lot of anecdotes, out of Colorado, of people getting their doctor's letter for athlete's foot to get medical marijuana and these things. But, you make a valid point. Much of it is anecdotal. I think there is some research that Ethan talked about—because, what I worry about is, the quality of life around these marijuana dispensaries and how the presence of a dispensary will compromise the quality of life by bringing a demographic into a neighborhood that would not otherwise come to that

neighborhood.

Mr. Nadelmann. But, there is actually research on that, showing no increase in crime or any decline in quality of life, in places where medical marijuana—in this country—

Chief RYAN. I do not know if that is true.

Mr. Nadelmann. By the way, it is also similar with methadone maintenance clinics. There is a huge "not in my back yard" (NIMBY) fear about having a methadone maintenance clinic. But, there is extensive research showing, once again, no diminution in quality of life or any increased criminality. I would be happy to send the studies about the issues—the public safety issues around there. And, I think it is worthwhile mentioning that you have the director of the High Intensity Drug Trafficking Area (HIDTA) in Colorado, who is, basically, saying that it is a relatively small number of crimes—he is quoted as saying that. When you look at overall crime in Denver, there are so many reasons it rises, and falls. The "2016 Colorado Department of Public Safety Report" notes, "The total number of industry-related crimes has remained stable and makes up a very small proportion of overall crime in Denver." The most common problem is burglary. Burglary. And, that is the issue that Governor John Hickenlooper and others have asked Congress to fix, because that is that the legal marijuana industry has to be cash-dependent, because the marijuana industry is not allowed to engage with federally-registered banks.

Chairman JOHNSON. Tom, feel free to hop in.

Senator CARPER. Well, thank you.

Chairman JOHNSON. I had not asked any questions.

Senator CARPER. You have not?

Chairman JOHNSON. I had not.

Senator Carper. I want to come back to the issue of tobacco. And, the Chairman has heard me say, many times, to "find out what works, do more of that; find out what does not work, do less of that." But, before I do that, I want to mention CARA, the legislation that we have been talking about, here, in this room, in the Senate, and in the House for a good part of this year.

We have, as you know, in terms of funding programs a two-step process. We authorize programs and we authorize spending levels, and then we come back in and we appropriate money. I have a friend, who is a pastor of a church in Wilmington, Delaware. And, he likes to say to his congregation, "It is not how high we jump up in church on Sunday that matters. It is what we do when our feet hit the ground."

It is one thing for us to pass authorizing legislation that would authorize programs to address this situation-opioids and opioid addiction. It is another thing to make sure that we have the resources to fully benefit from the programs we are authorizing.

One of the meetings I just went out to, in the anteroom, was with a major insurance company. And, they cover a multi-State region, here in the Midatlantic. And, I told them what our discussion was dealing with here. And, they mentioned—they do business in Pennsylvania. They mentioned that the Governor of Pennsylvania has called for creating, across the State, 40 different centers for treatment. And, the question is: How do you pay for that? And, I do not think anybody has figured that out. But, that was their idea.

In terms of the policies and the coverage that they offer, it is a lot different, today, with respect to opioids. They talked about the idea—one of them said, just anecdotally, that someone that they knew had oral surgery and got a 30-day prescription for opioids. How crazy can we be?

So, my sense is that—and this conversation, today, sort of bears it out—there is not any one silver bullet. I like to say "There are a lot of silver BBs. Some are bigger than others." And, this is not just on the Federal Government. This is not just on State and local governments. This is not just on insurance companies or on individuals—this is a shared responsibility. And, part of what our challenge is, is to figure out what the Federal responsibility is and how we can use the Federal actions to, maybe, leverage more effective action on the part of States, local governments, nonprofit organizations, and the health care delivery system.

I want to come back to tobacco. "Find out what works, do more of that." And, Dr. Nadelmann, I think you mentioned that nicotine—tobacco—is among the most addictive substances that we deal with. Yet, we have had pretty remarkable success in slowing down the growth of tobacco addiction and, actually, I think, reducing it—particularly among young people. And, it has been sustained. It is not like a one-trick pony—one-night stand. It has been sustained for about 20 years.

Mr. Nadelmann. Yes.

Senator Carper. About 20 years. What can we learn?

Mr. Nadelmann. I think what we learned is that the tobacco education was remarkably honest and truthful. It reported on real risks and real dangers, and kids got it. And, they also knew people who were dying of cancer—and they could see it. I think they got it.

I think a similar sort of campaign could, potentially, work with opiates. The difference is that you sometimes need opiates. Right? So, you do not need tobacco. You just have to say, "Do not do it. Do not do it. It can kill you," and what have you.

With opiates, the message has to be more nuanced, which is sometimes "this is a useful medication, but, understand: if you get this for oral surgery, you are going to use it for 3 or 4 days, maybe, and then no longer after that. Understand the risks. Understand what is going"—so the education has to be more sophisticated in that respect.

I think the issue with marijuana is that kids look around and they know 40 percent of their peers are doing it by the time they are 17-years-old to 18-years-old. They know that some have a problem. Some are clinical—waking and baking—getting up in the morning and smoking marijuana and not doing well. And, they see that those kids are foolish. It is like drinking and going to school.

But then, they see other kids, who are graduating with honors—going to good schools. They see adults who are successful and they understand that the anti-marijuana fanatical message we had is not truthful. When the government gives that message—

Senator CARPER. Just hold it right there. I just want to make

Mr. Nadelmann [continuing]. They lose credibility.

Senator CARPER [continuing]. We hear from the other witnesses, please. What can we learn from tobacco?

Mr. Murray. Thank you. I appreciate it. It is a good question. I would be remiss, if I let this hearing end without saying what I think is a really critical message. Then I will address directly

Senator CARPER. Just do it briefly, please.

Mr. Murray [continuing]. The misinformation that marijuana is not dangerous and that we have not been confronted with an enormous onslaught of media support that has, actually, been totally counterproductive for what youth are experiencing—and that the risks are very great, which they are—for those genetically predisposed—catastrophic—and that is a phrase used by the World Health Organization (WHO) in an article by the National Institute on Drug Abuse (NIDA), in the New England Journal of Medicine. "Catastrophic"—and that the onset in early adolescence of high-potency marijuana use has the prospect of triggering a psychic break, depression, and schizophrenia—prospects that are truly damaging. We are running an experiment, with our youth—and they are being hurt. They are being hurt, in Colorado. This is a qualitatively different drug. Anyone who denies that or who refuses to look at that evidence is misleading the Nation and misleading themselves—

Senator CARPER. OK. Thank you.

Mr. Murray [continuing]. And, we are sorry. Now, here is the most critical thing I want to deliver. We have looked carefully at—

Senator CARPER. The most critical thing, for me, is for you to answer my question.

Mr. Murray. Therefore—oh, I am sorry. Dr. Nadelmann had suggested that we had offered——

Senator CARPER. What can we learn from our success, with re-

spect to tobacco? That is my question.

Mr. Murray [continuing]. And, he suggested that we had not offered a calculated risk appreciation—that it was craziness and reefer madness. I was suggesting that, no, in fact, we need, precisely, to message the degree of risk and not have snarky, sarcastic headlines in the "Washington Post" about how using marijuana is like not flossing. No, it is not that. In fact, it is misleading and irresponsible to make those kinds of arguments.

Here is the critical thing, though—

Senator CARPER. Just be very brief, because I want to hear from the other witnesses.

Mr. Murray. Yes, Senator, I will. Sorry. The black market has not withered away. It has not disappeared. All of the things that we are doing, with regard to recreational, legal marijuana—and efforts to leverage media, and so forth, on how to—the black market has gotten stronger. There are people flooding this country with poisons that are killing Americans. And, they are stronger, more embedded, richer, more corrupt, and more penetrating in their reach and scope than any that I have ever experienced. And, they are getting stronger. They are running in parallel—

Senator CARPER. OK. Mr. Murray, please hold your comments.

Thank you.

Dr. MacDonald, the same question. What can we learn from our

success, with respect to tobacco?

Dr. MacDonald. We have excellent treatments. It works. At our clinic, 90 percent of the folks smoke. They are also heroin users. When they come to us, they are interested in having better health. They are sick because of the severity of their smoking. They have chronic disease, because of their smoking. And, in care, we are able to engage them and decrease their smoking use. Anybody can quit smoking.

Senator CARPER. Alright. Thank you. Chief.

Chief RYAN. Just very briefly—David makes a valid point about using stigma as leverage to try to help address the opiate issue, as we did with tobacco. My concern there is, if we had a magic wand, today, and we stopped any new person from becoming addicted to opiates, we still have a whole generation of people that have to run the course. And, the stigma is what is preventing—well, there are a number of things preventing, but, in my opinion, one of the major factors preventing people from seeking treatment is the stigma associated with opiate addiction and heroin addiction.

Senator CARPER. Alright. Thank you.

Chief RYAN. I would caution against using stigma as leverage in

this epidemic.

Mr. Nadelmann. I agree. I think stigma did play a positive role with cigarettes, but it is not just with heroin addiction. We even have stigma with methadone treatment. One of the problems you have is that it is so stigmatized that people do not want to send their kid, who is addicted to opiates, to get methadone or

buprenorphine. I have met people who are on methadone maintenance, and they are on it for decades. It is like a diabetic being on insulin. And, they are running a business, having a family, paying taxes, and doing everything right. It is methadone. They are not addicted to it. It is just their daily medication. And, I say, "Why do you not speak publicly about this? Be a role model." They will say, "Ethan, I cannot." I say, "Why not?" They say, "Let me tell you something. If I go to work one morning and I am exhausted, because my kid was up all last night, and I put my head down on the table to take a nap, people are going to say, 'Oh, poor boss—poor Joe, he must have been exhausted. Something must have happened with his kid last night.' If they knew that I was a methadone maintenance patient, the first thing they would be thinking is, 'He is nodding out.'"

So, I think we have to fight the stigma—not just with illicit

drugs, but even with the treatments, themselves.

Senator CARPER. Alright. Thank you.

Chief RYAN. Another good analogy, Senator, is seat belt usage.

Senator CARPER. Is what?

Chief RYAN. Seat belt usage. Highway safety bureaus, for many years, were using billboards as well as taking young ladies and showing scarred faces: "This is what will happen to you if you do not wear a seat belt." That worked.

Senator CARPER. You know what else worked? Convincing legislators—State legislators—to pass laws that mandated seat belt

Chief RYAN. Right. But, I would urge caution in this situation.

Senator CARPER. Alright. Thank you.

Chairman JOHNSON. And then, that kind of gets back to that point, in our hearing, where we had the one witness talking about the effectiveness of tobacco and saying that the reason why it has not been effective with drugs is that we just have not shown the truth—the graphic nature of this is not good.

I want to talk to the doctor, a little bit, about the difference in chemistry between these drugs. What is the difference between a

synthetic opioid and heroin?

Dr. MACDONALD. They are all opioids. They all have similarities. And, trying to distinguish one opioid from another—they all have potential benefits and they all have ultimately, risk.

Chairman JOHNSON. My point is, why has one been legal—or a

class of them legal—and another one illegal?

Dr. MACDONALD. Well, I will take diacetylmorphine—prescription heroin-for example. It is used as a pain medication, in many jurisdictions, in Europe. It does not have the same stigma that it does in North America.

Chairman JOHNSON. How close is it, chemically, to natural heroin?

Dr. MACDONALD. It is very close to morphine

hydromorphone—diacetylmorphine, there is just-

Chairman JOHNSON. So, we have one form of heroin that is produced artificially that is, basically, identical to heroin. That one is legal, because it is medically controlled versus-

Mr. Nadelmann. Right. The way to think about this is, both in Vancouver and also other places, they did a couple of studies. They took long-term illegal heroin users, and they tried, in a controlled, double-blind study—this group got illegal heroin—I mean legal heroin and did not know it. The other group got morphine. They could tell the difference. This group got injectable methadone and the other got heroin—they could tell.

You know what they did? Half of the group got pharmaceutical heroin. The other half of the group got pharmaceutical Dilaudid, which is what people get prescribed. It turns out, long-time heroin users could not tell the difference, in the effect—how it felt between

heroin and Dilaudid.

Now, what does that mean? It, potentially, means that, if all of the hundreds of thousands of Americans in hospitals each year, were being given heroin instead of Dilaudid without knowing it, it would have the same effects. Nobody would know the difference. It means, alternatively, that if you would snap your fingers and all of the people in the world consuming illegal heroin were suddenly consuming Dilaudid, nobody would know the difference.

It means if you were to spell heroin D–I–L–A–U–D–I–D or spell Dilaudid H–E–R–O–I–N, it would, essentially, be the same. Right? And, I think we need to understand that, part of what makes heroin what it is that it is called "heroin." The bottom line is, it is diamorphine. It becomes morphine when it enters the human body. It is a legitimate painkiller. So, part of it is the cultural perception

of the thing and who is perceived to use it.

Chairman JOHNSON. Let me ask about the potency of marijuana. What has been the trend, from the 1970s to today? And, can you address the problems associated with the far greater potency? Doctor, can you speak to that?

Dr. MacDonald. It is certainly not the same drug it was 30

years ago. It is more dangerous.

Chairman JOHNSON. Which speaks to what Dr. Murray was talking about.

Mr. Murray. I am still reeling from what we just heard about diacetylmorphine. I think that that—

Mr. NADELMANN. And, Dilaudid?

Mr. Murray. You asked, specifically, Senator—and I will try to add hue to this. The potency of marijuana—as best we can tell from the seizure data from the DEA, in the 1980s—was around 3 percent Tetrahydrocannabinol (THC), which is the intoxicating element. It rose, steadily, year after year, about 1 percent a year, until about 2010, when it approached, nationwide, around 12 per-

cent to 14 percent THC—sinsemilla—a more potent drug.

Since Colorado—and recreational legalization—the concentrates and new products—the "shatter," the "butter," and so forth—that are extracts of just THC approach 70 percent to 90 percent pure THC. And, THC is then embedded in gummy bears, drinks, and candies being consumed at far higher rates. The rate of change of that kind of bolus to the brain is so striking that the risk of dependency and addiction seems to be elevated. The impact on psychotic breaks seems to be greatly elevated. And, the exposure, at a relatively early age, to a drug that is now 70 percent to 90 percent potency—averaging, nationwide, around 14 percent to 15 percent, for all marijuana markets combined, together—as opposed to the marijuana that most people know from previous generations—

and, unfortunately, it is the marijuana that is reflected in the literature that has taken a longitudinal look at use of those exposed in New Zealand, in Canada, or in the United States—they were consuming 3 percent to 4 percent THC at age 17. It is a more dangerous—

Chairman Johnson. So, is there any dispute about what Dr. Murray was talking about there, in terms of the potency and the

danger of that?

Mr. Nadelmann. Yes. First, let me agree on two key points. The potency of marijuana has increased. And, second, when he refers to something called "shatter," which is a sort of crack-like version of marijuana, I am also deeply concerned about consuming marijuana potency that is at 70 percent or 80 percent. That said—

Chairman JOHNSON. But, it is the truth that that is moving in

that direction—and it is legal.

Mr. NADELMANN. Yes. But, it is important to—well, "shatter?" I do not know what is going on with "shatter."

Mr. Murray. You call it legal—sir, it is smuggled into every

State in——

Mr. Nadelmann. Yes, smuggled. So, therefore, prohibition has been a failure, in that case. I think it is important to understand that doubling or tripling the potency of the THC, in marijuana, does not double or triple the high. I think it is also—and let me just be frank here, Senator. I have been an occasional marijuana consumer, for the last 40 years—since I was age 18. Right? I remember when I was 18, there were things called "Acapulco Gold," "Panama Red," and "Thai Stick," where one hit would get you high. There was a lot more low-quality Mexican marijuana around, but there was high-potency marijuana back then.

Today, there is other high-potency stuff. Do you know what you do? You smoke less of it. OK? And, I think that is important to un-

derstand about the relative dangers.

Chairman JOHNSON. Doctor, can you speak to the medical reality

of those higher potencies?

Dr. MacDonald. I think there is some risk for some individuals. It is hard to predict—especially with the edibles. I think those can be a concern. But, I agree with Dr. Nadelmann that the biggest risk is a criminal record, for somebody who is using marijuana.

risk is a criminal record, for somebody who is using marijuana.

Chairman JOHNSON. We talked a little bit about the difference in tobacco. And, you had mentioned that increasing taxes was effective. I guess, I would argue—I just kind of want to throw this on the table—because, there really is no black market, for cigarettes—I mean, there is some black market, where you have a high-tax State next to a low-tax State, and there are some cigarette runners, from that standpoint. But, I mean, the problem you have with marijuana is that there is a very robust black market. And so, if you try and approach this, in terms of reducing use, by higher taxation, I mean, you just fuel the black market.

Mr. Nadelmann. Except, what we are trying to do is to move it from a world where marijuana was 99 percent or 100 percent illegal, into a world, like tobacco or alcohol, essentially, where it is 10 percent or 15 percent illegal—people evading taxes and smuggling from low tax States, like North Carolina, to high-tax States, like New York. Or, from New York to Canada, or something like that.

There is a huge benefit in moving this from an underground, un-

controlled market into a legally regulated market.
Chairman JOHNSON. Chief Ryan, you, obviously, are talking about the opiate and heroin overdoses, and what you are trying to do there. What are you seeing, in terms of marijuana and the effects, potentially, the higher potency?

Chief Ryan. Yes, I mean-

Chairman JOHNSON. And, the trafficking, from the legal States into States like Massachusetts.

Chief RYAN. Right. And, I remain concerned that the perception that it is acceptable will have devastating consequences, in terms of kids experimenting—and then experimenting at younger ages. And then, that manifesting to experimentation with other drugs.

Chairman JOHNSON. You are saying that is a high-level concern,

on your part.

Chief RYAN. It is indeed. And, just—a quick personal story. I am playing basketball with my daughter, at the end of my driveway, recently—a 12-year-old girl. It is a Friday evening. My wife is on the front porch having a glass of wine. I am having a lovely time with my daughter. A young man pulls up, and I witness a marijuana deal going down. I went over and I intervened, as a dad. I never identified myself as a police officer. I do not want drug deals going on in my neighborhood. I took action. The kid got flip. I tried to get him to call his parents. He refused to do so. I called the police

Where I am going with this, Senator, is, the next day, do you know what the talk of the neighborhood was? What I did and how I handled the kid. It was not about the kid's behavior and the fact that he was in the neighborhood delivering illegal marijuana.

So, this perception—that marijuana is acceptable and not a social norm violation—is resulting in kids experimenting younger. And, what I am seeing on the street—early on—I am concerned about.

Chairman JOHNSON. So, the bottom line, going back to my story about the seventh grade kid, that is a very legitimate concern in this whole debate: What are we communicating to our youth?

Chief RYAN. And, how do we manage that? That is the challenge. Chairman JOHNSON. There is the conundrum. So, we have

Chief RYAN. This bad dad stopping-

Chairman JOHNSON [continuing]. Drug problem, and, because of the illegal nature of it, we are funneling billions of dollars to some of the most evil people on the planet. And yet, you move away from that, and, all of a sudden, you are communicating, unfortunately, potentially, that this is OK.

Mr. Nadelmann. Senator, I think we communicated a lot of very good messages to young people about tobacco without making it illegal for adults and creating a vast black market. I think we are increasingly communicating effectively about alcohol—right?—without creating a huge black market.

Chairman Johnson. I am not sure we are very effective about

Mr. Nadelmann. But, actually, binge drinking is going down. Some of the worse outcomes are actually going down, now. And so, I think it is important to understand—let us focus on using good, smart messages to young people about safety and health, and not getting into drugs and all that. We do not need to criminalize an entire adult population, spend tens of billions of dollars on a "war on marijuana," and get 750,000 arrests a year in order to send a message to kids. That is a very expensive and destructive way of

sending a message.

Chairman Johnson. Again, the purpose of this is really to try and find the areas of agreement. I think that is where you move forward from, because there is not going to be an agreement, by Dr. Murray and Dr. Nadelmann, on so many issues. But, I think there can be complete agreement in what we can do to communicate—to make sure our young people realize this is not a good path, this is dangerous, and this is not good for you to do. I think there would be agreement about that, on this Committee, as well.

So, it really is about how we, effectively, develop a national, concerted public relations (PR) and education campaign to dissuade all Americans from abusing drugs, particularly our young people—because, it is good to hear that there are some effective treatments for addiction, but it is a pretty difficult path. You are better off

never having somebody get addicted.

Mr. Nadelmann. If I could just make two points. First, in direct response to your question, I just want to caution against over-investment on the youth piece. We have done a lot—we are, actually, doing not so bad. The real investment needs to be on dealing with people who are really beginning to get in trouble with opiates at older ages. That is where most of the death and addiction is. It does not mean you ignore young people, but understand the great investment needs to be on the serious addiction.

And, let me just finish——

Chairman JOHNSON. Let me just comment on that point, because, again, I just want to ferret out—

Mr. NADELMANN. Senator, if I could just—let me just throw in one last point.

Chairman Johnson. OK.

Mr. Nadelmann. Because, it goes two ways, in which the marijuana issue and the opiate issue have overlapped, here—the opioid overdose issue—and there are three fascinating studies that have come out, in the last couple of years, that go to the issue of people dying of overdose. And, what they find is that, in the States that have the most robust medical marijuana programs—the ones with the easiest access to marijuana for medical purposes—in those States, you see lower levels of opioids being prescribed. And, you see dramatically lower rates of opioid overdoses. Those studies are published in JAMA's Internal Medicine, in the prestigious Journal of Pain, and by the National Bureau of Economic Research (NBER). It is suggesting that, when you are treating pain, opioids are not the only thing. Marijuana can also play a positive role. And, that, for certain types of pain, marijuana may be a more effective way of dealing with pain than opioids are and a far less dangerous way.

Chairman JOHNSON. Dr. Murray.

Mr. Murray. Again, I am just reeling from the amount of partial truth, misinformation, misdirection, and improper—

Chairman JOHNSON. Here is your opportunity to—

Mr. Nadelmann. Well, except three studies published in peer-reviewed journals—top of the line—and I have not heard the contrary studies quoted, here. So, I rest my case right there.

Mr. MURRAY. Dr. Nadelmann—

Chief RYAN. I have my handcuffs with me, gentlemen. [Laughter.]

Mr. Murray. It would please me to no end to offer you evidence.

I do not anticipate that it would dent you.

That said, I think we are in a battle for the brains of a new generation—that it is a continuing struggle and it is an urgent one. "A battle for the brain," that is the phrase a colleague of mine, at Harvard Medical School, uses-Bertha Madras, who is a brain researcher, said that the critical issue here is we are losing these kids and we are losing them, rapidly. And, we are losing them, first in Colorado, but it is spreading, nationwide. And, if we do not address that urgently—because we think it is a soft drug. It has been called a "medicine," and it is offered as such. It is a joke, when you read the national media. It is something that we see on television routinely. There is damage coming. There is damage that has already been planted into this generation. We have not seen it yet. It will manifest. And, the damage will cause us, in shock to think, "What have we done, experimenting on this generation, without knowing what price we were going to pay in broken lives, cognitive impairment, educational failure, psychotic breaks, schizophrenia, and depression? These are the sequelae. If you do not believe me, read the New England Journal of Medicine. Or, you can listen to the World Health Organization—and they are issuing urgent pleas.

Let me tell you my last story.

Chairman JOHNSON. Here—I will tell you what. We are going to give everybody a chance to wrap it up——

Mr. Murray. I can tell my story then.

Chairman JOHNSON. You can tell your story then. I would like to give Senator Carper a chance for any further thoughts or closing questions. And then, we will give you each a chance to close—and, again, I want to keep it to about a minute. So, Senator Carper?

Senator CARPER. I am going to come back to "find out what works, do more of that." And, go back to tobacco—highly addictive. And, among the things that worked that, I think, were helpful was the "Truth Campaign," particularly for young people. I think it is still working. Among the other things, it has worked, with respect to tobacco's-I remember when I was brand-new to Delawareright out of the Navy-and I remember going to the State fair. And, when we walked into the State fair, they had people actually handing out little packets of cigarettes—five or six cigarettes in a little packet. That is how easy it was to get. For many years, if you were a kid—I do not care if you were 9 years old or 90 years old you could get access to tobacco in a vending machine. And, a lot of kids got access to it—and we made it easy for people. People would go to drug stores and supermarkets. Kids going in and buying cigarettes for their parents or whatever—maybe using them for themselves—maybe taking them to their parents.

We made it more expensive, and we raised taxes, and that sort of thing. We have a substance that other people can use, if they are addicted to nicotine, like patches-people can have gum to chew that reduces the craving for cigarettes

I think there are lessons there, for us. And, I just want us to, again, "Find out what works, do more of that." And, I think there are a number of things that we have done, on the tobacco side,

other than just scaring young people straight.

The other thing that is helpful for me—and, again, thank you so much—each of you. Some of you have come a long way, and we are grateful for your being here and for your years of commitment your passion for this. Part of what we need to do is figure out what is the appropriate role for the Federal Government. And, I said this earlier. What is the appropriate role for the Federal Government? How do we use limited Federal resources to leverage, from a whole wide range of stakeholders-to leverage their contributions and their participation in things—in approaches that will actually work?

I would just close with that thought, and, again, thank you all.

Chairman JOHNSON. Thank you, Senator Carper.

Again, I truly appreciate the time you have spent on very thoughtful prepared testimonies, coming here, hopping on a red-eye flight. We will be issuing a report on this. And you can kind of understand, and by from my background as a manufacturer, I am pretty data-driven. So, you will all be given the opportunity to provide the studies—the statistics that form the basis—the documents behind that report. So, we will have questions for the record, but

we will definitely afford you that opportunity.

You have heard the discussion. You have seen the differences. But, I also would encourage you, in what you supply the Committee for our report, to concentrate on the areas of agreement. I truly believe we share the same goal. That is a good place to start. Then, try and find all of the areas of agreement. And, yes, it will start breaking down beyond that point, but, in your response to the Committee, really concentrate on the things we agree on. Hopefully, we can agree on data. Facts are facts. I realize, sometimes, they are kind of hard to come by. But, again, I really want you to continue to help this Committee. I think this has been an incredibly interesting discussion.

I will turn it over to Dr. MacDonald to kind of start out, if you

have kind of a closing 1-minute comment, here.

Dr. MacDonald. Just to sum up, supervised injectable hydromorphone—a pharmaceutical agent—can be effective at engaging the most severely affected heroin users who have not re-

sponded to the standard treatment.

Chairman JOHNSON. And, I do want to quickly ask you a question, because I missed it. Your injectable sites, have they been magnets for—because, there has been some controversy, "Well, this is going to be a magnet for drug dealers and crime and that type of thing.

Dr. MacDonald. There has been no increase in social instability around the clinics. In fact, they have stabilized. And, there has been no honeypot effect. So, people have not come from other juris-

dictions seeking the treatment.

Chairman JOHNSON. Was there any resistance by the neighborhoods, in terms of establishing those sites?

Dr. MacDonald. With our first study, NAOMI, yes, there was. But, with people having seen the success and the benefits, both to the individuals and to the community, I think those have fallen away now.

Chairman JOHNSON. Thank you. Dr. Nadelmann.

Mr. Nadelmann. Yes, I think it is almost embarrassing that the United States has not proceeded with some form of experiment or policy reform to allow these sorts of safe injection sites and heroin maintenance programs to happen in the United States, given the overwhelming evidence, from outside of the United States, of their efficacy, in all regards.

But, let me finish with this point—and it is a different one, in a way. I talked, before, about how valuable it would be if thousands of ethnographers and other researchers were really trying to figure

out what is going on.

The other part of this is treating pain—and just a couple of

things about that.

First, I think the bravest doctors, in America, are doctors, who are trying to manage pain in patients, who have been addicted to opiates, illegally. That population of people, who have been the junkies—the addicts—whatever you want to call them—that are

dealing with real pain—they are courageous.

And, second, I tell you, a few months ago, I was talking to my brother, who is a cardiologist—and his daughters are both going to medical school. And, I was saying to his daughters, "I think the single most interesting area of medicine to go into is pain management." Right? It is so interdisciplinary. It is psychological and it is physical—it is an amazing subject. And, my brother got angry at me. He said, "Do not tell my daughters—your nieces—to do that. Let me tell you, it is the most"—"You are going to have the DEA looking over your shoulder. They are looking over your shoulder. You do not know what is going on. Do not do it." But, something to incentivize medical students and, for that matter, physicians to learn dramatically more about managing pain, I think, would be an extraordinarily valuable investment.

Chairman JOHNSON. And, of course, that was Senator Portman's

point. Dr. Murray.

Mr. Murray. In short order, here, we have heard a great deal about safe injection, supervised injection facilities, and giving out heroin to heroin addicts. I will just, in summary fashion, say that the true test of any good public policy, it seems to me—it must meet two criteria:

It must be effective. And, the case is not, when you look at the literature, that these things are effective, as advertised. They still have many gaps. They do not, actually, transform the high-risk behavior of the populations. We continue to lose them, in overdose and HIV transmission. They continue to inject outside of the facilities. This is not ready to be an answer to our policy problem, at this point.

The second criterion is, it must be humane. And, I would say, Senator, that, for the government to step into the role of officially providing addictive heroin to its citizens, so transforms the relationship of the citizen to the government that we should fear it.

And, I will end with my story. I am frustrated by marijuana legalization advocates, who target children—and they do—and very effectively. And, they appeal to us by putting suffering victims—a woman with lupus, where medical marijuana made her walk again. We have seen this too much.

In particular, I have seen it, recently, regarding another population that I care a great deal about, because of my service in the White House. I had the privilege of serving with the men and women of America's armed services, who occupy our office and are extraordinary people. And, the issue of Post-traumatic Stress Disorder (PTSD), in the U.S. veteran population, is an exceptionally troubling, profound one—many of them are being treated through, I think, an inadequate Department of Veterans Affairs (VA) system. I will let others judge that. And, it has been proposed, here, in this Congress, and elsewhere, by marijuana advocates, that what veterans suffering from PTSD most need is high-potency marijuana to medicate themselves. And, the VA, itself, is not sure about this and issues equivocal statements about the impact.

But, a recent publication, by a Yale University psychiatrist indicated that the psychiatrist has studied the population of veterans who suffer from PTSD. And, he has looked at those who were given marijuana and the results were totally counterproductive. It put them at a greater risk of experiencing psychotic breaks and reduced the effectiveness of the treatment that they were already having. Many of these people are being medicated with very powerful psychotropic medications, already. No one has any idea what the interaction is, when you add THC to that mix. No one knows about the outcomes for the young kids in school taking Ritalin at exorbitant rates—or other antidepressants—interacting with THC. The potency of the mixtures, the unknown dimension of it, and to try and enlist veterans as a sympathetic audience—as a sympathetic profile—to try and sway us toward marijuana, as a medicine, strikes me as being highly irresponsible.

Chairman JOHNSON. Thank you, Dr. Murray. We had our own tragedies at the Tomah VA because of the overprescription of opi-

ates and drug toxicity.

Chief Ryan, again, you are on the frontline of this. You are dealing with it on the streets. So, again, we appreciate your service and appreciate your testimony. Your closing thought?

Chief RYAN. Thank you, Senator. And, thank you for your work and the work of your Committee. I would just, briefly, leave you

with a couple of thoughts.

I will never argue that enforcement is not a component to the global piece of the pie, on this challenge. But, it has to be proportional. And, we cannot label it a "war." As we try to roll out community policing and to build trust in our communities, the last word we want to use—or conduct behavior like a "warrior," in our communities. We are guardians in our communities, as law enforcement.

That said, to the extent that you and your Committee can bring a true sense of urgency to this issue—particularly the opiate epidemic—and facilitate meaningful dialogue with the medical profession, law enforcement, and the pharmaceutical industry—so that, a decade from now, we are in our rocking chairs, and we can look back and look at our work and our collaboration-although we may differ—and say that we have made a positive change in America.

And, thank you, Senator.

Chairman JOHNSON. Well, again, thank you. We all share the same goal. So, again, we are trying to facilitate a very honest, very frank discussion. I think that is what we have, certainly, had here. And, help us build the record, to write a report that will, hopefully, move that process forward.

So, again, I just thank you all for coming here and for all of your time. The roundtable record will remain open for 15 days, until June 30, at 5 p.m., for the submission of statements and questions for the record.

This roundtable is adjourned. Thank you all.

[Whereupon, at 12:18 p.m., the Committee was adjourned.]

## APPENDIX

America's Insatiable Demand for Drugs: Examining Alternative Approaches

15 June 201

#### D. Scott MacDonald MD

Physician Lead, Providence Crosstown Clinic

At Providence Crosstown Clinic 140 people are receiving daily treatment with injectable opioids, an intensified form of medication assisted treatment. I want to thank the Government of British Columbia for supporting our clinic and making the delivery of this treatment possible in Vancouver. About half are receiving treatment with hydromorphone a widely available licensed pain medication, the remainder receive diacetylmorphine.

Our patients can come up to three times a day for treatment, half come twice per day and the other half come three times a day. About a third take a small dose of methadone with their last session at night. All these patients have a chronic disease, a medical condition for life that can be successfully managed. Treatment prevents withdrawal and stabilizes their lives. Here they have an opportunity to deal with underlying psychological and mental health issues. In time some will step down to less intensive treatments or gradually wean themselves off.

These patients were all participants in SALOME, the study to asses longer term opioid medication effectiveness. SALOME was a follow-up study to NAOMI, The North American Opioid Medication Initiative, which showed diacetylmorphine or prescription heroin is superior to methadone in that group of patients who continue to use illicit heroin despite attempts at the standard treatments. A small group of NAOMI participants received hydromorphone and in a surprise experienced drug users could not distinguish which treatment they received and the beneficial treatment effect was preserved in the hydromorphone arm.

Some people suffering from severe opioid use disorder need an intensified treatment like this. While methadone and buprenorphine are effective treatments for many people and should remain first line responses, no single treatment is effective for all individuals. Every person left untreated is at high risk for serious illness and premature death.

Despite positive results for diacetylmorphine published in the New England Journal of Medicine only Denmark acted on these results and incorporated prescription heroin into their health system.

But, it did lead to our follow-up study, and testing of Hydromorphone or Dilaudid as a potential treatment. Hydromorphone has the advantage over diacetylmorphine of already being a licensed pharmaceutical.

The SALOME group underwent stringent testing and controls to show need for treatment. For them the standard treatments, suboxone and methadone had not worked and most had multiple prior attempts at treatment. They had used injectable opioids for at least 5 years and on average 15 years. They had medical and psychological health problems. They had nearly universal involvement in the criminal justice system. In short we were able to recruit those patients appropriate for an intensified treatment like this.

At the start of the study they were using illicit opioids every day and by six months their use was down 3 to 5 days per month. Nearly 80 percent were retained in care and that high rate continues through today. At outset they were engaged in illegal activities on average 14 days per month and with treatment that reduced to less than 4 days per month. This study was published this past April in the Journal of the American Medical Association Psychiatry. I would like to acknowledge Health Canada for allowing us to investigate this important scientific question and for allowing a number of our patients to continue on Diacetylmorphine, those who need it on a compassionate basis.

Supervised injectable hydromorphone is indicated for the treatment of severe opioid use disorder. We are using injectable hydromorphone as a medication assisted treatment, an intensified medical intervention and part of the treatment continuum. Severe opioid use disorder is a chronic disease that needs to be managed long-term like type 2 diabetes or hypertension. Without our treatment this group's only option would be illicit opioids through the Narco capitalist networks.

We still have people who use drugs on the street in Vancouver, but we do have another option in addition to needle exchanges. Supervised consumption rooms are legally protected places where drug users consume pre-obtained illicit drugs in a safe, non-judgmental environment. Vancouver has two such sites. The sites provide an important entry point for people into medical care and substance use treatment. They also provide value over needle exchanges alone as all needles and equipment are contained onsite and needles will not end up in playgrounds or schoolyards where they could cause injury.

To contrast with these harm reduction interventions, at our clinic we are providing a medical treatment. Providing injectable medication in a specialized opioid clinic, under supervision of medical professionals not only ensuring safety of the patients and the community but allowing for the provision of comprehensive care.

We are able to use hydromorphone 'off-label' in Canada for treatment of substance use disorder but some jurisdictions restrict its use to pain. I have seen some remarkable transformations in our patients. Some of our patients have already returned to work or to school.

Supervised injectable hydromorphone is safe, effective, and cost effective. A useful tool when the standard treatments are not effective. Treatments are dispensed within our opioid treatment clinic and prescribed on a 'dispensing basis' on site. In this setting Hydromorphone is not susceptible to diversion and an exemption for its use could be considered in jurisdictions where its use to treat substance use disorder is prohibited by law.

In British Columbia we need every tool in the toolbox to rise to the challenge the opioid epidemic presents. Injectable opioid assisted treatment in supervised clinics is one effective approach. Supervised consumption rooms, like Insite, are valuable for public health. Of course we would like to see an end to people dependent on heroin but for those already suffering it is essential to provide care, and care based on evidence.

# America's Insatiable Demand for Drugs: Examining Alternative Approaches 15 June 2016

#### INJECTABLE OPIOIDS FOR TREATMENT OF SEVERE OPIOID USE DISORDER

Prepared by Dr. Scott MacDonald, Physician Lead at Crosstown Clinic, Providence Health Care, with Dr. Eugenia Oviedo-Joekes, Associate Professor, School of Population and Public Health, UBC and Kurt Lock, Outreach Coordinator for the SALOME study.

Medically prescribed injectable opioids in supervised settings reach and treat people with severe opioid use, preventing fatal overdoses.

#### **BACKGROUND**

Substitution treatment with long-acting oral opioids (e.g. methadone, buprenorphine) is effective at reducing the use of street opioids, and many of the harms associated with their use. However, there is an important vulnerable minority (a subgroup of 15 to 25%) that is either not retained in other treatments for very long or continue to use illicit opioids while in treatment. For these individuals, studies in Europe and Canada showed that supervised medically prescribed injectable diacetylmorphine (the active ingredient in heroin), is an effective and cost effective treatment alternative.

The hypothesis is that by providing medically prescribed pharmaceutical-grade heroin at prescribed dosages in sterile conditions in clinical settings, opioid-dependent individuals who cannot stop injecting despite other options available will: (1) be better engaged into and retained in treatment; (2) be protected from harms such as overdose, HIV and hepatitis C infection; (3) be removed from destructive cycles of crime, prostitution, etc. that are often required to acquire the drugs in the streets; and (4) benefit from prolonged exposure to medical and psycho-social support services.

Supervised, medically prescribed diacetylmorphine is now being used with success in a number of countries in Europe (e.g., Germany, the Netherlands, Switzerland, Denmark), where it accounts for approximately 5% to 8% of all those enrolled in substitution treatments. However, there are many countries around the world where diacetylmorphine is not available due to regulatory and/or political reasons. To overcome this barrier, a recent study conducted in Vancouver, Canada, tested if hydromorphone, a licensed opioid, was as good as diacetylmorphine at reducing street opioid use and retaining patients in treatment.

The SALOME study, a double-blinded non-inferiority randomized controlled trial demonstrated that injectable hydromorphone is as effective as injectable diacetylmorphine for long-term injection street opioid users not currently benefitting from available treatments. Both medications, delivered in identical conditions, have proven to have positive outcomes such as high retention rates (80%), reduction of street drug use (from daily to few days per month), and illicit activities.

Thus, in jurisdictions where diacetylmorphine is currently not available, or in patients where it is contraindicated or unsuccessful, hydromorphone provides a licensed alternative. In the Supervised Model of Care of medically prescribed injectable opioids ensures safety for the patients by, for example, providing pharmaceutical-grade, unadulterated, injectable opioids in known doses and onsite treatment of overdoses and seizures. It also ensures the safety of the community (i.e., prevent diversion of a strong opioid) and most importantly ensures comprehensive care (e.g., support with securing housing, treating chronic illnesses, etc.), since patients come daily.

#### KEY POINTS:

Without a supervised injectable opioid treatment option, a small number of patients, the most vulnerable ones, are relegated to the illicit stream of opioids, with the tremendous associated risks

In a supervised model, within an opioid treatment clinic where the medications are prescribed, dispensed and used on site, there is little risk of diversion and substantial opportunities for expanding care.

#### ACTION FOR CONSIDERATION:

Exemption for the treatment of severe opioid use disorder for products not susceptible to diversion like supervised injectable hydromorphone.

#### IMPORTANT REFERENCES

Strang J, Groshkova T, Uchtenhagen A, et al. Heroin on trial: systematic review and metaanalysis of randomized trials of diamorphine-prescribing as treatment for refractory heroin addiction. Br J Psychiatry 2015;207:5-14.

Oviedo-Joekes E, Guh D, Brissette S, et al. Hydromorphone Compared With Diacetylmorphine for Long-term Opioid

Dependence: A Randomized Clinical Trial. JAMA Psychiatry 2016;73:I-9.

Oviedo-Joekes E, Brissette S, Marsh DC, et al. Diacetylmorphine versus methadone for the treatment of opioid addiction. N Engl J Med 2009;361:777-86.

Nosyk B, et al. Cost-effectiveness of diacetylmorphine versus methadone for chronic opioid dependence refractory to treatment, CMAJ 2012. DOI:10.1053/cmaj.110669

Ferri M, et al. Heroin maintenance for chronic heroin-dependent individuals. Cochrane Database Syst Rev, 2011 Dec 7;(12):CD003410

### Contact

D. Scott MacDonald Physician Lead, Providence Crosstown Clinic 84 West Hastings Street Vancouver, BC, Canada V6B 1G6 Smacdonald2@providencehealth.bc.ca

### Eugenia Oviedo-Joekes PhD

SALOME principal investigator
Associate Professor - Michael Smith Foundation Scholar and CIHR New Investigator
School of Population and Public Health
University of British Columbia
Centre for Health Evaluation & Outcome Sciences
Providence Health Care
St. Paul's Hospital
588B-1081 Burrard Street
Vancouver, BC. V6Z 1Y6

Tel: <u>604-682-2344 Ext. 62973</u>

Fax: 604-806-8005

E-mail: eugenia@cheos.ubc.ca

# America's Insatiable Demand for Drugs: Examining Alternative Approaches 15 June 2016

#### SUPERVISED CONSUMPTION ROOMS/INJECTION SITES

Prepared by Dr. Scott MacDonald, Physician Lead at Crosstown Clinic, Providence Health Care, with Dr. Thomas Kerr

#### BACKGROUND

Supervised injection sites (SISs) are healthcare facilities where people who inject drugs (PWID) can inject pre-obtained illicit drugs under the supervision of nurses or other healthcare professionals. Within SISs, PWID are provided with sterile injecting equipment (syringes, alcohol swabs, cookers, etc.,), as well as safer injecting education, emergency response in the event of overdose, and referrals to internal and external health and social services. There are over 90 SISs operating throughout the world in approximately 66 cities in 10 countries, including in Western Europe and Australia. SIS programs take on many forms, including: large stand-alone facilities designed specifically for the supervision of drug injecting.

Smaller SISs have also been integrated into other pre-existing facilities in Europe, including in supportive housing programs, community health clinics, and in drop-in centres. Mobile SISs have now been established in many European cities to increase the coverage of supervised injecting programming. These may be particularly helpful in reaching PWID who are more street-entrenched and those who use drugs in locations far away from fixed SISs. Several European cities have also implemented supervised inhalation rooms, although no such facilities exist in BC.

SISs have been subjected to rigorous evaluation in various settings, although most of the existing SIS literature has been derived from the evaluation of Insite in Vancouver. The Vancouver SIS evaluation revealed many benefits of Insite, including: declines in public injecting; reductions in fatal overdose; reductions in HIV risk behaviour; increases in uptake of detoxification and addiction treatment services. The evaluation also found no negative impacts in terms of increased crime, initiation into injecting, relapse into injecting, and Insite was found to be cost-effective. Evaluations undertaken in Australia and Europe also have shown: declines in ambulance call-outs; high rates of referral to external services; declines in syringe sharing; and one ecological study from Germany found lower rates of overdose death in cities with SIS compared to cities without SIS.

## IMPORTANT REFERENCES

1. Wood E, Tyndall MW, Montaner JS, Kerr T. Summary of findings from the evaluation of a pilot medically supervised safer injecting facility. CMAJ. 2006;175(11):1399-1404.

- 2. Potier C, Laprevote V, Dubois-Arber F, Cottencin O, Rolland B. Supervised injection services: what has been demonstrated? A systematic literature review. Drug Alcohol Depend. 2014;145:48-68.
- 3. Ti L, Buxton J, Harrison S, et al. Willingness to access an in-hospital supervised injection facility among hospitalized people who use illicit drugs. J Hosp Med. 2015;10(5):301-306.
- 4. European Monitoring Centre on Drugs and Drug Addiction. Perspectives on drugs: Drug consumption rooms: an overview of provision and evidence. EMCDDA, 2015. Available at: http://www.emcdda.europa.eu/attachements.cfm/att\_239692\_EN\_Drug%20consumption%20rooms\_P OD2015.pdf

#### Contact

D. Scott MacDonald Physician Lead, Providence Crosstown Clinic 84 West Hastings Street Vancouver, BC, Canada V6B 1G6 Smacdonald2@providencehealth.bc.ca

Thomas Kerr, PhD
Director, Urban Health Research Initiative
British Columbia Centre for Excellence in HIV/AIDS
Professor, Dept. of Medicine
University of British Columbia

St. Paul's Hospital
608-1081 Burrard Street
Vancouver, British Columbia
Canada, V6Z 1Y6
(Tcl) 604-806-9116
(Fax) 604-806-9044
Email: drtk@cfenet.ubc.ca
http://uhri.cfenet.ubc.ca/index.php

## Testimony Before the

U.S. Senate Committee on Homeland Security and Governmental Affairs

Hearing in Reference to "America's Insatiable Demand for Drugs:

Examining Alternative Approaches"

June 15, 2016

Ethan Nadelmann

Executive Director of the Drug Policy Alliance

Good morning. I would like to thank Chairman Johnson and the rest of the Homeland Security and Government Affairs Committee for inviting me to testify. I am Ethan Nadelmann, the founder and executive director of the Drug Policy Alliance, the leading organization in the United States promoting alternatives to the failed war on drugs.

The Drug Policy Alliance (DPA) is the nation's leading organization promoting drug policies that are grounded in science, compassion, health and human rights. Our supporters are individuals who believe the war on drugs is doing more harm than good. Together we advance policies that reduce the harms of both drug use and drug prohibition, and seek solutions that promote safety while upholding the sovereignty of individuals over their own minds and bodies. We work to ensure that our nation's drug policies no longer arrest, incarcerate, disenfranchise, and otherwise harm millions – particularly young people and people of color who are disproportionately affected by the war on drugs.

The war on drugs has had a devastating impact on the world: murder and mayhem in Mexico, Central America, and so many other parts of the planet, a global black market estimated at 300 billion dollars a year, prisons packed in the United States and elsewhere, police and military drawn into an unwinnable war that violates basic rights, and ordinary citizens just hoping they don't get caught in the crossfire. Meanwhile, there are just as many people using drugs as ever. It is our country's history with alcohol Prohibition and Al Capone, times 50.

Even routine drug law enforcement can increase violence by destabilizing markets and creating power vacuums. A systematic review of more than 300 international studies found that when police crack down on people who use or sell drugs, the result is almost always an increase in violence. Two studies conducted in 1991 and 1999 found that when there has been a major increase in the homicide rate in the U.S., it could be positively associated with intensified enforcement of alcohol Prohibition or drug prohibition. In recent years, the escalation of the war on drugs in Mexico and other Latin American countries has led to the deaths of tens of thousands of people in those countries. Hundreds, if not thousands, of Americans die on U.S. streets in drug prohibition-related violence every year, although it goes largely untracked.

<sup>&</sup>lt;sup>1</sup> International Centre for Science in Drug Policy, Effects of Drug Law Enforcement on Drug-Related Violence: Evidence from a Scientific Review (2010), 22, available at <a href="http://www.icsdp.org/docs/ICSDP-1%20-%20FINAL.pdf">http://www.icsdp.org/docs/ICSDP-1%20-%20FINAL.pdf</a>

<sup>9620</sup>FINAL.pdf

Friedman, Milton, "The War We Are Losing," in Searching for Alternative: Drug-Control Policy in the United States, M.B. Krauss and E.P. Lazear, eds. (Hoover Institution: Stanford, CA: 1991), 53-67; Jeffrey A. Miron, "Violence and the U.S. Prohibitions of Drugs and Alcohol," American Law and Economics Review 1-2 (1999): 78-114, available at http://aler.oxfordjournals.org/content/1/178.full.pdf.

In Mexico, over 70,000 people have been killed, 25,000 have been disappeared, and hundreds of thousands have been internally displaced in prohibition-related violence in the past six years, while several Central American countries have some of the highest homicide rates in the world, prompting the U.N to describe the region as the most violent in the world outside of active war zones. See, for example, Booth, William. Mexico's crime wave has left about 25,000 missing, government documents show. Washington Post (2012); David A. Shirk, The Drug War in Mexico Confronting a Shared Threat, Council on Foreign Relations (2012).

http://i.cfr.org/content/publications/attachments/Mexico\_CSR60.pdf; and United Nations, "Drug-related violence has reached alarming levels in Central America – UN," (February 2012),

http://www.un.org/apps/news/story.asp?NewsID=41407&Cr=drug+trafficking&Cr1#.UQI\_gr88CSo. See also Cory Molzahn, Octavio Rodriguez Ferreira, and David A Shirk, "Drug Violence in Mexico: Data and Analysis through 2012," (Trans-Border Institute, 2013); "Epn En 100 Días: 4 Mil 549 Ejecuciones," Zeta, 11 de marzo, 2013; Angélica Mercado, "Violencia Saca De Sus Pueblos a 1.2 Millones," Milenio, 19 de noviembre, 2012; Gloria Leticia

Drug control strategies that seek to interrupt the supply at its source have failed over and over again for cocaine, heroin, marijuana, and virtually every drug to which they have been applied – including alcohol during alcohol Prohibition. Fundamental economic principles demonstrate why: As long as a strong demand for a drug exists, a supply will be made available at some price to meet it. Worse than simply being ineffective, supply-side strategies drive immutable market forces to expand cultivation and trafficking, generate unintended consequences, and, in many instances, ultimately worsen the problem.

I wrote my Ph.D dissertation on international drug control and have written and co-authored books on international policing, including drug control. I have interviewed hundreds of DEA and other law enforcement agents all around Europe and the Americas and asked them what they think the answer is.

In Latin America, they would tell me you can't really cut off the supply; the answer lies back in the U.S., in cutting off the demand. When I talked to people involved in anti-drug efforts in the U.S., they said you can't really cut off the demand; the answer lies over there, and you have to cut off the supply. Then I talked to guys in customs trying to stop drugs at the borders, and they would say you're not going to stop it here; the answer lies over there, in cutting off supply and demand. And it hit me: Everybody involved in this thought the answer lay in that area about which they knew the least.

That is when I started reading everything I could about psychoactive drugs: the history, the science, the politics, all of it. The more I read, the more it hit me how a thoughtful, enlightened, intelligent approach would take us one direction whereas the politics and laws of our country were taking us in a far less effective and more destructive direction. That disparity struck me as this incredible intellectual and moral puzzle.

Research into the history, science, and politics of psychoactive drugs reveals that there has probably never been a drug-free society. Virtually every society has ingested psychoactive substances to deal with pain, increase our energy, socialize, even commune with God. Our desire to alter our consciousness may be as fundamental as our desires for food, companionship, and sex. So our true challenge is to learn how to live with drugs so they cause the least possible harm and in some cases the greatest possible benefit.

Diaz, "Desplazados 1.6 Millones De Mexicanos Por Guerra Contra El Crimen Organizado," Proceso, 28 de noviembre, 2011.

<sup>&</sup>lt;sup>4</sup> "Crime in the United States 2011 - Arrests," FBI Uniform Crime Report, "Murder Circumstances, by Sex of Victim, 2011," (Washington, DC: US Dept. of Justice, October 2012), http://www.fbi.gov/about-us/cjis/ucr/crime-in-the-u.s/2011/crime-in-the-u.s.-2011/tables/expanded-homicide-data-table-13 (reporting that in 2011, an estimated 14,612 people were murdered, including at least 390 that the FBI attributes to "narcotic drug laws", another 494 labeled "gangland killings", and over 5,000 other homicides in which the circumstances were unknown or

unspecified).

Soyum, David, and Peter Reuter. An Analytic Assessment of U.S. Drug Policy. Washington, D.C.: American Enterprise Institute Press, 2005; Reuter, Peter. "The Limits of Supply-Side Drug Control." The Milken Institute Review Santa Monica, CA, First Quarter 2001: 15-23; and Youngers, Coletta, and Eileen Rosin, Ed. "Drugs and Democracy in Latin America: The Impact of U.S. Policy." Washington Office on Latin America Special Report Washington, D.C., Nov. 2004: 1-5.

<sup>&</sup>lt;sup>6</sup> Reuter, Peter. "The Limits of Supply-Side Drug Control." The Milken Institute Review Santa Monica, CA, First Ouarter 2001: 15-23.

The reason some drugs are legal and others are not has almost nothing to do with science or health or the relative risk of drugs, and almost everything to do with who uses and who is perceived to use particular drugs. In the late 19th century, when most of the drugs that are now illegal were legal, the principal consumers of opiates in this country and others were middle-aged white women, using them to alleviate aches and pains when few other analgesics were available. And nobody thought about criminalizing it back then because nobody wanted to put Grandma behind bars.

But when hundreds of thousands of Chinese people started showing up in our country, working hard on the railroads and the mines and then relaxing in the evening just like they had in the old country with a few puffs on that opium pipe, that's when the first drug prohibition laws were put in place, in California and Nevada, driven by racist fears of Chinese transforming white women into opium-addicted sex slaves. 8 The first cocaine prohibition laws were similarly prompted by racist fears of black men sniffing that white powder and forgetting their proper place in Southern society. The first marijuana prohibition laws were all about fears of Mexican migrants in the West and Southwest. 10

I used to be a professor teaching about this at Princeton. Now I'm a human rights activist, and what drives me is my shame at living in an otherwise great nation that has less than five percent of the world's population but almost 25 percent of the world's incarcerated population. It's the people I meet who have lost someone they love to drug-related violence or prison or overdose or AIDS because our drug policies emphasize criminalization over health. And it's the good people who have lost their jobs, their homes, their freedom, even their children to the state, not because they hurt anyone but solely because they chose to use one drug instead of another.

So is legalization the answer? On that, I'm torn. There's the possibility that more people would become addicted but also no doubt that legally regulating and taxing most of the drugs that are now criminalized would radically reduce the crime, violence, corruption and black markets, and the problems of adulterated and unregulated drugs, and improve public safety, and allow taxpayer resources to be developed to more useful purposes.

The markets in marijuana, cocaine, heroin, and methamphetamine are global commodities markets just like the global markets in alcohol, tobacco, coffee, sugar, and so many other things. Where there is a demand, there will be a supply. Knock out one source and another inevitably emerges. People tend to think of prohibition as the ultimate form of

<sup>&</sup>lt;sup>7</sup> See for instance, King County Bar Association, "Drugs and the Drug Laws: Historical and Cultural Contexts," (2005), accessed June 1, 2016, https://www.kcba.org/druglaw/pdf/report\_hc.pdf. Licit and Illicit Drugs; The Consumers Union Report on Narcotics, Stimulants, Depressants, Inhalants, Hallucinogens, and Marijuana -Including Caffeine (1973).

<sup>&</sup>lt;sup>8</sup> Herbert Hill, Anti-Oriental Agitation, Society, 10:43-54, 1973; p. 51; Andrew Sinclair, Prohibition: Era of Excess (1962); Arnold Trebach, The Heroin Solution (1982).

Dr. Edward H. Williams, "Negro Cocaine 'Fiends' Are a New Southern Menace, "The New York Times, Feb. 8, 1914; Dr. Christopher Koch, Literary Digest, March 28, 1914, p. 687; Richard Ashley, Cocaine: Its History, Uses and Effects, p. 60; "The Growing Menace of the Use of Cocaine," New York Times, August 2, 1908.

10 R.J. Bonnie and C.H. Whitebread, The Marihuana Conviction

<sup>(</sup>Charlottesville: University of Virginia Press, 1974); Ernest L. Abel, Marihuana: The First 12,000 Years, p. 207

regulation when in fact it represents the abdication of regulation, with criminals filling the void. That's why putting criminal laws and police front and center in trying to control a dynamic global commodities market is a recipe for disaster. What we really need to do is bring the underground drug markets as much as possible above ground and regulate them as intelligently as we can to minimize both the harms of drugs and the harms of prohibitionist policies.

With marijuana, that obviously means legally regulating and taxing it like alcohol. The benefits of doing so are enormous, the risks minimal. Will more people use marijuana? Maybe, but it's not going to be young people, because it's not going to be legalized for them, and quite frankly, they already have the best access to marijuana. Youth marijuana use is actually falling in the states that have legalized marijuana, as are arrests. Meanwhile, tax revenue is up. 11

As for the other drugs, look at Portugal, where all drugs were decriminalized in 2001. Nobody goes to jail there for possessing drugs, and the government is deeply committed to treating addiction as a health issue. People who don't fear arrest become more likely to seek help when they need it. Both adolescent drug use as well as overall problematic drug use has decreased since 2003 in Portugal. <sup>12</sup> Overdose fatalities have decreased. <sup>13</sup> Treatment admissions are up. <sup>14</sup>

A growing number of national and international organizations and experts support decriminalization, including the American Public Health Association, World Health Organization, Organization of American States, International Federation of Red Cross and Red Crescent Societies, NAACP, Human Rights Watch, American Civil Liberties Union, National Latino Congreso, and UN agencies that focus on health, development, and human rights. Recent polls of primary voters in New Hampshire 15 and South Carolina 16 found a substantial majority of voters believe people caught with a small amount of drugs should be evaluated and offered treatment but not be arrested or face jail time.

California and Maine recently downgraded drug possession from a felony to a misdemeanor. Thirty-two states and the District of Columbia have adopted 911 Good Samaritan overdose prevention laws, which essentially decriminalize simple possession and other minor drug

<sup>&</sup>lt;sup>11</sup> http://www.drugpolicy.org/sites/default/files/Drug\_Policy\_Alliance\_Status\_Report\_Marijuana\_Legalization\_in\_Washington\_July2015.pdf; State of Colorado (2013) 'Task Force Report on the Implementation of Amendment 64: Regulation of Marijuana in Colorado: Transform (2015), "Cannabis Regulation in Colorado: early evidence defies teritics" http://www.tdpf.org.uk/blog/cannabis-regulation-colorado-early-evidence-defies-critics; "As Fear And Intolerance Of Marijuana Declined, So Did Adolescent Use", Jacob Sullum, Forbes, June 2, 2016.
<sup>12</sup> Hughes and Stevens, "What Can We Learn from the Portuguese Decriminalization of Illicit Drugs?," 999-1022;

<sup>&</sup>lt;sup>12</sup> Hughes and Stevens, "What Can We Learn from the Portuguese Decriminalization of Illicit Drugs?," 999-102: Mafalda Ferreira, Margarida Gaspar de Matos, and José Alves Diniz, "Risk Behaviour: Substance Use among Portuguese Adolescents." Procedia - Social and Behavioral Sciences 29(2011): 486-92.

Portuguese Adolescents," Procedia - Social and Behavioral Sciences 29(2011): 486-92.

Hughes and Stevens, "A Resounding Success or a Disastrous Failure: Re- Examining the Interpretation of Evidence on the Portuguese Decriminalisation of Illicit Drugs," 107; (SICAD), "Relatório Anual 2013 – a Situação Do País Em Matéria De Drogas E Toxicodependências," 64.

Hughes and Stevens, "What Can We Learn from the Portuguese Decriminalization of Illicit Drugs?," 1015;

<sup>&</sup>lt;sup>13</sup> Hughes and Stevens, "What Can We Learn from the Portuguese Decriminalization of Illicit Drugs?," 1015; Instituto da Droga e da Toxicodependência, "Relatório Anual 2011 – a Situação Do País Em Matéria De Drogas E Toxicodependências," (2012), Anexo, 32. As a result of changes to Portugal's national treatment data collection and reporting processes, data published after 2011 are not directly comparable to data published before 2011. Laqueur, "Uses and Abuses of Drug Decriminalization in Portugal."

http://www.drugpolicy.org/sites/default/files/NHResults\_012616.pdf
 http://www.drugpolicy.org/sites/default/files/SC\_poll\_0216\_PPP.pdf

offenses at the scene of an overdose by providing immunity from prosecution to those who seek help. Policies such as Law Enforcement Assisted Diversion (LEAD) – which operate in Seattle and Santa Fe and are now being adopted in other major cities – seek to reduce the role of the criminal justice system at the point of contact for low-level offenses like drug possession, minor drug sales, prostitution, and petty larceny. Police use their discretion to refer people to voluntary, harm reduction-oriented treatment and other services instead of arresting and booking them.

A growing number of countries – including Canada, Denmark, Germany, Spain, Switzerland, and the United Kingdom – now provide pharmaceutical heroin and helping services in medical clinics. The results are clear: Illegal drug abuse, disease, overdoses, crime, and arrests all go down while health and well-being improve, taxpayers save money, and many drug users even put their addictions behind them. <sup>17</sup>

Evaluations of these heroin-assisted treatment programs demonstrate that "prescribed pharmaceutical heroin does exactly what it is intended to do: it reaches a treatment refractory group of addicts by engaging them in a positive healthcare relationship with a physician, it reduces their criminal activity, improves their health status, and increases their social tenure through more stable housing, employment, and contact with family." Moreover, these substantial benefits come with improved cost-savings compared to standard treatments and with no negative impacts on the larger community.

Though heroin-assisted treatment programs only serve a small minority of the population that uses heroin, it is this subgroup that consumes the majority of the heroin supply. For this reason, heroin maintenance can actually help destabilize local heroin markets. One published article concluded that heroin maintenance participants had "accounted for a substantial proportion of consumption of illicit heroin, and that removing them from the illicit market has damaged the

<sup>&</sup>lt;sup>17</sup> See, e.g., Fischer, B., Oviedo-Joekes, E., Blanken, P., et al. (2007). Heroin-assisted treatment (HAT) a decade later: A brief update on science and politics. J Urban Health, 84, 552-62; Strang, J., Groshkova, T. & Metrebian, N. (2012). New heroin-assisted treatment: Recent evidence and current practices of supervised injectable heroin treatment in Europe and beyond. European Monitoring Centre for Drugs and Drug Addiction Insights. Luxembourg: Publications; See, e.g., van den Brink, W., Hendricks, V. M., Blanken, P., et al. (2003). Medical prescription of heroin to treatment resistant heroin addicts: two randomised controlled trials. British Medical Journal, 327, 310-316; Haasen, C., Verthein, U., Degkwitz, P., et al. (2007). Heroin-assisted treatment for opioid dependence. British Journal of Psychiatry, 191, 55-62; March, J. C., Oviedo-Jockes, E., Perea-Milla, E., Carrasco, F. et al. (2006). Controlled trial of prescribed heroin in the treatment of opioid addiction. Journal of Substance Abuse Treatment, 31, 203-211; Oviedo-Joekes, E., Brissette, S., Marsh, D., et al. (2009). Diacetylmorphine versus methadone for the treatment of opiate addiction. The New England Journal of Medicine, 361, 777-786; Perneger, T. V., Giner, F., del Rio, M. & Mino, A. (1998). Randomised trial of heroin maintenance programme for addicts who fail in conventional drug treatments. British Medical Journal 317, 13-18; Strang, J., Metrebian, N., Lintzeris, N., et al. (2010). Supervised injectable heroin or injectable methadone versus optimised oral methadone as treatment for chronic heroin addicts in England after persistent failure in orthodox treatment (RIOTT): a randomised trial. Lancet, 375, 1885-1895. See, e.g., Ferri, M., Davoli, M., & Perucci, C.A. (2005). Heroin maintenance for chronic heroin dependents, Cochrane Database Syst Rev., 2.

<sup>&</sup>lt;sup>18</sup> Small, D. & Drucker, E. (2006). Policy makers ignoring science and scientists ignoring policy: The medical ethical challenges of heroin treatment. *Harm Reduction Journal*, 3, 16.

<sup>&</sup>lt;sup>19</sup> Bammer, G., van den Brink, W., Gschwend, P., et al. (2003). What can the Swiss and Dutch trials tell us about the potential risks associated with heroin prescribing? *Drug and Alcohol Review*, 22(3), 363-71; Dijkgraaf, M. G., van der Zanden, B. P., de Borgie, C.A., et al. (2005). Cost utility analysis of co-prescribed heroin compared with methadone maintenance treatment in heroin addicts in two randomised trials. *BMJ*, 330, 1297-1302.

market's viability."<sup>20</sup> The authors further state that "by removing retail workers [who] no longer sold drugs to existing users, and . . . no longer recruited new users in to the market . . . the heroin prescription market may thus have had a significant impact on heroin markets in Switzerland."

66 cities around the world in nine countries have supervised injection facilities (SIFs) that get people who inject drugs off the streets and make sterile injection equipment, information about reducing the harms of drugs, health care, treatment referrals, and access to medical staff available. These facilities not only benefit individuals who use drugs and their families; they also reduce public disorder associated with illicit drug use including improper syringe disposal and public drug use. Hundreds of evidence-based, peer-reviewed studies have proven the positive impacts of supervised injection facilities internationally.<sup>21</sup>

Research shows that supervised injection drug use facilities reach the intended target groups of long-term addicts, street injectors, homeless drug users, and drug-using sex workers and are thus facilitating contact with the most problematic and marginalized drug users. <sup>22</sup> One study of the Canadian safer drug use facility found that "regular use of the [facility] and having contact with counselors at the [facility] were associated with entry into addiction treatment, and enrollment in addiction treatment programs was positively associated with injection cessation."<sup>23</sup>

Supervised injection facilities target the "nuisance factor" of drug scenes – the hazardous litter and the seemingly intimidating presence of injectors congregating in city parks, public playgrounds, and on street corners – by offering them an alternative, supervised, and safe space. Another study of the Canadian safer drug use facility found "significant reductions in public injection drug use, publicly discarded syringes and injection-related litter after the opening of the medically supervised safer injections facility in Vancouver."<sup>24</sup>

The European Monitoring Centre on Drugs and Drug Addiction's review of the evidence in support of safer drug use facilities found that "[s]urveys of local residents and businesses, as well as registers of complaints made to the police, generally show positive changes following the establishment of consumption rooms, including perceptions of decreased nuisance and increases

<sup>&</sup>lt;sup>20</sup> Killias, M., Aebi, M.F., Jurist, K. (2000). The Impact of Heroin Prescription on Heroin Markets in Switzerland. Crime Prevention Studies, 11.

Wrigh Potier, C., V. Laprevote, F. Dubois-Arber, O. Cottencin, and B. Rolland. "Supervised Injection Services: What Has Been Demonstrated? A Systematic Literature Review." Drug Alcohol Depend 145C (2014): 62 Frank Zobel and Francoise Dubois-Arber, Short appraisal of the role and usefulness of drug consumption facilities (DCF) in the reduction of drug-related problems in Switzerland (Lausanne, Switzerland: University Institute of Social and Preventive Medicine, 2004), 27. Brandon DL Marshall et al., "Reduction in overdose mortality after the opening of North America's first medically supervised safer injecting facility: a retrospective population-based study," The Lancet 377, no. 9775 (2011): 1429-37. K. DeBeck et al., "Injection drug use cessation and use of North America's first medically supervised safer injecting facility," Drug Alcohol Depend 113, no. 2-3 (2011): 172-6.
15 Broadhead et al., "Safer injection facilities in North America: Their place in public policies and health initiatives," 329-55. MSIC Evaluation Committee, Final Report of the Medically Supervised Injecting Centre (Sydney Australia: Authors 2003)

<sup>(</sup>Sydney, Australia: Authors, 2003).

<sup>22</sup> Kathleen Dooling and Michael Rachlis, "Vancouver's supervised injection facility challenges Canada's drug laws," *Canadian Medical Association Journal* 182, no. 13 (2010).

laws," Canadian Medical Association Journal 182, no. 13 (2010).

23 K. DeBeck et al., "Injection drug use cessation and use of North America's first medically supervised safer injecting facility," Drug Alcohol Depend 113, no. 2-3 (2011): 172-6.

injecting facility," *Drug Alcohol Depend* 113, no. 2-3 (2011): 172-6.

<sup>24</sup> E Wood et al., "Changes in public order after the opening of a medically supervised safer injection facility for injection drug users," *Can Med Assoc J* 171, no. 7 (2004): 733.

in acceptance of the rooms."<sup>25</sup> The Centre also found that "[p]olice, too, often acknowledge that consumption rooms contribute to minimising or preventing open drug scenes."<sup>26</sup>

New Zealand recently enacted a law allowing certain synthetic drugs to be sold legally, provided their safety can be established. In Brazil and other countries, a remarkable psychoactive substance, ayahuasca, can be legally bought and consumed provided it is done so within a religious context. In Bolivia and Peru, products made from the coca leaf, the source of cocaine, are sold legally over the counter with no apparent harm to people's public health.

Conversely, think about cigarettes: Nothing can both hook you and kill you like cigarettes. When researchers ask people addicted to heroin what's the toughest drug to quit, most say cigarettes. Yet in this country and many others, half of all the people who were ever addicted to cigarettes have quit without anyone being arrested or put in jail or sent to a "treatment program" by a prosecutor or a judge. What did it were higher taxes and time and place restrictions on sale and use and effective anti-smoking campaigns. Now, could we reduce smoking even more by making it totally illegal? Probably. But just imagine the drug war nightmare that would result.

So the challenges we face today are twofold. The first is the policy challenge of designing and implementing alternatives to ineffective prohibitionist policies, even as we need to get better at regulating and living with the drugs that are now legal. But the second challenge is tougher, because it's about us. The obstacles to reform lie not just out there in the power of the prison industrial complex or other vested interests that want to keep things the way they are, but within each and every one of us.

It is our fears and our lack of knowledge and imagination that stands in the way of real reform. Ultimately, I think that boils down to the kids, and to every parent's desire to put our baby in a bubble, and the fear that somehow drugs will pierce that bubble and put our young ones at risk. In fact, sometimes it seems like the entire war on drugs gets justified as one great big child protection act, which any young person can tell you it's not.

Here's what I say to teenagers. First, don't do drugs. Second, don't do drugs. Third, if you do do drugs, there are some things I want you to know, because my bottom line as your parent is that I want you to come home safely at the end of the night and grow up and lead a healthy and good adulthood. That's my drug education mantra: safety first. Futting safety first requires that we provide our young people with credible information and resources. We also need to teach our teenagers how to identify and handle problems with alcohol and other drugs – if and when they occur – and how to get help and support.

The war on drugs has filled our jails and prisons with nonviolent offenders but hasn't made young people safer. Despite the incarceration of tens of millions of Americans and more than a

<sup>&</sup>lt;sup>25</sup> Hedrich, Dagmar. "European Report on Drug Consumption Rooms", European Center on Drugs and Drug Addiction, February 2004.

<sup>26</sup> Ibid

<sup>&</sup>lt;sup>27</sup> See Safety First: A Reality-Based Approach to Teens and Drugs, Marsha Rosenbaum, Drug Policy Alliance, http://www.drugpolicy.org/resource/safety-first-reality-based-approach-teens-and-drugs.

trillion dollars in spending since the modern drug war was launched 40-plus years ago, illegal drugs remain cheap, potent, and widely available. The harms associated with them continue to persist in every community. Meanwhile the war on drugs is creating problems of its own – broken families, increased poverty, racial disparities, wasted tax dollars, prison overcrowding, and eroded civil liberties.

Repeating the mistakes of the past will not improve the future. A new approach is needed, one that reduces both the harm caused by drugs and the harm caused by current drug control policies. We need to decriminalize drug use and possession and ensure that people who use drugs have access to good health services. We need to encourage different models for regulating marijuana. And we need, more broadly, to reduce the role of criminalization and criminal justice to the extent truly required to protect health and safety. It is time to put all options on the table and have a robust debate about the direction of U.S. drug policy.

June 30, 2016

The Honorable Ron Johnson Chairman Senate Committee on Homeland Security and Governmental Affairs 340 Dirksen Senate Office Building Washington, D.C. 20510

The Honorable Tom Carper Ranking Member Senate Committee on Homeland Security and Governmental Affairs 442 Hart Senate Office Building Washington, D.C. 20510

Dear Chairman Johnson and Ranking Member Carper,

Thank you for inviting me to testify before your Committee on June 15th. I am writing to offer supplemental testimony for the record of the committee hearing entitled "America's Insatiable Demand for Drugs: Examining Alternative Approaches." The following information provides additional background on some of the issues and interventions that we discussed during the roundtable, as well as several additional recommendations to consider going forward.

#### Marijuana legalization in Colorado

As I stated during the hearing, it's really too early to say anything conclusive about the impact of the legal taxation and regulation of marijuana in Colorado, Washington, Oregon and Alaska. The implementation of such laws in all four states has only been underway for two years or less and it is very difficult to sort out causal relationships between the law and marijuana-related trends. However, in Colorado, the first state to implement taxation and regulation in 2014, preliminary data shows many promising indications that taxation and regulation in Colorado is working. Arrests for marijuana possession dropped dramatically by nearly 80% between 2010 and 2014 with much of the decrease occurring after non-medical legalization took effect. As I submitted in testimony, the legal regulation and taxation of marijuana in Colorado and other places is probably not going to increase marijuana use among young people. Marijuana use has not been legalized for them, and quite frankly, they already have the best access to marijuana under prohibition. The best evidence we have of this again comes out of Colorado.

Every two years, the state administers what is known as the Health Kids Colorado Survey (HKCS). The state administered the survey to roughly 25,000 high schoolers in 2013 and 17,000 high schoolers in 2015. What they found was that between 2013 and 2015, marijuana use among high schoolers in Colorado remained flat in the state. These findings are consistent with research demonstrating that youth marijuana use has not increased following the legalization of marijuana for medical or non-medical use. And as I mentioned during my oral testimony before the Committee, a just released analysis of the National Youth Risk Behavior Survey

Drug Policy Alliance | 131 West 33rd Street, 15th Floor, New York, NY 10001 212 613.8020 voice | 212.613.8021 fax | www.drugpolicy.org



Board Members
Larry Campbell
Christine Downton
Jodie Evans
James E. Ferguson, II
Jason Flom
Ira Glasser
Carl Hart, PhD
Mathide Krim, PhD
David C. Lewis, MD
Pamela Lichty
Ethan Nadelmann, JD, PhD
Robert Newman, MD
Rev Edwin Sanders
Michael Skolnik
George Sons
Itona Szabó de Carvalho
John Vasconcelios

Honorary Board
Former Mayor
Rocky Anderson
Harry Belafonte
Richard Branson
Former Defense Secretary
Frank C. Carlucot. III
Deepak Chopra
Rep. John Conyres, Jr.
Walter Cronkite
[1918-2009]
Ram Dass
Vincent Dole, MD
[1913-2006]
Former President of the Swiss
Confederation Ruth Drefifus
Former Sugeno General
Joycelyn Elders
Judge Nancy Gentner (Ret.)
Former Police Chief
Penny Harrington
Former Sugeno General
Joycelyn Elders
Judge Nancy Gentner (Ret.)
Former Police Chief
Penny Harrington
Former Police Chief
Penny Harrington
Former Police Chief
Annana Huffington
Former Altoriney General
Nicholas Gels. Katzenbach
[1922-2012]
Former Police Chief
Joseph McNamara
Former Altoriney General
Nicholas Gels. Katzenbach
[1922-2011]
Benny J. Primm, MD
Dennis Rivera
Former Police Chief
Joseph McNamara
Former Mayor Kurt Schmoke
Chailes R. Schuster, PhD
[1930-2011]
Renory J. Primm, MD
Dennis Rivera
Former Solice
Roserve Policy McKer
Roserve Police
Roserve Policy Worker

between 1991 and 2015 also found that prevalence of marijuana use by high school students decreased -- a time period when roughly half the states implemented medical marijuana laws.<sup>4</sup>

In terms of the impact of legalization in Colorado on road safety, existing ways to measure marijuana use among drivers do not confirm whether a driver is impaired. The only thing these tests establish is whether a driver consumed marijuana within the past several hours, days, or even weeks. They do not measure whether the person is unsafe to drive. It's the equivalent of an alcohol test that showed us that a driver consumed some amount of alcohol within the past couple of weeks, which would tell us nothing about whether the driver was impaired at the time of the accident. Existing data do not tell us that there are more impaired drivers on the road. That question has not yet been analyzed. Unlike with alcohol the impairment effect of marijuana is unclear.

There was no significant increase in road fatalities in Colorado and road fatalities remained at near-historic lows through 2014.<sup>5</sup> Much was made of the sudden jump in road fatalities in 2015 but Colorado officials blamed drivers not using their seat belts as the underlying cause of this increase and have since launched a statewide seat belt use awareness campaign.<sup>6</sup> The Colorado State Patrol (CSP) reported that the number of summons issued for driving under the influence in which marijuana or marijuana-in-combination with other drugs actually decreased 1% between 2014 and 2015.<sup>7</sup>

Similarly, while the overall crime rate in Colorado – and Denver specifically reportedly rose in 2015, the director of Rocky Mountain HIDTA noted that marijuana-related crimes in Denver are "a relatively small number of crimes" and "When you look at overall crime in Denver, there's so many reasons that crime rises and falls." A spokesperson for the Denver police department did not speculate if there is a relationship between marijuana legalization and an increase in the Denver crime rate when contaeted by the *Denver Post*. It is truly too soon to know whether the legal non-medical marijuana market has any bearing on crime.

As for criminal activity related to marijuana businesses, the 2016 Colorado Department of Public Safety report notes that "the total number of industry-related crimes has remained stable and makes up a very small portion of overall crime in Denver. The most common industry-related crime is burglary, which accounts for 62% of all industry-related crime. There has been concern that, due to the cash-only nature of the industry, robbery would be prevalent but this has not proven to be the case." Because of federal law, banks are afraid to provide services to state-legal marijuana businesses. Colorado's governor John Hickenlooper has urged the federal government to change federal law so that marijuana industry participants can bank with federally licensed banks. 10

Through all of this we have to remember that Colorado is in the early stages of an evolution from illicit market to legal market (analogous to what happened with the repeal of alcohol prohibitions in the 1930s). Implementation of these reforms in Colorado appears to be working, so much so that more Coloradans support the law now than voted for it in 2012. Tax revenues and other economic benefits have exceeded expectations. If The benefits of legally regulating and taxing marijuana like alcohol clearly are substantial, while the risks are minimal. Congress should give

states the flexibility they need to effectively regulate marijuana and try other alternative approaches to prohibition policies.

#### Decriminalization

The presence or harshness of criminal penalties for drug possession or use in open societies appear to have no impact on levels of use. <sup>12</sup> Criminalizing people who sell and use drugs, especially opioids, amplifies the risk of fatal overdoses and diseases, increases stigma and marginalization, and drives people away from needed treatment, health, and harm reduction services. <sup>13</sup> Reducing the role of the criminal justice system is therefore critical to ensuring that people who use opioids are able to access vital treatment and harm reduction services that most benefit individuals, families, and communities.

Decriminalization is commonly defined as the elimination of criminal penalties for drug possession for personal use. It means that people who merely use or possess small amounts of drugs are no longer arrested, jailed, prosecuted, imprisoned, put on probation or parole, or saddled with a criminal record. Decriminalization is not synonymous with legalization, which typically involves the legal regulation of drug sales that are currently prohibited.

Punishment for a drug possession violation is not only meted out by the criminal justice system, but is perpetuated by policies denying a host of rights and privileges – even after one's sentence is served. A criminal conviction for drug possession can lead to the temporary or permanent loss of child custody, voting rights, employment, business loans, licensing, student aid, public housing and other public assistance. These "collateral consequences" of drug convictions intensify the struggles individuals face on the road to recovery and rehabilitation. Moreover, there is no evidence that criminalization actually encourages abstinence or treatment.

Nearly two dozen countries have taken steps toward decriminalization. As I indicated in submitted testimony, the best and most well-documented example is Portugal, which in 2001 eliminated criminal penalties for low-level possession and use of all illicit drugs, and made a commitment to treating drug use as a health issue. <sup>14</sup> Empirical evidence from the international experiences demonstrate that decriminalization does not result in increased use or crime, reduces incidences of HIV/AIDS and overdose, increases the number of people in treatment, and reduces social costs of drug misuse. <sup>15</sup>

All criminal penalties for possession of small amounts of controlled substances for personal use should be removed. Maryland recently introduced legislation to accomplish this reform. Moreover, various other steps toward deer minialization have been taken in the United States. Twenty states and Washington, DC have reduced or eliminated criminal penalties for personal marijuana possession. Four states – California, Connecticut, Maine and Utah – recently reclassified drug possession from a felony to a misdemeanor. Since the passage of California's law, Proposition 47, more than 13,000 people have been released and resentenced – saving the state an estimated \$156 million in incarceration costs averted, which is being reinvested in drug treatment and mental health services, programs for at-risk students in K-12 schools, and victim services. 17

#### Supervised injection facilities

Every potential tool available that can help reduce overdoses and injection-related harms should be considered. This is especially valid in the case of some of the most marginalized people who use drugs in communities who are not reached by traditional service providers. These marginalized and high-risk drug users have little recourse than to consume drugs in public spaces due to lack of housing and other supportive care. Public drug use is associated with significantly higher rates of overdose, transmission of infectious diseases, and necessity of costly emergency care, as well as a variety of nuisance and safety issues, including improper syringe disposal and "open-air" drug consumption. These users are at the greatest risk for disease and death, and are also the least likely to engage directly in traditional abstinence-based health services, and would benefit the most from access to supervised injection facilities.

As I stated in submitted testimony, supervised injection facilities (SIFs) keep people who inject drugs alive and off the streets. These legally sanctioned facilities provide a space for the most problematic and marginalized people who use drugs to consume pre-obtained drugs in a hygienic environment supervised by trained medical staff. Staff members do not directly assist in consumption or handle any drugs brought in by clients, but are present to provide sterile syringes and injection-related supplies, answer questions on safe consumption practices, administer first aid if needed, and monitor for overdose. Staff also offer general medical advice and referrals to drug treatment, medical treatment, and other social support programs. SIFs serve as a critical means to engage people who are on the margins and bridge them to drug treatment. The SIF environment is designed to put a marginalized person in the right frame of mind to accept help in this way.

There are at least 98 SIFs operating in 66 cities around the world in ten countries (Switzerland, Germany, the Netherlands, Norway, Luxembourg, Spain, Denmark, Greece, Australia and Canada). No Numerous evidence-based, peer-reviewed studies from those countries have demonstrated the positive impacts of SIFs. Nose benefits include increased uptake into treatment for drug dependence, especially among people who are unlikely to seek treatment on their own, reduced public disorder, reduced public injecting, and increased public safety, reduced HIV and hepatitis C risk behavior (i.e. syringe sharing, unsafe sex). Pareduced prevalence and harms of bacterial infections and reductions in overdose fatalities.

SIFs deliver these benefits without increasing community drug use, <sup>26</sup> initiation into injection drug use<sup>27</sup> or drug-related crime. <sup>28</sup> A large amount of research has also been conducted studying North America's only supervised injection facility in Vancouver, British Columbia known as InSite. <sup>29</sup> Data indicate that supervised injection facilities are uniquely effective in sustaining contact with the most marginalized and chaotic users who consume drugs in public places and who are otherwise not reached by current harm reduction interventions. Despite the compelling and uncontroverted evidence, however, no SIFs have been established in the United States to date.

#### Heroin-assisted treatment

In my testimony before the Committee, I discussed the pivotal role that heroin

assisted treatment can play in addressing the health needs of a small subgroup of heroin users who have consistently not responded to other types of medication-assisted treatment without negatively impacting the larger community.<sup>30</sup>

Heroin-assisted treatment involves administration of pharmaceutical grade heroin or hydromorphone under supervision by licensed medical professionals in a specialized clinic and under strict controls. The drug is required to be consumed on-site, under the watchful eye of trained professionals. This enables providers to ensure that the drug is not diverted, and allows staff to intervene in the event of overdose or other adverse reaction. The clinic-based model also encourages interaction between clients and staff, which improves referrals to and uptake of health and other services. As a treatment modality, heroin-assisted treatment has gained traction within the scientific community as a tried-and-true method for dealing with particularly refractory cases of heroin addiction and the associated harms.

Heroin-assisted treatment has proven enormously successful and now operate in Switzerland, <sup>31</sup> Netherlands, <sup>32</sup> United Kingdom, <sup>33</sup> Germany, <sup>34</sup> Spain, <sup>35</sup> Denmark, <sup>36</sup> Belgium, <sup>37</sup> Canada, <sup>38</sup> and Luxembourg. Notably, In the United Kingdom, three clinics remained open after the conclusion of their trial program and currently serve approximately 100 people. <sup>39</sup> In January 2012, the government gave approval for the roll-out of additional heroin maintenance clinics after the Department of Health concluded that heroin-assisted treatment "is now evidenced as a clinically-effective second-line treatment . . . . <sup>340</sup> Moreover, approximately 500 people in the United Kingdom receive preseription heroin directly from their physician for maintenance treatment. <sup>41</sup>

Rigorous research studies examining heroin-assisted treatment in these countries have found that this approach reduces heroin use, improves treatment engagement and retention, and prevents mortality among high-risk drug users who do not respond to other types of medication-assisted treatment. <sup>42</sup> Studies have also found that heroin-assisted treatment is associated with decreased illicit drug use, crime, overdose fatalities, and risky injecting, as well as improvements in physical and mental health, employment and social relations. <sup>43</sup> Additional findings from randomized controlled studies in countries that have implemented heroin-assisted treatment have yielded additional positive results, including that retention rates in heroin-assisted treatment surpass those of conventional treatment, heroin-assisted treatment can be a stepping stone to other treatments and even abstinence, heroin-assisted treatment does not pose nuisance or other neighborhood concerns and heroin-assisted treatment is cost-effective (cost-savings from the benefits attributable to the program far outweigh the cost of program operation over the long-run). <sup>44</sup>

Every heroin-assisted treatment trial has shown a marked decrease in street heroin use. <sup>45</sup> The United Kingdom trial, for instance, reported over a two-thirds (72 percent) reduction in illicit drug use among heroin-assisted treatment participants. <sup>46</sup> Similar reductions in street heroin use were reported from heroin maintenance trials in Switzerland (74 percent), <sup>47</sup> Germany (69 percent), <sup>48</sup> and Canada (67 percent). <sup>49</sup> As I stated in testimony, it is also key to consider the role that providing effective replacement therapy to this heroin using population that consumes the majority of the heroin supply can help with destabilizing local heroin markets. <sup>50</sup>

An estimated one million people used heroin in the United States in 2014, almost triple the 2003 rate, according to a new report by the United Nations Office on Drugs and Crime. <sup>51</sup> A significant population of people who use heroin could benefit from heroin assisted treatment. However, zero tolerance policies and federal law have stood in the way of pilot heroin-assisted treatment projects in the United States.

#### Drug courts

There is no doubt that drug court judges and their staffs have helped change, even save, many lives, but it is important to consider the full range of drug court impacts, both positive and negative, on all participants as well as on the criminal justice and other systems. It is also important to consider drug court outcomes within the larger context of potential policy options and practices to reduce drug arrests, incarceration and problematic drug use. In this light, the benefits of drug courts pale considerably. My fellow witness, Arlington, Massachusetts police chief Frederick Ryan was right when he gave his opinion on drug courts, commenting that "When you push the button for the criminal justice system, it's incredibly complex and difficult to reverse," Chief Ryan added: "You take somebody suffering from a substance use disorder and put them into a complex criminal justice system – we're finding it creates even more challenges."

In 2011, the Drug Policy Alliance released a report that sought to address the lack of critical analysis that often stymies the policy discussion on drug courts. <sup>52</sup> The report analyzed the research on drug courts and found that drug courts leave many people worse off than if they had received drug treatment outside the criminal justice system, had been left alone, or even been conventionally sentenced. Another finding was that drug courts have not demonstrated cost savings, reduced incarceration, or improved public safety. A 2011 report by Justice Policy Institute made similar findings. <sup>53</sup>

Drug courts also penalize relapse with incarceration and ultimately eject from the program those who are not able to abstain from drug use for a period of time deemed sufficient by the judge. Meeting these requirements often means that a participant cannot enroll in evidence-based medication-assisted treatment programs. Medication-assisted treatment refers to the treatment of opioid dependence through the prescription of medications such as buprenorphine and methadone, which block the effects of opioid use and prevent or relieve withdrawal symptoms and cravings. Scientific research has established that medication-assisted treatment is a cost-effective intervention that increases patient retention in treatment and decreases drug use, transmission of infectious diseases, and criminal activity.

The White House Office of National Drug Control Policy (ONDCP) recently took the position that drug courts and other diversion programs that receive federal funding should not be permitted to prohibit participants from accessing medication-assisted treatment. SAMHSA subsequently implemented a rule that drug courts that receive federal funding to drug courts cannot deny the use of medication-assisted treatment when made available to the client under the care of a physician and pursuant to a valid prescription.<sup>54</sup> The National Association of Drug Court Professionals has long taken the position that drug courts should permit the use of medication-assisted treatment for participants in need of an addiction medication.<sup>55</sup> Drug courts and other

diversion programs should at a minimum be required to demonstrate that evidencebased treatment practices, including the use of medication assisted treatment, can be utilized by participants.

The bottom line is that drug courts have made the criminal justice system more punitive toward addiction – not less. As the Committee looks at options for addressing the nation's demand for drugs, it is pivotal that we move in the direction of treating drug use as a health issue and not as a criminal justice issue. In this context, people caught with possession quantities of drugs do not belong in the criminal justice system. We should divert these individuals directly into treatment and health-based services and reserve drug courts for cases involving offenses against person or property that are linked to a drug use disorder, while improving drug court practices and providing other options for people convicted of drug law violations.

### Recommendations going forward

Above all, I urge the Committee to consider new approaches to dealing with drug demand and the harms that stem from drug use. Please review the evidence supporting the use of these interventions that I have provided here. We should be looking for ways to support further research into the viability of these interventions in the United States. My staff can provide additional information or answer any questions you may have.

It is understandable that the Committee is focused on the management of pain. I made several recommendations that I hope the Committee will explore, including taking steps to incentivize medical students and physicians to learn dramatically more about managing pain. This might take the form of incentivizing medical schools to place a greater focus on this subject, as well as exploring treatment alternatives to opioids. I also recommended that we look to the role that marijuana could play as a replacement therapy in the treatment of pain. I highlighted three studies during the roundtable that showed that the states with the most robust medical marijuana programs have experienced lower levels of opioids being prescribed and dramatically lower rates of opioid overdoses. <sup>56</sup> This deserves a closer look, especially if marijuana can play a more effective and far less dangerous way of dealing with pain.

In my testimony, I pointed to the example of St. Joseph's Regional Medical Center in Paterson, New Jersey as a potential model to look at for addressing pain in innovative ways, the subject of a recent New York Times article.<sup>57</sup> We all agree on the need to reduce demand for opioids, but what is so important about the example being set at St. Joseph's is the importance of being smart and creative about finding other ways to manage pain, such as the use of less dangerous medications and other alternative approaches. I also believe we should focus public awareness campaigns so that they better reach older people who are prone to become dependent on opioids and are at elevated risk of overdose because of co-morbidities or the co-occurring use of benzodiazepines or other drugs. It is these kinds of issues that should be highlighted in public awareness campaigns.

Finally, I think it is vital that the Committee look at ways that we can dramatically scale up funding and support for research. We need to get a better handle on the many facets of the problems stemming from drug demand. This should include an

examination of the underlying motivations driving the use of various drugs such as fentanyl and oxycodone. It will take an army of researchers, including thousands of ethnographers, to explore these and other aspects of this problem that could drive more effective policy on these issues.

Thank you for considering these recommendations.

Sincerely.

Ethan Nadelmann Executive Director Drug Policy Alliance

Drug Policy Alliance (2015) 'Marijuana Arrests in Colorado After the Passage of Amendment 64', <a href="http://www.drug-policy.org/sites/default/files/Colorado Marijuana Arrests After Amendment 64-pdf">http://www.drug-policy.org/sites/default/files/Colorado Marijuana Arrests After Amendment 64-pdf</a>
'Denver Post, 'Marijuana use remains flat among Colorado tens, survey finds,' John Ingold, June 20, 2016, <a href="https://www.denverpost.com/2016/06/20/marijuana-use-colorado-tecns-marijuana-no-increase/">https://www.denverpost.com/2016/06/20/marijuana-use-colorado-tecns-marijuana-no-increase/</a>
'Dirisu et al., 2016. Influence of legal status on the uptake of cannabis in young people. Current Opinion in Psychiatry: Colaneri et al. 2016. Adolescents' ease of access to marijuana before and after legalization of marijuana in Abstract presented at the 2016 Pediatric Academic Societies meeting: Wall et al., 2016. Prevalence of marijuana uses not afferentially increase among youth after states pass medical marijuana laws: Commentary on and reanalysis of US National Survey on Drug Use in Households data 2002-2011. International Journal of Drug Policy; Hasin et al. 2015. Medical marijuana laws and adolescent marijuana use in the USA from 1991 to 2014; results from annual, repeated cross-sectional surveys. Lancet Psychiatry: Anderson et al., 2014. Medical marijuana uses: Choo et al., 2014. The Impact of State Medical Marijuana Legistation on Adolescent Marijuana Use. Journal of Adolescent Marijuana use. American Journal of Public Health; Harper et al., 2012. De medical marijuana laws on adolescent marijuana use. American Journal of Public Health; Harper et al., 2012. De medical marijuana laws and adolescent marijuana use. Replication study and extension. Annals of Epidemiology.: Cornan and Huber. 2007. Do medical cannabis laws encourage cannabis use? International Journal of Drug Policy \*\*Centers for Disease Control and Prevention, Youth Risk Behavior Survey (YRBS), 2015

<sup>4</sup> Centers for Disease Control and Prevention, Youth Risk Behavior Survey (YRBS), 2015 <a href="http://www.cdc.gov/healthyyouth/data/vrbs/pdf/trends/2015\_us\_drug\_trend\_vrbs.ndf">http://www.cdc.gov/healthyyouth/data/vrbs/pdf/trends/2015\_us\_drug\_trend\_vrbs.ndf</a>
Department of Transportation (2015) 'Colorado Historical Fatal Crash Trends'
<a href="https://www.colort.gov/fibrans/trafile/safety-erash-data/fatal-erash-data-eity-gounts/historical\_fatals.pdf/view">https://www.colort.gov/fibrans/trafile/safety-erash-data/fatal-erash-data-eity-gounts/historical\_fatals.pdf/view</a>
Denver Post\_Colorado sees deadliest year of traffic fatalities since 2008," January 19, 2016, Elizabeth

Denver Post, "Colorado sees deadliest year of traffic fatalities since 2008," January 19, 2016, Elizabeth
Hernandez, <u>http://www.denverpost.com/2016/01/19/colorado-sees-deadliest-year-of-traffic-fatalities-since-2008.</u>
 Colorado Department of Public Safety (2016) 'Marijuana Legalization in Colorado: Early Findings,' P.

Colorado Department of Public Safety (2016) "Marijuana Legalization in Colorado: Early Findings," P.
 http://cdps.locs.state.co.us/ors/doss/reports/2016-SB13-283-Rpt.pdf
 Denver Post, "Marijuana legalization unlikely to blame for Denver crime increase," February 17, 2016,

<sup>8</sup> Denver Post, "Marijuana legalization unlikely to blame for Denver crime increase," February 17, 2016 John Ingold. http://www.denverpost.com/2016/02/17/marijuana-legalization-unlikely-to-blame-for-denver-crime-increase?

Oolorado Department of Public Safety (2016) "Marijuana Legalization in Colorado: Early Findings," P.26.

<sup>&</sup>lt;sup>16</sup> Denver Post, "Colorado. Washington governors urge solution on marijuana shop banking," John Ingold, October 2, 2013. <a href="http://www.denverpost.com/2013/10/02/colorado-washington-governors-urge-solution-on-narijuana-shop-banking/">http://www.denverpost.com/2013/10/02/colorado-washington-governors-urge-solution-on-narijuana-shop-banking/</a>

- 11 State of Colorado (2013) 'Task Force Report on the Implementation of Amendment 64: Regulation of Marijuana in Colorado'; Transform (2015). "Cannabis Regulation in Colorado: early evidence defies the critics" http://www.tdpf.org.uk/blog/cannabis-regulation-colorado-early-evidence-defies-critics: "As Fear And Intolerance Of Marijuana Declined, So Did Adolescent Use", Jacob Sullum, Forbes, June 2,
- Drug War Heresies: Learning from Other Vices, Times, and Places, Robert J. MacCoun and Peter
- Reuter, Cambridge University Press, Aug 27, 2001

  <sup>13</sup> See, e.g., Friedman, S. et al. "Relationships of Deterrence and Law Enforcement to Drug-Related Harms Among Drug Injectors in US Metropolitan Areas." AIDS 20, no. 1 (January 2006): 93-99: Hughes, Caitlin, and Alex Stevens. "What Can We Learn from the Portuguese Decriminalization of Illicit Drugs?" *British Journal of Criminology* 50, no. 6 (July 2010): 999-1022.
- | Washing Admin Ari, and Niamh Eastwood. "A Quiet Revolution: Drug Decriminalisation Policies in Practice across the Globe," Release: Drugs, the Law, and Human Rights. 2012.
  | Drug Policy Alliance. "Approaches to Decriminalizing Drug Use & Possession." February 2016.; Hughes and Stevens, "M. Resounding Success or a Disastrous Failure: Re- Examining the Interpretation of Evidence on the Portuguese Decriminalisation of Illicit Drugs." 107; (SICAD), "Relatório Anual 2013 – a Situação Do País Em Matéria De Drogas E Toxicodependências," 64.; Hughes and Stevens, "What Can We Learn from the Portuguese Decriminalization of Illicit Drugs?," 1015; Instituto da Droga e da Toxicodependência. "Relatório Anual 2011 – a Situação Do País Em Matéria De Drogas E Toxicodependências." (2012), Anexo, 32. As a result of changes to Portugal's national treatment data collection and reporting processes, data published after 2011 are not directly comparable to data
- published before 2011. Laqueur, "Uses and Abuses of Drug Decriminalization in Portugal."

  Maryland State Legislature. House, (HB 1919) 2016.

  Stanford Justice Advocacy Project. "Proposition 47 Progress Report: Year One Implementation."

  Stanford Law School. 2015. https://www.cdn.law.stanford.edu/wp-content/uploads/2015/10/Prop-47-
- policy Consortium (2012). 18-22. http://www.drugsandalcohol.ie/17898/1/IDPC-Briefing-Paper\_Drug-consumption-tooms.pdf; S Semaan et al., "Potential Role of Safer Injection Pacilities in Reducing HIV and Hepatitis C Infections and Overdose Mortality in the United States," Drug Alcohol Dependence 118,2-3 (2011): 100-110,
- 118.2-3 (2011): 100-110.

  \*\*E Schafz and M. Nougier, "Drug Consumption Rooms: Evidence and Practice," International Drug Policy Consortium (2011): S Semaan et al., "Potential Role of Safer Injection Facilities in Reducing HIV and Hepatitis University and Overdose Mortality in the United States," Drug Alcohol Dependence 118,2-3 (2011): 100-110: E. Wood, MW Tyndall, JS Montaner, Findings from the Evaluation of Vancouver's Pilot Medically Supervised Safer Injection Facility, (Vancouver, BC: BC Centre for Excellence in HIV/AIDS, 2009), 1-62; L. Maher and A. Salmon, "Supervised injecting facilities: how much evidence is enough?" *Drug Alcohol Review* 26.4 (2007): 351-3; Dagmar Hedrich, Thomas Kerr and Françoise Dubois-Arber, Drug Consumption Facilities in Europe and Beyond, (Lisbon, Portugal: European Monitoring Centre for Drugs and Drug Addiction, 2010) 305. <sup>20</sup> E Schatz and M. Nougier, "Drug Consumption Rooms: Evidence and Practice," International Drug Policy Consortium (2011); S Semaan et al., "Potential Role of Safer Injection Facilities in Reducing HIV and Hepatitis C Infections and Overdose Mortality in the United States," *Drug Alcohol* Dependence 118.2-3 (2011): 100-110: E Wood, MW Tyndall, JS Montaner, Findings from the Evaluation of Vancouver's Pilot Medically Supervised Safer Injection Facility, (Vancouver, BC: BC Centre for Excellence in HIV/AIDS, 2009), 1-62: L Maher and A Salmon, "Supervised injecting facilities: how much evidence is enough?" Drug Alcohol Review 26.4 (2007): 351-3; C Potier et al., "Supervised Injection Services: What Has Been Demonstrated? A Systematic Literature Review," Drug Alcohol Dependence 145C (2014): 48-68; R. McNeil et al., "Impact of Supervised Drug Consumption Aconot Dependence 145. (2014): 48-68, R. McNeil et al., "Impact of supervised Drug Consumption Services on Access to and Engagement with Care at a Palliative and Supportive Care Facility for People Living with HIV/AIDS: A Qualitative Study," Journal of International AIDS Society 17(2014): 18855.; GJ MacArthur et al., "Interventions to Prevent HIV and Hepatitis C in People Who Inject Drugs: A Review of Reviews to Assess Evidence of Effectiveness," International Journal of Drug Policy 25,1(2013): 34-52; N Boyd, "Lessons from INSITE, Vancouver's supervised injection facility: 2003-25,1(2013); 34-52; N Boyd, "Lessons from INSITE, Vancouver's supervised injection facility: 2003-2012;" Drugs: Education Prevention and Policy 20.3 (2013): 234-240. G Christian et al., "Overdose Deaths and Vancouver's Supervised Injection Facility." The Lancet 379.9811 (2012):117; S Pinkerton, "How many HIV Infections are Prevented by Vancouver Canada's Supervised Injection Facility?" International Journal of Drug Policy 22 (2011): 179 - 181; S Pinkerton, "Is Vancouver Canada's Supervised Injection Facility Cost-saving?" Addiction 105 (2010): 1429 - 1436; M Andreen, N Boyd, "A Cost-Benefit and Cost-effectiveness Analysis of Vancouver's Supervised Injection Facility." International Journal Orag Policy 21 (2010): 70-76; K Deffeck et al., "Police and Public Health Partnerships: Evidence from the Evaluation of Vancouver's Supervised Injection Facility." Substance

Abuse Treatent, Prevention and Policy 3,1 (2008): 1-5; R Wood et al., "Nurse-delivered Safer Injection Education Among a Cohort of Injection Drug Users: Evidence from the Evaluation of Vancouver's Supervised Injection Facility," International Journal of Drug Policy 19.3 (2008)183 - 188: A Bayoumi Supervised Injection Facility." International Journal of Drug Policy 19,3 (2008)183 - 188: A Bayoum. G. Zarie. "The costs-effectiveness of Vancouver's supervised injection facility." Canandian Medical Association Journal 179,11 (2008):1143-1151; D Des Jarlais, K. Arasteh, H Hagan. "Evaluating Vancouver's Supervised Injection Facility: Data and Dollars, Symbols and Ethics," Canandian Medical Association Journal 179,11 (2008):1105 - 1106; T Kerr et al., "Circumstances of First Injection Among Illicit Drug Users Accessing a Medically Supervised Safer Injection Facility," American Journal of Public Health 97,7 (2007): 1228-30; I McKnight et al., "Factors Associated with Public Injecting Among Users of Vancouver's Supervised Injection Pacility." American Journal of Drug Alcohol Abuse 33,2 (2007): 319-325; S Petrar et al., "Injection Drug Users' Perceptions Regarding use of a Medically Supervised Safer Injecting Facility," Addictive Behaviors 32 (2007): 1088-1093; J Stoltz et al., "Changes in Injecting Practices Associated with the Use of a Medically Supervised Injection Facility," Journal of Public Health (Oxford) 29,1 (2007): 35-39; E Wood et al., "Rate of Detoxification Service Use and its Impact Among a Cohort of Supervised Injection Practify Users," Addiction 102 (2007): 916-919; E Wood et al., "Service Uptake and Characteristics of Injection Drug Users Utilizing North America's First Medically Supervised Safer Injection Pacility on Community Drug Use Patterns: A Before and After Study," British Medical Journal of Public Health 96,5 (2006): 770-773; T Kerr et al., "Impact of a Medically Supervised Safer Injection Pacility," International Journal of Drug Policy 17 (2006):436 - 441; M Tyndall et al., "HIV Sero-prevalence Among Participants at a Supervised Injection Facility in Vancouver, Canada: Implications for Prevention, Care and Treated Overdoses Within a Medically Supervised Safer Injection Facility," International Journal of Drug Policy 17 (2006):436 - 441; M Tyndall et al., "HIV Sero-prevalence Among Partic G. Zarie, "The cost-effectiveness of Vancouver's supervised injection facility," Canandian Medical "Attendance, Drug Use Patterns, and Referrals Made from North America's First Supervised Injection Facility," Drug Alcohol Dependence 83.3 (2005): 193-198; E Wood et al., "Prevalence and Correlates of Hepatitis C Among Users of North America's First Medically Supervised Safer Injection Facility." of repatitis. A mong Users of Norm Americas 11th Medically Supervised Injecting Facilities Attract Public Health 119.2 (2005): 1111-1115, E. Wood et al., "Do Supervised Injecting Facilities Attract Higher-risk Injection Drug Users?" American Journal Preventative Medicine 29.2 (2005):126-130; D Small, "Mental Illness, Addiction and the Supervised Injection Facility," Visions: BCK Mental Health and Addictions Journal 2.1 (2004) 37-39; E. Wood et al., "Changes in Public Order After the Opening of a Medically Supervised Safer Injection Facility for Injection Drug Users." Canadian Medical Association Journal 171,7 (2004): 731–734: Fairbairn, N., et al., Women's experiences in North America's First Medically Supervised Safer Injection Facility. Soc Sci Med. 67(8): p. 817 - 823. Also, these benefits include increased uptake into treatment for drug dependence, especially among people who are unlikely to seek treatment on their own, reduced public disorder, reduced public injecting, and who are unlikely to seek treatment on their own, reduced public disorder, reduced public injecting, and increased public safety, reducing HIV and Hepatitis C risk behavior (i.e. syringe sharing, unsafe sex), reducing the prevalence and harms of bacterial infections, and successfully managing hundreds of overdoses and reducing drug-related overdose death rates. See: E Wood et al., "Rate of Detoxification Service Use and its Impact Among a Cohort of Supervised Injection Facility Users," Addiction 102 (2007): 916-919; E Wood et al., "Service Uptake and Characteristics of Injection Drug Users Utilizing North America's First Medically Supervised Safer Injecting Facility," American Journal of Public Health 96,5 (2006): 770-773: M Tyndall et al., "Attendance, Drug Use Patterns, and Referrals Made from North America's First Supervised Injection Facility." Drug Acholo Dependence 83,3 (2005): 193 Heatth 96,5 (2006): 770-773: M Tyndall et al., "Attendance, Drug Use Patterns, and Referrals Made from North America's First Supervised Injection Facility." Drug Alcohol Dependence 83,3 (2005): 193-198.: C Potier et al., "Supervised Injection Services: What Has Been Demonstrated? A Systematic Literature Review," Drug Alcohol Dependence 145C (2014): 48-68, S Petrar et al., "Injection Drug Users' Perceptions Regarding use of a Medically Supervised Safer Injecting Facility," Addictive Behaviors 32 (2007): 1088-1093; J Stottz et al., "Changes in Injecting Practices Associated with the Use of a Medically Supervised Injection Facility," Journal of Public Health (Oxford) 29.1 (2007): 35-39; E Wood et al., "Changes in Public Order After the Opening of a Medically Supervised Safer Injection Facility for Injection Drug Users." Canadian Medical Association Journal 171.7 (2004): 731-734; A.M. Salmon et al., "Five Years On: What are the Community Perceptions of Drug-related Public Amenity Following the Establishment of the Syddew Medically Supervised Injecting Centre?" International Following the Establishment of the Sydney Medically Supervised Injecting Centre?" International Journal of Drug Policy 18,1 (2007): 46-53.; E Wood, MW Tyndall, IS Montaner, Findings from the Journal of Drig Folicy 18,1 (2001); 46-35.; E. WOOd, MW Tynam, 15 Wolntaner, Finalings from the Evaluation of Vancouver, 59 Filot Medically Supervised Sofer Infection Facility, (Vancouver, BC: BC Centre for Excellence in HIV/AIDS, 2009), 1-62: C Potier et al., "Supervised Injection Services: What Has Been Demonstrated? A Systematic Literature Review," Drug Alcohol Dependence 145C (2014); 48-68; GJ MacArthur et al., "Interventions to Prevent HIV and Hepatitis C in People Who Inject Drugs: A Review of Reviews to Assess Evidence of Effectiveness," International Journal of Drug Policy 25.1(2013): 34-52: N Boyd, "Lessons from INSITE. Vancouver's supervised injection facility: 2003-2012." Drugs: Education, Prevention and Policy 20,3 (2013): 234-240; ; S Pinkerton, "How many HIV Infections are Prevented by Vancouver Canada's Supervised Injection Facility?" International Journal of Drug Policy 22 (2011): 179 - 183: I McKnight et al., "Factors Associated with Public Injecting

Among Users of Vancouver's Supervised Injection Facility," American Journal of Drug Alcohol Abuse 33.2 (2007): 319-325: S Petrar et al., "Injection Drug Users' Perceptions Regarding use of Adedically Supervised Safer Injecting Facility," Addictive Behaviors 32 (2007): 1088-1093; J Stotz et al., "Changes in Injecting Practices Associated with the Use of a Medically Supervised Injection Facility," Journal of Public Health (Oxford) 29.1 (2007): 35-39; M Tyndall et al., "HIV Sero-prevalence Among Participants at a Supervised Injection Facility in Vancouver. Canada: Implications for Prevention. Care and Treatment." Harm Reduction Journal 3.36 (2006): 1-5; T Kerr et al., "Safer Injecting Facility Use and Syringe Sharing Among Injection Drug Users," Lance 366 (2005): 316-318; T Kerr et al., "The role of safer injection facilities in the response to HIV/AIDS among injection drug users." Current HIV/AIDS Reparts 4.4 (2007): p. 158-164.; S Semaan et al., "Potential Role of Safer Injection Facilities in Reducing HIV and Hepatitis C Infections and Overdose Mortality in the United States," Drug Alcohol Dependence 118,2-3 (2011): 100-110; G Christian et al., "Overdose Deaths and Vancouver's Supervised Injection Facility," The Lancet 379,9811 (2012)11.7. Kerr et al., "Drug-related Overdoses Within a Medically Supervised Safer Injection Facility." International Journal of Drug Policy 17 (2006):436-441; T Kerr et al., "A Micro-Environmental Intervention to Reduce Harms Associated with Drug-Related Overdose: Evidence from the Evaluation of Vancouver's Safer Injection Facility," International Journal of Drug Policy 18 (2007): p. 37-45; BD Marshall et al., "Reduction in Overdose Mortality After the Opening of North America's First Medically Supervised Safer Injection Facility." A Retrospective Population-based Study," The Lancet 377,9775 (2011): 1429-1437; MJ Milloy et al., "Non-fatal Overdose Among a Cohort of Active Injection Drug Users Recruited from a Supervised Injection Facility." The American Journal of Drug and Alcohol Abu

- Facility, "Drug Alcohol Dependence 83.3 (2005): 193-198.

  \*C Potier et al., "Supervised Injection Services: What Has Been Demonstrated? A Systematic Literature Review," Drug Alcohol Dependence 145C (2014): 48-68; S Petrar et al., "Injection Drug Users' Perceptions Regarding use of a Medically Supervised Safer Injecting Facility," Addictive Behaviors 32 (2007): 1088-1093; J Stotle et al., "Changes in Injecting Practices Associated with the Use of a Medically Supervised Injection Facility," Journal of Public Health (Oxford) 29,1 (2007): 35-39; E Wood et al., "Changes in Public Order After the Opening of a Medically Supervised Safer Injection Facility for Injection Drug Users," Canadian Medical Association Journal 171, (2004): 731-734; A.M. Salmon et al., "Five Years On: What are the Community Perceptions of Drug-related Public Amenity Following the Establishment of the Sydney Medically Supervised Injecting Centre?" International Journal of Drug Policy 18,1 (2007): 46-53.
- Nation et al., "Five years On: What are the Community Perceptions of Drig-related Public Amenity Following the Establishment of the Sydney Medically Supervised Injecting Centre?" International Journal of Drug Policy 18,1 (2007): 46-53.

  \*\*2 E Wood, MW Tyndall, JS Montaner, Findings from the Evaluation of Vancouver's Pilot Medically Supervised Majer Injection Facility. (Vancouver, BC: BC Centre for Excellence in HIV/AIDS, 2009), 1-62; C Potier et al., "Supervised Injection Services: What Has Been Demonstrated? A Systematic Literature Review." Drug Alcohol Dependence 145C (2014): 48-68; GJ MacArthur et al., "Interventions to Prevent HIV and Hepatitis C in People Who Inject Drugs: A Review of Reviews to Assess Evidence of Effectiveness." Intervantional Journal of Drug Policy 25, 1(2013): 34-52; N Boyd, "Lessons from INSITE, Vancouver's Supervised Injection facility: 2003-2012," Drugs: Education, Prevention and Policy 20, 3 (2013): 234-240; S Pinkerton, "How many HIV Infections are Prevented by Vancouver Canada's Supervised Injection Facility?" Intervantional Journal of Drug Policy 22 (2011): 179-183; 1 McKnight et al., "Factors Associated with Public Injecting Among Users of Vancouver's Supervised Injection Facility." Januaria of Public Public Public Public Injection Proceedings, 1991
- In the response of the Control of Safer Injection Facilities in Reducing HIV and Hepatitis C Infections and Overdose Mortality in the United States," Drug Alcohol Dependence 118.2-3 (2011): 100-110: E Wood, MW Tyndall, IS Montaner, Findings from the Evaluation of Vancouver's Pilot Medically Supervised Safer Injection Facility, (Vancouver, BC: BC Centre for Excellence in IIIV/AIDS,

- 2009), 1-62; C Potier et al., "Supervised Injection Services: What Has Been Demonstrated? A
- 2009). 1-02; C Pender et al., Supervised injection Services, what has been Definioristrator A Systematic Literature Review," Drug Alcohol Dependence 145C (2014); 48-68.
   S Semaan et al., "Potential Role of Safer Injection Facilities in Reducing HIV and Hepatitis C Infections and Overdose Mortality in the United States," Drug Alcohol Dependence 118.2-3 (2011): 100-110; G Christian et al., "Overdose Deaths and Vancouver's Supervised Injection Facility." The Lancet 379,9811 (2012)117; T Kerr et al., Drug-related Overdoses Within a Medically Supervised Safer Lancet 379,9811 (2012)117; 1 Kerr et al., Drug-related Overdoses Within a Medically Supervised Sater Injection Facility," International Journal of Drug Policy 17 (2006):436-441; T Kerr et al., "A Micro-Environmental Intervention to Reduce Harms Associated with Drug-Related Overdose: Evidence from the Evaluation of Vancouver's Safer Injection Facility," International Journal of Drug-Policy 18 (2007): p. 37 – 45; BD Marshall et al., "Reduction in Overdose Mortality After the Opening of North America's First Medically Supervised Safer Injecting Facility: A Retrospective Population-based Study," The Lancet 377,9775 (2011): 1429-1437; MJ Milloy et al., "Non-fatal Overdose Among a Cohort of Active Injection Drug Users Recruited from a Supervised Injection Facility," The American Journal of Drug and Mechal Abuse 34 4 (2018): 493-698.
- and Methol Abuse 34,4 (2008): 499-509.

  Semaan, S., et al., Potential role of safer injection facilities in reducing HIV and hepatitis C infections and overdose mortality in the United States, Drug Alcohol Depend, 2011. 118(2-3): p. 100-10; E Wood, MW Tyndall, JS Montaner, Findings from the Evaluation of Vancouver's Filot Medically Supervised Safer Injection Facility, (Vancouver, BC: BC Centre for Excellence in HIV/AIDS, 2009), 1-62; T Kerr et al., "Impact of a Medically Supervised Safer Injection Facility on Community Drug Use Patterns: A Before and After Study," *British Medical Journal* 332 (2006): 220 – 222.
- <sup>27</sup> T Kerr et al., "Circumstances of First Injection Among Illicit Drug Users Accessing a Medically Supervised Safer Injection Facility." American Journal of Public Health 97,7 (2007): 1228-30.
  <sup>28</sup> C Potier et al., "Supervised Injection Services: What Has Been Demonstrated? A Systematic
- "Croner et al., Supervised Injection Services, what thas been Definionstated: A Systematic Literature Review," Drug Alcohol Dependence 145C (2014): 48-68.

  "E Wood, MW Fyndall, JS Montaner, Findings from the Evaluation of Vancouver's Pitot Medically Supervised Sagir hipection Facility, (Vancouver, BC: BC Centre for Excellence in HIV/AIDS, 2009), 1-62: and Boyd, N., N Boyd, 'Lessons from INSITE, Vancouver's supervised injection facility; 2003-2012," Drugs: Education, Prevention and Policy 20,3 (2013): 234-240; S. Semaan, et al., "Potential Role of Safer Injection Facilities in Reducing HIV and Hepatitis C Infections and Overdose Mortality in the United States," *Drug and Alcohol Dependence* 118, 2-3 (2011): 100-10; and T. Kerr, et al., *Findings* from the Evaluation of Vancauver's Plot Medically Supervised Safer Injection Facility (Vancouver, BC: BC Centre for Excellence in HIV/AIDS, 2009); and C. Potier, et al., "Supervised Injection Services: What Has Been Demonstrated? A Systematic Literature Review," Drug and Alcohol Dependence 145C (2014): 48-68.

  Carrier, B., Brochu, S., Boyd, N. & Fischer, B. (2010). A heroin prescription trial: Case studies from
- Montreal and Vancouver on crime and disorder in the surrounding neighbourhoods. Lake studies from Montreal and Vancouver on crime and disorder in the surrounding neighbourhoods. International Journal of Drug Policy, 21, 28-35. Miller, P., McKenzie, S., Lintzeris, N., Martin, A. & Strang, J. (2010). The community impact of RIOTT, a medically supervised injectable maintenance clinic in south London. Mental Health and Substance Use: Dual Diagnosis 3, 248-259. Miller, P., McKenzie, S., Walker, J., Lintzeris, N. & Strang, J. (2011). Investigating the effect on public behaviour of patients of a medical supervised injectable maintenance clinic. *Drngs and Alcohol Today*, 11, 204–209.

  <sup>31</sup> A.A. Uchtenhagen. "Heroin-Assisted Treatment in Switzerland: Λ Case Study in Policy Change.
- Addiction 105, 1 (2010): 29-37, and A.A. Uchtenhagen, "Heroin Maintenance Treatment: From Idea to Research to Practice," Drug and Alcohol Review 30, 2 (2011): [30-137, 32]. Blanken, et al., "Heroin-Assisted Treatment in the Netherlands: History, Findings, and International Context," European Neuropsychopharmacology 20 (2010): \$105-\$158.

  33. J. Strang, et al., "Supervised Injectable Heroin or Injectable Methadone Versus Optimised Oral Methodones or Treatment for Cheroid Review Addiction. In England Along Page Page 19, 1901
- Methadone as Treatment for Chronic Heroin Addicts in England after Persistent Failure in Orthodox
- Methadone as Treatment for Chronic Heroin Addicts in England after Persistent Failure in Orthodox Treatment (RIOT): A Randomised Trial; "He Lancer 375, 9729 (2010): 1885-1895. 

  \*C. Haasen, et al., "Heroin-Assisted Treatment for Opioid Dependence: Randomised Controlled Trial," 
  British Journal of Psychiatry 191 (2007): 55-62; U. Verthein, et al., "Long-Ferm Effects of HeroinAssisted Treatment in Germany." Addiction 103, 6 (2008): 960-6, 967-8; and U. Verthein, C. Haasen, 
  and J. Reimer, "Switching from Methadone to Diamorphine: 2-Year Results of the German HeroinAssisted Treatment Trial," Substance Use and Misuse 46, 8 (2011): 980-91.

  \*\*S. L. Oviedo-Jockes, et al., "The Andalusian Trial on Heroin-Assisted Treatment: A 2-Year Follow-Up. 
  Drug and Alcohol Review 29, 1 (2010): 75-80; and E. Perea-Milla, et al., "Bfficacy of Prescribed 
  Injectable Diacetylmorphine in the Andalusian Trial: Bayesian Analysis of Responders and NonResponders According to a Multi Domain Outcome Index," Trials 10 (2009): 70.

  \*\*A.A. Uchtenhagen. "Heroin Maintenance Treatment: From Idea to Research to Practice," Drug and 
  Alcohol Review 30, 2 (2011): 130-137.

  \*\*Belgian Monitoring Centre for Drugs and Drug Addiction, 2012 National Report (2011 Data) to the

- Account neview 30, a (2011), 130-1311.

  The Belgian Monitoring Centre for Drugs and Drug Addiction, 2012 National Report (2011 Data) to the EMCDDA by the Reitox National Focal Point: Belgium New Developments. Trends and In-Depth

Information on Selected Issues 2013, (Brussels: OD Public Health and Surveillance, Scientific Institute of Public Health, 2013).

of Putne Fleatin, 20(3).

8 E. Oyiedo-Joekes, et al., "Diacetylmorphine Versus Methadone for the Treatment of Opioid Addiction," New England Journal of Medicine 361, 8 (2009): 777-786.

8 Strang, J., Groshkova, T. & Metrebian, N. (2012). New heroin-assisted treatment: Recent evidence and current practices of supervised injectable heroin treatment in Europe and beyond. European

Monitoring Centre for Drugs and Drug Addiction Insights. Luxembourg: Publications.

40 Strang, J., Groshkova, T. & Metrebian, N. (2012). New heroin-assisted treatment: Recent evidence

"Strang, J., Grosikova, L. & Wetterban, N. (2012). New nerotn-assisted readment, actean evidence and current practices of supervised injectable heroin treatment in Europe and beyond. European Monitoring Centre for Drugs and Drug Addiction Insights, Luxembourg: Publications.

"Linuxeris, N., Strang, J., Metrebian, N., et al. (2006). Methodology for the Randomised Injecting Opioid Treatment Trial (RIOTT): Evaluating injectable methadone and injectable heroin treatment versus optimised oral methadone treatment in the UK. Harm Reduction Journal, 3, 28-33.

"Timko C. Schultz NR, Cucciare MA, Vittorio L, Garrison-Diehn C. (2016). Retention in medication-partial. assisted

treatment for opiate dependence: A systematic review, J Addict Dis; 35(1): 22-35.; Strang J, et al. (2015). Heroin on trial: Systematic review and meta-analysis of randomized trials of diamorphineprescribing

as treatment for refractory heroin addiction. The British Journal of Psychiatry: 207: 5-14.

Marica Ferri, M. Davoli, and C. A. Perucci, "Heroin Maintenance for Chronic Heroin-Dependent Individuals," Cochrane Database System Review 12 (2011); U. Verthein, C. Haasen, and J. Reimer, "Switching from Methadone to Diamorphine: 2-Year Results of the German Heroin-Assisted Treatment Trial," Substance Use and Misuse 46, 8 (2011); P. Blanken, et al., "Outcome of Long-Term Heroin-Trail. "Substance Use and Missies 46, 8 (2011); P. Blanken, et al., "Outcome of Long-Term Heroni-Assisted Treatment Offered to Chronic, Treatment-Resistant Heroin Addicts in the Netherlands," Addiction 105, 2 (February 2010); A. Karow, et al., "Quality of Life under Maintenance Treatment with Heroin Versus Methadone in Patients with Opioid Dependence," Drug and Alcohol Dependence 112, 3 (2010); A. Uchtenhagen, "Heroin-Assisted Treatment in Switzerland: A Case Study in Policy Change," Addiction 105, 1 (January 2010); E. Oviedo-Joekes, et al., "Diacetylmorphine Versus Methadone for the Treatment of Opioid Addiction," New England Journal of Medicine 361 (2009): 777-786; C. Haasen, et al., "Whale Assisted Treatment for Opioid Addiction," New England Journal of Medicine 361 (2009): 777-786; C. Haasen, et al., "Whale Assisted Treatment for Opioid Popendence, Pandenial Controlled Trial," Builty Insural al., "Heroin-Assisted Treatment for Opioid Dependence: Randomised Controlled Trial," British Journal of Pstchiatry 191 (2007): 55-62: B. Fischer, et al., "Heroin-Assisted Treatment (Hat) a Decade Later: A Brief Update on Science and Politics," *Journal of Urban Health* 84, 4 (2007); M. P. Garcia-Portilla, et al., "Long-Term Outcomes of Pharmacological Treatments for Opioid Dependence: Does Methadone Still Lead the Pack?," British Journal of Clinical Pharmacology 77, 2 (2012): 272-284; J. Strang, T. Groshkova, and N. Metrebian, New Heroin-Assisted Treatment: Recent Evidence and Current Practices of Supervised Injectable Heroin Treatment in Europe and Beyond (Luxembourg: Publications Office of the European Union, 2012); M. T. Schechter and P. Kendall, "Is There a Need for Heroin Substitution the European Union, 2012); M. 1. Schechter and P. Kendali, "Is 1 here a Need for Heroin Substitution Treatment in Vancouver's Downtown Eastside? Yes There Is, and in Many Other Places Too," Canadian Journal of Public Health 102, 2 (2011); A. Karow, et al., "Quality of Life under Maintenance Treatment with Heroin Versus Methadone in Patients with Opioid Dependence," Drug and Alcohol Dependence 112, 3 (2010); J. Rehm, et al., "Mortality in Heroin-Assisted Treatment in Switzerland 1994-2000," Drug and Alcohol Dependence 79, 2 (2005); Robert P Schwartz, et al., "Opioid Agonist Treatments and Heroin Overdose Deaths in Baltimore, Maryland, 1995–2009." American Journal of Public Health 103, 5 (2013): U. Verthein, I. Schäfer, and P. Degkwitz, "Social Integration after 4 Years of Heroin-Assisted Treatment," Rehabilitation 52, 4 (2012); Carlos Nordt and Rudolf Stohler. of Heroin-Assisted Treatment," Rehabilitation 52, 4 (2012); Carlos Nordt and Rudoll Stohler,
"Combined Effects of Law Enforcement and Substitution Treatment on Heroin Mortality," Drug and
Alcohol Review 29, 5 (2010); B. Nosyk, et al., "Health Related Quality of Life Trajectories of Patients in
Opioid Substitution Treatment." Drug and Alcohol Dependence 118, 2 (2011). In 2009, the New
England Journal of Medicine reported on the success of the North American Opioid Medication
Initiative (NAOMI) in Canada, which provided theroin by prescription to a select group of people who had not responded to other forms of treatment. The journal reported a two-thirds (67%) reduction in illicit drug use or other illegal activity. Similar reductions in illicit heroin use were reported from HAT index unguse or outer fuegal activity. Similar feederings in mixtureron use were reported from the Trials in the United Kingdom (72 percent), and Germany (69 percent). See: E. Ovideo-Joekes, et al., "Diacetylmorphine Versus Methadone for the Treatment of Opioid Addiction," New England Journal of Medicine 361, 8 (2009): 777-786. J. Strang, et al., "Supervised Injectable Heroin or Injectable Methadone Versus Optimised Oral Methadone as Treatment for Chronic Heroin Addicts in England After Persistent Failure in Orthodox Treatment (RIOTT): A Randomised Trial," The Lancet 375, 9729 (2010): 1885-1895.; C. Haasen, et al., "Heroin-Assisted Treatment for Opioid Dependence: Randomised (2010): 1885-1893. C. Hassen, et al., "Herona-Assisted Freatment for Opinio Dependence: Kandownsk Controlled Trial," British Journal of Psychiatry 191 (2007): 55-62.

\*\*See, e.g., van den Brink, W. et al. "Medical Prescription of Heroin to Treatment Resistant Heroin Addicts: Two Randomised Controlled Trials." BMJ 327, no. 7410 (August 2003); Hassen, C. et al. "Heroin-assisted Treatment for Opioid Dependence: Randomised Controlled Trial." British Journal of

Psychiatry 191 (July 2007): 55-62; March, J.C. et al. "Controlled Trial of Prescribed Heroin in the Treatment of Opioid Addiction." Journal of Substance abuse Treatment 31, no. 2 (September 2006): 203-11; Oviedo-Joekes, E. et al. "Diacetylmorphine versus Methadone for the Treatment of Opiate Addiction." New England Journal of Medicine 361, no. 8 (August 2009): 777-86; Perneger, T.V. et al. "Randomised Trial of Heroin Maintenance Programme for Addicts Who Fail in Conventional Drug Treatments." BMJ 317, no. 7150 (July 1998); Strang, John et al. "Supervised Injectable Heroin or Treatments. BMJ 317, Bo. 7150 (tilly 1998); Strang, John et al. "Supervised injectable included in Injectable Methadone various Optimised Orlal Methadone various Orlal Methadone orlal Methadone orlal Methadone orlal Methadone of Chronic Heroin Dependents." Cochrane Database of Systematic Review, no. 8 (August 2010).

\*\* Haasen et al. (2007), supra note 3 at 55-62; P., Vincent, M. H., Maarten, W. J., Koeter, Van Ree, J.M. & van den Brink, W. (2005). Matching of treatment-resistant heroin-dependent patients to medical prescription of heroin or oral methadone treatment: Results from two randomized controlled trials. Addiction, 100, 89-95; Franziska, G., Gschwend, P., Schulte, B., Rehm, J., & Uchtenhagen, A. (2003). Evaluating long-term effects of heroin-assisted treatment: The results of a 6-year follow-up. European Addiction Research, 9, 73-79; March et al. (2006), supra note 3 at 203-211; Oviedo-Joekes et al. 2009.

- supra note 3.

  Strang, J., Metrebian, N., Lintzeris, N., et al. (2010). Supervised injectable heroin or injectable methadone versus optimised oral methadone as treatment for chronic heroin addicts in England after persistent failure in orthodox (reatment (RIOTT): a randomised trial. Lancet, 375, 1885–1895.
- <sup>37</sup> Rehm, J., Gschwend, P., Steffen, T., Gitzwilfer, F., Dobler-Misola, A. & Uchtenhagen, A. (2001). Feasibility, safety, and efficacy of injectable heroin prescription for refractory opioid addicts: a follow-
- up study. Lancet. 358, 1417-23

  48 Haasen, C., Verthein, U., Degkwitz, P., et al. (2007). Heroin-assisted treatment for opioid dependence.

  British Journal of Psychiatry, 191, 55-62:
- British Journal of Psychiatry, 191, 23-02.

  \*O'viedo-Jockes, E., Brissette, S., Marsh, D., et al. (2009). Diacetylmorphine versus methadone for the treatment of opiate addiction. *The New England Journal of Medicine*, 361, 777–786;

  \*Stillias, M., Aebi, M.F., Jurist, K. (2000). The Impact of Heroin Prescription on Heroin Markets in
- Switzerland, Crime Prevention Studies, 11.

  1 United Nations Office on Drugs and Crime, World Drug Report 2016 (United Nations publication
- Sales No. E.16.XI.7), p. 3-4

  <sup>52</sup> See Drug Policy Alliance, *Drug Courts Are Not the Answer: Toward A Health-Centered Approach to*
- Drug Use (2011).
- 53 See Justice Policy Institute, Addicted to Courts: How a Growing Dependence on Drug Courts Impacts
- People and Communities, (2011). http://www.justicepolicy.org/research/2217

  4 Knopf, Alison. "SAMHSA Bans Drug Court Grantees From Ordering Participants Off MAT."
  Alcoholism and Drug Abuse Weekly. February 16, 2015.
- http://www.alcoholismdrugabuseweekly.com/Article-Detail/samhsa-bans-drug-court-grantees-from-
- ordering-participants-off-mat.aspx.

  National Association of Drug Court Professionals, NADCP Board Resolutions, "Resolution on the Availability of Medically Assisted Treatment (MAT) for Addiction in Drug Courts," July 2011,
- http://www.nadep.org/learn/positions-policy-statements-and-resolutions/board-resolutions

  http://www.nadep.org/learn/positions-policy-statements-and-resolutions/board-resolutions/board-resolutions

  http://www.nadep.org/learn/positions-policy-statements-and-resolutions/board-resolutions/board-resolutions

  http://www.nadep.org/learn/positions-policy-statements-and-resolutions/board-resolut Medication Use in a Retrospective Cross-Sectional Survey of Patients With Chronic Pain; Boehnke, Kevin F. et al. The Journal of Pain, Volume 17, Issue 6, 739-744; National Bureau of Economic Research. Do Medical Marijuana Laws Reduce Addictions and Deaths Related to Pain Killers? Cambridge, MA: National Bureau of Economic Research; 2015, Working Paper No. 21345.

  7 New York Times, An E.R. Kicks the Habit of Opioids for Pain, Jan Hoffman, June 10, 2016 http://www.nytimes.com/2016/06/14/health/pain-treatment-er-alternative-opioids.html? r=1

### **Statement of David Murray**

# "America's Insatiable Demand for Drugs: Examining Alternative Approaches"

### A Roundtable with the Senate Committee on Homeland Security and Governmental Affairs

### Wednesday, June 15, 2016 10:00 A.M. SD-342 Dirksen Senate Office Building

Chairman Johnson, Ranking Member Carper, and members of the Committee, thank you for this opportunity to address "America's Insatiable Demand for Drugs: Examining Alternative Approaches" before this Committee.

In this written testimony, I shall endeavor to answer several of the Committee's concerns as were expressed in my invitation to testify. In this document, I will, following a brief overview of decriminalization and legalization problems, present evidence and discussion with regards to the following:

- I shall examine the impact of proposals to either decriminalize or legalize drugs such as marijuana, as currently found in several states in contravention of the federal Controlled Substances Act.
- Moreover, I shall argue that the criminal black market in states such as Colorado has thrived, not diminished, in the presence of legalized access.
- I shall offer a critical review of proposals to offer so-called "safe" or supervised injection facilities as a potential response to the current opioid crisis.
- I shall offer a critical review of the state of current national drug control
  policy, as represented by the strategic undertakings of the current
  Administration.

- I shall also address some attention to the current state of drug treatment programs, and discuss how they are affected by changes recently found in regards to marijuana policy.
- I shall follow that critical evaluation by addressing the specific need for a
  more robust focus on reducing drug supply and availability, with some
  specific examples.

### Has Federal Drug Control Strategy Lost Direction? An Overview

It must be borne in mind in evaluating Obama Administration drug control performance across the horizon of its responsibilities that the first action taken upon assuming office was to remove the Director of the President's own Office of National Drug Control Policy (ONDCP) from Cabinet status.

As a consequence, the very entity charged with setting and implementing drug control strategy, and with coordinating responses and priorities across the interagency as affected by the President's drug control budget, lost political power and impact.

In a stunning recent development, we now learn that, as the Administration prepares to leave, ONDCP has suffered a substantial cut to personnel, and has experienced a downsizing organizational restructuring that can only hamper its most effective programs. The effect is to institutionalize the weaknesses that have been imposed beyond ready repair in successive administrations.

As we shall see later in this testimony, these troubling developments were all presaged in the beginning, and can be placed in relief by reviewing Administration performance with respect to its own goals.

The real contrast between the last seven years and that of previous approaches lies in three things: 1. Failed leadership, turning away from the urgency of protecting Americans from this disease approaching epidemic proportions, and instead undermining federal law; 2. Weakening prevention by failing to defend social norms and allowing the normalization of drug use; and 3. Neglecting drug supply, thereby allowing the tide of drugs to now flood our streets.

Instead of effective drug control, we have witnessed at the state level, for the last several years, widespread efforts at decriminalization or outright legalization of

drugs. These efforts were not countered by the Administration, which even declined to challenge them in court, and they have proven counterproductive against multiple drug control objectives.

In summary form, to be expanded upon in the text that follows, these are the types of problems that follow from decriminalization/legalization:

First, multiple legal problems are presented beyond the provisions of the Controlled Substances Act, which is being set aside with regards to marijuana at the state level. Examples include drug-related provisions regarding food safety, child endangerment, a drug-free workplace, federal contracting obligations, banking and finance protections, and even international treaty obligations, which are also adversely affected.

Decriminalization undermines key expressed goals of the Administration, such as treatment and prevention. Not only are the incentives to remain "drug free" weakened when drugs are readily and legally available, but decriminalization commonly leads to the removal of a law enforcement/judicial role in supporting treatment. Positive developments such as drug courts are undermined. The continuing presence of laws against drug use and trafficking serve to strengthen treatment and prevention objectives. They must not be dismissed.

Under liberalizing drug policies such as have been pursued, drug use prevalence increases, certainly among adults, as we shall see, and there is evidence that it happens for youth, as well. The National Epidemiological Survey on Alcohol and Related Conditions (NESARC), for instance, recently reported a doubling of marijuana use among adults and a comparable doubling of "marijuana related disorders" during the period 2001-2013, following liberalized marijuana policies.

The public health, educational, and law enforcement impact is negative, and the costs imposed, in lives as well as public expense, outweigh whatever revenue is promised. The impact can be found on mental health, cognitive performance, and overall public well being; all are degraded.

The black market and attendant violence, attached to the trafficking of both marijuana and other drugs, does not wither away, but thrives in the environment of decriminalization; the lessons from Colorado are particularly striking.

Crucial public attitudes concerning the risk in using drugs and the social norms of disapproval tumble; among high school seniors, for instance, they are now at the

lowest points recorded involving marijuana. Where these norms and attitudes change, increased use commonly follows.

The revenue from recreational, legal marijuana sales can be seen to feed back into political actions to insulate the new, liberalized markets, threatening corruption and the integrity of banking services; the risk of criminals exploiting these conditions is high.

The U.S becomes increasingly in violation of international treaties regarding drug control (we have already been sanctioned by international bodies such as the International Narcotics Control Board of the United Nations Office of Drug Control) and our "moral authority" and leadership internationally is undermined.

There appears to be a spill-over effect and a 'gateway' risk from liberalized marijuana policies that may well feed into related drug control problems, such as the emerging and climbing opioid overdose crisis.

Law enforcement, reflected by such recent <u>statements</u> as those of Commissioner Bill Bratton in New York, indicate that marijuana markets become a serious problem threatening public order, while the smuggling of high potency marijuana from Colorado is now found in multiple states.

Drug potency increases dramatically, as seen in the new "concentrates" flowing from Colorado, approaching 70 to 80 percent THC (intoxicating element in marijuana) found in "edibles" such as candies marketed to youth. There are yet other attendant legal problems, but these are some prominent concerns already showing up.

Most importantly, the combined effect of both Administration policy as seen in the National Drug Control Strategy and the impact of broad state level decriminalization/legalization developments has been the weakening of a critical strategic pillar of effective drug control policy: efforts against drug supply, availability, and trafficking.

## Specific Evidence Regarding Marijuana, Drug Decriminalization and Legalization: Colorado's Record and the Continuing Black Market:

Recent state-level data from the Department of Health and Human Services show that only 5.5 percent of Oklahoma youth between 12 and 17 years of age are "current users" (having used in the past month) of marijuana, compared with the

national average of 7.2 percent, according to the most recent survey.

That's the good news. The bad news is that the percentage is much higher in neighboring Colorado where, as an Oklahoma lawsuit against that state has shown, "legalization (of marijuana) has created a dangerous gap in the federal drug control system."

The notion that Colorado's first full year of commercial, "recreational" marijuana production and sales — in violation of federal law — is some sort of "experiment" has been embraced by many within the Administration and members of both political parties. Given what's at stake — mental health, educational outcomes, family well-being, and even future policy decisions in other states — an accurate accounting is essential.

A major new <u>report</u> from the National Household Survey on Drug Use and Health (NSDUH) with combined two-year data (2013-2014; a sample size sufficient to give a picture at the state level) presents the reality of marijuana use for the first time since the legal roll-out.

The data are devastating to the marijuana "experiment." Use is up in Colorado, and has been rising steadily every year since 2009. That date matters not only because it marks the end of Bush administration policies that fought back against — and lowered substantially — teen marijuana use, but because that year saw a major expansion of the state's medical marijuana program. Medical marijuana drives up teen use; legalization drives it up even more.

To anyone paying attention, this rise is not surprising. Recent data have clearly shown increases in marijuana use, including adolescent use, in states that have adopted either so-called "medical marijuana" programs, or have liberalized access to the drug. Colorado has recklessly done both, and the latest data show that it has the dubious distinction of being the national leader in youth marijuana use.

A realistic assessment of impact, from 2009, shows a stunning rise of 27 percent by 2014 (from 9.91 percent to 12.56 percent) in teen marijuana use, as well as large increases for those ages 18 to 25. And there is no sign that the rate of increase is slackening.

Lest we think Colorado's rise is something going on everywhere in the country, a comparable rise has not been seen in all states, except those, like Washington, Oregon, the District of Columbia, and Alaska, which also legalized, and now join

Colorado in the top eight states. In fact, in states like Georgia, Ohio and Texas, the rate of youth marijuana use is half that of Colorado. Parents should take note. Moreover, use by those 12 and older, which includes Colorado's young adults, is also steeply up, rising 99 percent in the last 10 years.

According to the proclamations of eager advocates for the legal dope market, this wasn't supposed to happen to kids. In fact, they argued that they were legalizing marijuana with the specific intention to protect the children, since a regulated market would shut down the criminals (which hasn't happened, either) and ensure that young people couldn't get access.

Those aged 12 to 17 are adolescents, ranging in classrooms from junior high to their senior year. These data now show one in every eight Colorado kids is a current smoker of the highest-potency dope in the nation.

Almost weekly, the science grows stronger and more undeniable as to what this drug is doing to the adolescent brain; eight-point IQ loss, potentially permanent impact on memory, learning, cognitive performance, and risk of psychosis; these are but some of the damaging associations with heavy use.

More than 6 percent of high school seniors nationwide are now "daily" marijuana users, says another <u>survey</u> released in December, which also showed that perceptions of risk in using marijuana by high school seniors ("perceived risk" being a major component of effective prevention), has dropped 62 percent since 2008 to its lowest level ever. President Obama's drug czar Michael Botticelli has laid the blame on legal marijuana. For states such as California, facing legalization on the ballot in 2016, voters should know that legal marijuana means an epidemic of teen use and addiction.

Solutions? We should enforce federal law, designed to push back on this very threat. Pro-drug legalizers — and their apologists — need to stop denying the science, and the facts before their eyes.

### The Impact of Liberalized Attitudes: More on the NESARC:

To generalize, liberalized attitudes about marijuana appear to have the predicted effect, and they extend well beyond Colorado and are associated with national impact. I have mentioned already the latest results from the National Epidemiological Survey on Alcohol and Related Conditions (NESARC). To

demonstrate specifics, NESARC showed that by 2012-2013, past year prevalence of marijuana use has risen 132 percent since last measured in 2001-2002 (from 4.1 percent of study participants to 9.5 percent).

The results may be even worse than they appear. The NESARC is a longitudinal survey, tracking the subjects over time, and reporting once a decade (there were interim "wave" results issued in 2004-2005), meaning that the temporal trajectory of this change (the sharp upswing in the most recent years) is masked by looking only at the beginning and ending of the decade.

There appears to be an acceleration in the most recent years, with decline occurring in the middle. Confirmation of this trajectory can be found in a "wave" finding in 2004-2005, which showed a decline down to 3.57 percent "past year" use (at least in the 41 states that did not have medical marijuana laws).

Collateral confirmation can be found in a parallel study of youth (the Monitoring the Future school-base survey done yearly by the National Institute on Drug Abuse), which revealed a 25 percent decline in marijuana use between 2001 and 2008 for high school youth, only to increase thereafter, and the even larger survey known as the National Survey on Drug Use and Health (NSDUH).

There are differences in the studies rendering them not completely comparable. The NSDUH samples those 12 and older, while the NESARC reports on those 18 and older. Thus, the absolute numbers are not fully compatible, but the trends support the interpretation of a recent rise, not a steady increase from 2002. In the NSDUH, between 2002 and 2007 past month use of marijuana first fell by 6 percent, to be followed by a 29 percent increase between 2007 and 2013. Further, the NESARC measured in the year prior to the impact of legal commercial marijuana, implemented in 2014. NSDUH reveals that in the period subsequent to 2013 (NESARC's final year), steep increases continued, rising an additional 12 percent during a single year by 2014.

The Obama Administration's support for legal marijuana could well be reflected in these sharp increases in marijuana use.

Finally, what are the consequences of our choices? While the impact of high-potency use has been well documented, the impact affects more than just current users. The medical report found in the Proceedings of the National Academy of Sciences (PNAS) addresses the future that we are sowing, showing that marijuana's THC affects the brain structure and functioning of the progeny of

maternal users (which, depending on the community, reaches as high as 41 percent of neonates born in North America).

Though prenatal risks in maternal marijuana use are well known, the PNAS, through an animal study, hits upon a specific neural mechanism: "Prenatal exposure to cannabinoids (through the impact of THC on developing cortical neurons) evokes long-lasting functional alterations ... [with] remarkable detrimental consequences of embryonic THC exposure on adult-brain function." The consequences were lifelong, including an increased risk of seizure in adulthood.

This is only the latest study to dispel the widely but mistakenly-held belief driving legalization efforts that marijuana is harmless. Pulling together the three reports, it seems undeniable from the weakening of attitudes against marijuana, the associated sharp increases in marijuana prevalence, and now the further demonstration of harm from maternal marijuana use for future generations, damage is already being done.

While for some, that damage appears irreversible, it is not too late for responsible Americans to push back against this clear public health threat. The fate of future unintended victims is in our hands.

### Further National Survey Results: NSDUH on Adults and Increased Use:

On September 10, 2015, the Obama Administration released the results of the 2015 National Survey on Drug Use and Health (NSDUH), the most recent of he nation's annual report card on illicit substance use conducted by the Department of Health and Human Services (HHS).

Though it is the 2015 NSDUH, the data are for the year 2014, and were released at a press conference at the National Press Club.

The survey is the largest and most comprehensive report on the population 12 and older in the United States. It is subdivided into sections reporting on those 12-17 years of age, those 18-25 years of age, and those 26 and older

.

The report analyzes use of illicit substances according to whether it was Lifetime (ever used), Past Year use, or Past Month use (treated as "current use"). The latter category, Past Month, is regarded as the most policy relevant, as it measures those whose use is not only "current," but likely reflects habitual, regular use of a

substance. Regular, habitual users are at greater risk of suffering the consequences of their drug use, including dependency and harms to health.

The report includes several different categories of specific drugs, providing findings on use of "Any Illicit Drug," as well as specific drugs, such as marijuana use, cocaine and heroin use, or misuse of prescription medications, such as pain killers.

The report comes at a time when the nation is undergoing the most dramatic change in drug policy driven by the Obama Administration's determination not to uphold the federal Controlled Substances Act, fostering a legal, commercial market in "recreational" marijuana use by several states, as well as a broader retreat from efforts to diminish the supply of illegal drugs at home and abroad.

There are important changes in drug use to be found in this survey when one examines both 12-17 year olds and those between the ages of 18-25. But the most dramatic changes in this year's results are found in the category of adults, those 26 and older.

Heroin use, for those 26 and older, effectively doubled between 2013 and 2014 (though it is mercifully a relatively small absolute number; the change was from .1 percent to .2 percent). However, we now have the highest figure for heroin use since at least 2002, which is as far back as the tables released by the Administration cover. (All findings noted here are "statistically significant," including the heroin increase.)

Yet, according to the HHS press release headline, today's news is: "Alcohol, tobacco, and prescription drug use by teens declines; level of youth with major depressive episodes remains high."

While that narrow focus presents relatively good (and some bad) news, a far more troubling story lies elsewhere, and must be discovered by careful examination of the data tables.

By comparing drug use over time, it is possible to discover the impact of Obama Administration drug policies and compare them to the previous, Bush Administration, drug use results.

Taking last year of the Bush Administration, 2008, and today's results for 2014, here are the headlines:

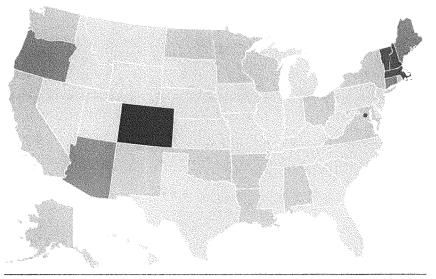
- Between 2008 and 2014, for the population 26 and older, Past Month use of Any Illicit Drug has risen 41 percent. In the single year 2013-2014, it rose 14 percent.
- Between 2008 and 2014, for the population 26 and older, Past Month use of Marijuana has risen 57 percent. In the single year 2013-2014, it rose 18 percent.

It is now undeniable that the Obama Administration's drug policies and its facilitation of commercial marijuana distribution are deeply damaging. And the damage is only spreading, accelerating, and deepening.

The comprehensiveness of the impact can be seen the graphic below. Colorado, as seen in SAMHSA state-level drug use analysis, is the leading state for every one of the major drugs of abuse, as well as alcohol. That last realization tells us that marijuana use, for instance, does not displace high levels of alcohol use, but rather is coincident with them.

### Heavy drug use, state by state

Number of substances (marijuana, cocaine, non-medical opioids, alcohol) for which the state's population is a heavy consumer: 80 81 82 83



WAPO.ST/WONKBLOG

Source: National Survey on Drug Use and Health

### The Thriving Black Market: Rocky Mountain HIDTA and Smuggling:

Colorado has now become a national as well as international center for drug smuggling. According to a recent law enforcement report from southern Colorado, an illegal operation there has been accused of growing marijuana for distribution to Cuba. Local law enforcement reports note the increased presence of criminal gangs, including transnational organizations, entering the state to capitalize on the lax legal environment.

We can see clearly that promises to end criminal participation in drug markets, along with the violence that accompanies such operations, were empty, and have been disconfirmed. Notwithstanding the rising threat, the Administration has failed to provide a prosecutorial response, one moreover which was a predicate of the initial decision to allow legalization to go unchallenged.

A new government report on the Colorado "experiment" to legalize and commercialize marijuana sales was recently released by the multi-agency intelligence fusion center of the Rocky Mountain High Intensity Drug Trafficking Area (RMHIDTA) headquarters in Denver. In it we can witness the continued operation of the black market criminal activities.

Two prior reports traced the development of marijuana legalization through successive stages (medical marijuana introduction, expansion of medical marijuana dispensaries) and the new report covers full commercial legalization beginning in January, 2014. The report confirms the warnings of legalization opponents in considerable detail.

Simply put, the report shows that the impact to date has affected public health (emergency department episodes in particular), public safety (rising crime rates, traffic fatalities from drugged driving), and the integrity of public institutions, such as schools (student violations of drug policy, disruptions and expulsions). And, predictably, adult use of marijuana has surged, as has increasing access and use by minors.

Each of these points in presented in detail in the report, along with presentation of recent research showing the cognitive and psychological damage of marijuana exposure, especially on youth, subjected to the rising potency of Colorado commercial marijuana (now exceeding 17.1 percent average potency of THC, the intoxicant in marijuana, well above the national average of 12.6 percent). Each of the findings warrant a full discussion, but one in particular deserves immediate attention.

As the Obama Administration progressively adapted the federal response to the escalating violation of the federal Controlled Substances Act represented by Colorado's legalization, successive memos from the U.S. Department of Justice (DOJ) provided rationales and excuses for not enforcing U.S. law.

In August of 2013, Deputy Attorney General James Cole provided guidance to all U.S. attorneys regarding marijuana criminal conduct in a memorandum, that would remain priorities for federal enforcement. Two of these priorities are:

Preventing the diversion of marijuana from states where it is legal under state law in some form to other states; and

Preventing state-authorized marijuana activity from being used as a cover or pretext for trafficking of other illegal drugs or other illegal activity.

The RMHIDTA report indicates that the DOJ priorities have been ignored as trafficking spreads rapidly. Listed below are episodes where marijuana seizures followed from traffic stops. Law enforcement estimates that approximately 10 percent of marijuana being trafficked from the state is represented in these seizures.

- During 2009 2012, when medical marijuana was commercialized, the yearly average number interdiction seizures of Colorado marijuana increased 365 percent from 52 to 242 per year.
- During 2013 2014, when recreational marijuana was legalized, the yearly average interdiction seizures of Colorado marijuana increased another 34 percent from 242 to 324.
- The average pounds of Colorado marijuana seized, destined for 36 other states, increased 33 percent from 2005 2008 compared to 2009 2014, rising from 2,763 pounds to 3,671 pounds.
- In 2014, there were 360 interdiction seizures of Colorado marijuana destined for other states. When compared to the precommercialization average of 52 from 2005 – 2008, this represents a 592 percent increase. The most common destinations identified were Kansas, Missouri, Illinois, Oklahoma, and Florida.

In addition to traffic stops, there were parcel intercepts of marijuana.

- U.S. mail parcel interceptions of Colorado marijuana, destined for 38 other states, increased 2,033 percent from 2010 2014, rising from 15 to 320 intercepts.
- Pounds of Colorado marijuana seized in the U.S. mail, destined for 38 other states, increased 725 percent from 2010 2014, from 57 to 470 pounds.
- From 2006 2008, compared to 2013 2014, the average number of seized parcels containing Colorado marijuana that were destined outside the United States increased over 7,750 percent (from 2 to 157 parcels) and pounds of marijuana seized in those parcels increased over 1,079 percent (from 29 to 342 pounds).

The seizures and intercepts all are tied to criminal activity and, more importantly, represent a small fraction of what law enforcement believes is the actual magnitude of this growth in trafficking.

In simplest terms, marijuana legalization is poisoning Colorado and Colorado is now poisoning more and more of America.

### COLORADO MARIJUANA SMUGGLING

Authorities say they've intercepted thousands of shipments of marijuana leaving Colorado, destined for sale on the black market in other states.

# States with Colorado marjijuana D.C.

SOURCES: El Paso Intelligence Center, National Seizure System, as of March 20, 2015 Janet Loehrke, USA TODAY



### Safe Injection Facilities: Evaluating the Evidence From "Harm Reduction"

My colleague John Walters, who has served as Director of the Office of National Drug Control Policy during the Bush administration, recently wrote on *USA Today* concerning safe or supervised injection facilities, which have recently been proposed as a response to the heroin epidemic in several US settings. Mr. Walters argues:

"There are no "safe heroin injection sites." The only "safe" approach to heroin is not to take it. For addicts, the humane public health response is to help them get and stay sober, or at the very least, opioid replacement therapy in sustained treatment. Any approach without these goals is cruel and dehumanizing — not healing, but perpetuating harm.

Addiction is a treatable disease. Millions of Americans are in recovery—living healthy, productive lives. Supporting addicts' heroin use maintains their disease, administering the poison that causes their illness and diminishes their lives. A government-approved place for unlimited heroin injection creates the conditions for never-ending addiction and gives government a drug dealer's power over the addicted.

Advocates for injection sites claim various "successes." In fact, very few who use these facilities are persuaded to enter treatment and reach recovery. Many addicts using such facilities do not stop using heroin and other such drugs from criminal sources — the "safe facility" is simply another place for drugs. Addicts are often abusers of multiple drugs and alcohol. Injection facilities sustain all of this.

Such proposals require us to suppress common sense and adopt heartless indifference to the lives of the addicted. We do not protect addicts by reviving them from overdose death only to return them to death's front door, perpetuating the self-destructive cycle of addiction. In fact, many addicts enter treatment because they cannot obtain heroin, and even more are treated under the supervision of drug courts. We treat the addicted through workplace interventions, medical practice and many faith-based organizations. We should keep vigil as they struggle to recover.

Today's heroin deaths are caused by the drug flooding into America from Mexico. Giving up on fighting heroin trafficking brought a supply-driven epidemic to our communities. Pressure on heroin networks works, just as

attacks on terror networks can and must be pressed for our security.

Heroin destroys freedom and life. Government-approved injection centers are shameful."

While such facilities have not changed fundamental high-risk health behavior, what they have changed is the moral and civilizational relationship between the state and the individual. At their worst, they risk representing servitude, and eroding prevention, when the government itself becomes the entity sustaining continued addiction.

While many claims have been made for positive health outcomes in association with the operation of such facilities, there are many questions about the actual evidence of benefit.

For instance, INSITE, a Supervised Injection Facility in Vancouver, Canada, opened in 2003. In 2007, Colin Mangham, Director of Research for the Canadian Drug Prevention Network <u>published</u> his critique of the operation and the validity of the evaluations.

### He argues:

- 1). "The published findings actually reveal little or no reductions in transmission of blood-borne diseases or public disorder, no impact on overdose deaths in Vancouver, very sporadic individual use of the facility by individual clients, a failure to reach persons earlier in their injecting careers and very little or no movement of drug users into long-term treatment and recovery. The fact that the evaluators and the funders of INSITE nonetheless have hailed the program as successful reveals a serious problem in drug policy today.
- 2). "(There is a) considerable overstating of findings as well as underreporting or omission of negative findings, and in some cases the discussion can mislead readers. The reports show no impact on the key issues that would most warrant its existence: spread of HIV or other blood borne disease, getting clients into treatment and off of drugs, reducing overdose deaths. The reported impact on public disorder that is discussed is questionable and so limited in scope as to be misleading.
- 3). Data in all of the reports suggest that only a small percentage of IV drug

users use INSITE for even a majority of their injections. Most drug users use it only some of the time or not at all. This finding illustrates a shortcoming of harm reduction measures that has recently been highlighted by Neil McKeganey in the UK: an inability to control a free moving population of IV drug users sufficiently to control disease in the face of continued use of drugs.

- 4). The article includes data that show the relative infrequent use of INSITE by individual IV drug users. In this evaluation, 178 of 400 participating drug users utilized INSITE during the study period, leaving over 50% who did not use INSITE at all. Of the 178 who did use INSITE, over half used it for less than a quarter of their injections. These findings illustrate a trend that precludes INSITE effectively controlling injection drug behaviours.
- 5). This article mentions that no overdose deaths occurred at the site. We do not know if any of the overdoses would have resulted in death outside the site. The number of overdose deaths in Vancouver and the DTES has increased since INSITE started up. This fact at least suggests that in its 3 years of operation, INSITE has produced no impact on overdose deaths.
- 6). We do not know what negative effects the facility may have had on the availability of treatment, given the preoccupation with INSITE. Neil McKeganey's research in the UK suggests such programs may actually have an adverse effect by drawing focus and efforts away from incidence reduction (prevention) and prevalence reduction (treatment).
- 7). This report, if not read carefully, is misleading. It implies that use of INSITE is associated with reduced needle sharing. Actually, only exclusive use of INSITE correlates with reduced sharing an example of a "straw horse" finding. If someone uses INSITE for all their injections, it goes without saying they would not share needles. Only about one in ten HIV negative participants reported using INSITE for all of their injections. Only four HIV positive participants reported using INSITE all the time. These are the most important findings in the study but are not reported.
- 8). This report ignores the significant negative implications of the fact that, of 431 drug users studied, only 90 used INSITE some, most or all the time. It does not recognize adequately that half of these persons still shared needles.

9). This report's only finding is that some INSITE users go to detoxification upon referral. It does not show that INSITE increases use of detoxification, nor, more importantly, does it show that INSITE produces any increase or effect on people proceeding to actual treatment. Detoxification is often called a "revolving door." Going to detoxification is by no means the same as going for treatment, and this is a well-understood fact.

In a similar vein, Professor Neil McKeganey, (already mentioned), Director of the Centre for Drug Misuse Research at the University of Glasgow since 1994, has provided (personal communication) his evaluation of the Safe Injection Facility evidence, extending beyond the particular case of INSITE in Canada to the comparable facilities in Europe and Australia. According to Professor McKeganey:

"The provision of a safe injecting facility as it is typically called can unquestionably lead to a reduction in some aspects of drug injectors risk behaviour. Injecting under some level of trained clinical supervision can for example reduce the risk of injecting being carried out with non sterile injecting equipment. Such settings can also enable staff working within the facility to provide advise on injecting techniques which may reduce the incidence of injection site related problems. In addition, such settings can ensure that medically trained staff are able to respond in the event that an individual experiences an overdose associated with the drugs they have used. It is important I believe to recognise what such settings can contribute but equally important to recognise their shortcomings. In short form these are summarised below.

- 1) Typically, so called safe injecting facilities provide a setting where individuals can inject previously purchased street drugs rather than prescribed injectable medication. Street drugs are likely to be contaminated with a variety of cutting agents. As a result, the injection of these drugs can result in serious blood based infections which will occur irrespective of the setting where the injection is occurring.
- 2) Providing a setting where individuals inject drugs runs the risk of encouraging injecting itself which is without doubt the single most risky way of administering any substance to the body. A more constructive approach than facilitating injecting would be to discourage injecting at all as a means of administering illicit substances.
- 3) The provision of any facility that enables individual's illegal drug use runs the very real danger of undermining efforts aimed at facilitating the individual's recovery from dependent drug use. In a situation of limited

- financial resources, it is more appropriate to ensure that addicts have access to treatment recovery oriented treatment services that can support their attempts at ceasing their drug use rather than providing facilities which actually enable such drug use.
- 4) The creation of a safe injection facility where individuals can inject street purchased drugs without fear of prosecution requires the limited suspension of national laws relating to the possession of illegal drugs. Clearly it would not make any sense to set up a safe injecting facility and then simultaneously prosecute individuals for possessing the illegal drugs they were consuming within the facility. However, creating a setting where national drug laws are suspended also creates situation in which any individual in possession of illegal drugs could claim that he or she was en-route to a safe injecting facility. In this way the setting up of such a facility is likely to result in a much wider dilution of the existing drug laws well beyond the physical boundary of the injecting facility itself.
- 5) It is questionable whether a national of local government (Federal or State) should take on the responsibility of facilitating individual's drug use. Indeed, it is hard to see how any such government authority taking on such a responsibility would not at one and the same time be undermining its efforts at drug prevention.
- 6) Whilst there have been some studies undertaken that have reported on the experience of a number of safe injecting centres (specifically in Vancouver and Australia) most of those evaluations have been undertaken by centres that are firmly supportive of safe injecting facilities as such it is not at all clear whether these evaluations can be considered as objective. Those studies have typically not shown that individuals who are attracted to use these facilities have been able to successfully cease their drug use.
- 7) Whilst it is clear that such settings can attract some individuals who then inject some of their drugs within the injecting facility it is equally clear that not all injectors within a local area are inclined to use such a facility. Equally it is also clear that even those injectors who do use such a facility do so on only a proportion of the times they are injecting. As a result, risky injecting behaviour persists even in the areas where such facilities have been provided.
- 8) The provision of so called safe injecting facilities can create a deep sense of confusion within local drug treatment and recovery services as to what their role is with regard to supporting individuals to cease their drug use. Services cannot easily combine a focus on both facilitating and discouraging individuals drug use.

 Relatedly it is hard to see how prevention efforts are not themselves undermined where a national or local government provides the means to inject illegal drugs and the settings within which illegal drugs can be used.

Significantly, Professor McKeganey has published <u>findings</u> showing that the presence of "robust law enforcement" activity is productive of both drug use cessation and entry into treatment. This finding in particular argues against any policy of decriminalization or relaxation of the law in order to avail the operation of injection facilities.

More broadly, a comprehensive review of such facilities globally <u>undertaken</u> by the European Monitoring Center for Drugs and Drug Addiction (EMCDDA) has pointed out very similar problems regarding the evidence. The EMCDDA review found not only similar limitations found in the evidence regarding public health effectiveness, they present a general conclusion that the evidence to date is unclear and hard to properly evaluate, largely because of methodological inadequacies.

### Evaluating a Specific Study of SIFs: The Methodological Weakness

Finally, a specific recent (2007) <u>study</u> has often been highlighted by advocates purportedly showing a raft of positive outcomes. But a review of actual findings and caveats shows once again the same partial, equivocal, and inconclusive results.

Findings were that out of 902 studied participants over multiple years, drug use "cessation" for as much as six months (they counted methadone maintenance as constituting "cessation") was reached by 23 percent. The study was of what characteristics were found as independently associated with entering that state; among the several such factors one finds (some) participation in SIFs (Safe Injection Facilities).

This is not a demonstration that SIF participation was itself the factor, nor that participation increased "cessation." (Hence the use of the term "potential role" in the Conclusions, below.) Final analysis out of more than 900 participants in the study that yielded about 2000 "observations of cessation" by these terms; that is, a "cessation event" was achieved for some period of time in 95 "events."

Note that the "cessation" comes from getting into treatment; since there is no demonstration that attending the SIF is the reason for getting into treatment, from a public policy perspective, why not provide the SIF funds directly to expanded

treatment options? (Note in the below quotes that Aboriginal participants, who are a large percentage of participants, were significantly **less likely** to enter into treatment services if attending SIFs):

Conclusions: While the role of addiction treatment in promoting injection cessation has been well described, these data indicate a **potential role of SIF** in promoting increased uptake of addiction treatment and subsequent injection cessation. The finding that Aboriginal persons were less likely to enroll in addiction treatment is consistent with prior reports and demonstrates the need for novel and culturally appropriate drug treatment approaches for this population.

Further: "This study has several limitations. Firstly, given that addiction is recognized to be a chronic relapsing condition (Galai et al., 2003; Evans et al., 2009), our definition of injection cessation is restricted to a relatively short period of injection cessation. Nevertheless, our findings are compelling and it is noteworthy that this definition of cessation has been consistently used in the injection drug use literature. Secondly, there are a number of limitations associated with the observational nature of our study. For one, the present study is limited in that the control group included non-frequent SIF users. As has been described previously (Lurie, 1997), selecting adequate control groups is particularly challenging in observational studies examining the use of healthcare services for IDU. While a randomized control trial would be an optimal evaluation strategy, interventional study designs to evaluate SIF have been deemed unethical (Christie et al., 2004). Given this limitation it is possible that individuals who are more concerned with their health may be independently more likely to visit a SIF, seek addiction treatment and experience periods of injection cessation....

Finally: "In addition, many of our measures relied on self-report and are susceptible to socially desirable reporting as well as recall bias.... Although our observational study cannot determine causation, these findings contribute to a growing body of literature suggesting a link between SIF attendance and entry into addiction treatment."

In the face of insufficient evidence of effectiveness, and given the realization that public dollars may more effectively be spent in support of expanded drug treatment, the lesson seems to be that the provision of government-enabled safe or supervised injection facilities simply cannot suffice as an adequate policy response to our present drug use, overdose, and HIV/AIDs crises.

The Overall Failure to Achieve National Drug Control Strategy Goals by the

### Obama Administration: The Opioid Crisis and Beyond

President Obama's *National Drug Control Strategy* in 2010 first proclaimed the major policy goals of the administration's approach to the drug problem and the goals were to be met by 2015. Not only have they not been met, in critical instances, the policies have been going in the wrong direction, rapidly.

We learned that, in the midst of the ongoing opiate overdose crisis, heroin overdose deaths rose an additional 28 percent between 2013 and 2014. That's on top of the 340 percent rise in heroin deaths since 2007, such that beyond the 8,217 deaths of 2013, we now have another 10,574. That is, we now see a 440- percent increase from the Bush years.

Moreover, prescription opiate deaths also surged an additional 16 percent, taking us to 18,893 dead, while heroin use and Mexican production of the drug continue their steep climb. Overall, all drug poisoning deaths hit 47,055 in 2014. That's up from the last years of the Bush administration, when they were 36,450; that is, the rise for all drug deaths is almost 30 percent.

But according to the Obama administration, that wasn't going to happen. Instead, it was supposed to drop by 15 percent between 2010 and 2015, a target confidently set in their own strategic goals.

And then we discover that marijuana use by high school students, as measured by the largest, longest-running youth survey, Monitoring the Future (MTF), remains steadfastly high, unmoved from the steep rise since 2009; more than 1-in-5 high school seniors are "past-month" users of the drug. (Moreover, the foundation of prevention education, perceived "harmfulness" in using marijuana, has fallen to its lowest point ever among 12th graders, 62 percent lower than in 2008.) The same sustained high rates are found for youth use of "any illicit drug," beyond marijuana.

Further, the lead researcher for MTF had issued a dire warning recently, that the "second relapse phase in America's youth epidemic of drug use may now be beginning," based on recent upturns in marijuana use.

Many experts suspect that the actual number of users is considerably higher, were MTF to properly capture the new, highly potent forms of the drug now spreading across the country, the candies, drinks, and concentrates such as "shatter" consumed in vapor-pens, even in the classroom. The potency of such forms is

unprecedented, reaching 70 to 80 percent THC (compared to the 3-4 percent potency of the 1980s), the intoxicating chemical linked to such effects as IQ loss, memory and cognitive impairment, psychosis, and multiple social pathologies, including school drop-out.

Again, that wasn't supposed to happen. By the administration's goals, youth "pastmonth" use of drugs was to decline by 15 percent. Similarly for 18-25 year olds, whose rates of "past-month" use were supposed to fall 10 percent; the National Survey on Drug Use and Health (NSDUH) shows that since 2008, their "pastmonth" use has risen 12 percent (strictly marijuana use by 18 percent).

Drugged driving was to drop; it's up. The "lifetime" use of drugs by 8th graders was supposed to decline by 15 percent (surely a modest goal); MTF shows that in 2015 it's up 8 percent since 2007. And so forth.

These recent findings matter, as they show undeniably that the drug policies of the Obama administration have failed. Importantly, they have failed not according to editorializing critics, but according to the very metrics, required of the White House Office of National Drug Control Policy by law, which the administration itself selected as the way to evaluate their performance. That is, this evidence represents a self-indictment.

For seven long years, the administration has insisted on a master narrative. It denounced the supposed policies of the past, and proclaimed a new, enlightened approach, that "ended the drug war," promised treatment insurance that never arrived, dispensed clean needles and overdose antidotes and other inadequate "harm reduction" approaches, and in an overarching manner blamed "stigma" for the disease of addiction.

Never mind that the actual Bush policies had produced real results—treating drug addiction as a public health problem; insisting, for example, on drug courts over incarceration; and effectively reducing the availability and use of all drugs through a combined medical science, national security, and law enforcement strategy that reduced drug supply as it strengthened prevention and treatment. But the Obama administration insisted on the distorted caricature.

The policies of the Obama administration's predecessors, we heard repeatedly, were the failed crack-downs of the past, trying to reduce the supply of drugs and fighting back against international cartels. All that was declared futile, notwithstanding that under Bush, the same MTF data showed a 25-percent

reduction in "past-month" marijuana use, for combined high school grades 8th through 12th, that cocaine production had fallen 75 percent in Colombia, and cocaine use on U.S. streets had plummeted 50 percent (by 2011).

So far was this administration from achieving their goals that even the Government Accountability Office issued a report warning that they were seriously off track, based largely on data from 2012; but they did not change course, and things have only worsened since then.

Then, on CBS's 60 Minutes, Obama Drug Czar Michael Botticelli termed legalized marijuana "bad public health policy," and worried that youth receive the message that because the drug is legal, it's somehow safe, eroding the perceptions of risk essential to good prevention programs.

He should tell the president, the source of the policies that have led us into this circumstance, when he disabled federal law and enabled commercial, legalized marijuana.

# The Impact on Drug Treatment: Drug Decriminalization and Legalization Undermine Public Health Goals

Recovery, including abstinent recovery, from long-term serious addiction is well attested. There is ample ground for hope, and for many recovery is in reach. Drug addiction is a habit, a habit that over time changes the brain, and in many forms becomes a type of disease. Recovery therefore is also a habit, which, over time, enables the brain to improve and even heal.

Many people who are deeply dependent simply stop using drugs and liberate themselves, even in the absence of a treatment intervention.

There are various forms of treatment, and ideally the form will be tailored to the specific needs of various populations of patients, perhaps inflected for gender, age, ethnicity, parenthood, resources, and co-morbidities, among many dimensions. There are faith-based treatments, cognitive and behavioral therapies, medication-assisted therapies, and entry into therapeutic communities, to provide but an incomplete sample. Some are publicly funded, some private, some in recent history were even voucher-ized, enabling selection by the participant for treatment with a demonstrated record of success, and some are insurance-covered.

But what remains a continuing failure on the part of the treatment community is clear and convincing evidence of what works and why. That there is recovery is true; that treatment sometimes leads to recovery is also true. But studies of effectiveness have fallen woefully short.

Some studies claiming effectiveness turn out to only examine the positive behavior of those who are still in treatment. But after they leave treatment, their outcomes are not well-documented in the evidentiary literature, not the least problem is the attrition rate in the study population. Moreover, the attrition is differential; we are most likely to lose from the study just those most at risk from failure. It is a major weakness of claims for treatment effectiveness that treatment populations are commonly followed for short months into their recovery, rendering long-term outcomes of specific treatment modalities largely an unknown.

Treatment must be supported as necessary part of the triad of strategic responses but it cannot be stressed enough that better and more honest evaluations of treatment effectiveness must be forthcoming or the field will lose credibility.

That said, we are presented routinely with policy statements, such as the respective return on investment of a public policy dollar spent on treatment as being cost effective compared to other options, that are really based on unknowns. Unfortunately, what has happened all too often in the treatment world has been a call for more funding, an assurance that the investment is worth it, while at the same time moving the goalposts. That is, a "successful outcome" gets progressively re-defined in such a manner that holding treatment accountable becomes a semantic exercise rather than a medical one.

Once we have been accustomed to accept that drug use is a "chronic, relapsing" condition from which we should not expect full and abstinent recovery, we have taken a partial truth about this disease and converted it into a framework of expectation whereby safe injection facilities or government-supported heroin maintenance programs come to be regarded as part of a treatment continuum.

SAMHSA budgets <u>approximately</u> \$1.8 billion a year on publicly funded treatment, while insurance and private payments greatly supplement that amount. Greater demonstration that this money is actually effective, meaning actually turning around lives and producing recovery, is a fundamental urgency in drug policy.

What is the impact of the Affordable Care Act? Initially hailed as a 'breakthrough' for substance abuse treatment, the Act mandates expanded insurance coverage for

drug treatment with "parity" requirements (comparable to coverage of other medical conditions) that ACA supporters hope will revolutionize health care for the addicted.

That's not where the treatment policy problem is; it lies with those who don't feel that they need treatment and aren't even seeking it, expanded coverage or no. Our problem, then, is denial. And more drugs, with greater availability and acceptability, can only make that denial worse.

Of greater concern, however, is how prosecutorial neglect of marijuana use will harm the Administration's own <u>efforts</u> to treat substance abuse through the Affordable Care Act.

While the Administration's new policy of neglect won't substantially reduce drugrelated incarceration, it will inflict harm on effective programs in drug prevention and treatment. Though the administration's rhetoric has stressed a public health approach to curb drug use, their policies will produce short-term harm from increasing marijuana use and long-term damage to the administration's stated prevention and treatment objectives.

Legal marijuana undermines social norms against drugs, diminishes perceptions of risk, handcuffs the courts as an instrument in treatment, and makes it less likely that the largest category of dependent drug users in need of treatment will pursue a path to their recovery.

Concerns now beset provisions of the ACA, especially concerning marijuana, which is the largest cause driving treatment need. While the heaviest drug using age cohort (18-25 year olds) should now be covered until age 26 under their parents' plan, if the ACA falters in its funding assumptions or in some other manner, federal funding for treatment under the old system would be wholly inadequate to cover expanded treatment need spurred by legal, recreational marijuana.

Legal marijuana also has a perverse impact on getting people needed treatment. The National Survey on Drug Use and Health discloses the problem. Among the 7.3 million Americans in 2012 who met the criteria for needing treatment (4.3 million of whom were dependent on marijuana), high cost or lack of insurance were offered by some as the reasons that they didn't actually get the treatment they sought. But these problems were cited by fewer than half of those who didn't get, for any reason, the treatment they wanted. In fact, the entire category of those who

sought treatment but failed to get it represents only 1.7 percent of those who needed it.

In fact, a remarkable 95 percent of those who needed treatment for a drug abuse disorder were not seeking it – that is, they are in denial. No provision of an expanded ACA can help those who do not seek their own recovery. Public policy should be designed to motivate those in need to seek help.

Regrettably, widely accessible, socially acceptable marijuana provides no incentive for the dependent to enter recovery; rather, such a permissive environment makes it easier for a person to persist in denial and continue the self-destruction of addiction.

There is similar jeopardy for drug courts, which serve as an alternative to incarceration for non-violent drug offenders. There are now more than 3,400 such courts, where offenders are directed to treatment, completion of which can lead to clearing their record, with no resort to prison. They are a huge success; in fact, the criminal justice system today is the largest single source of referral for treatment for drugs like marijuana. But the success of these courts in driving treatment will likely suffer as a consequence of legalization, which weakens the criminal justice system as an adjunct to treatment and recovery.

We can add to that the misapprehension regarding the criminal justice issue, which is often promoted as a reason to legalize marijuana. The Obama administration, perhaps driven by the mistaken notion that America's prisons are unjustly filled with first-time marijuana offenders, has condoned marijuana use through an artful blend of inaction and avoidance towards legalization initiatives. Not only has the administration declined to challenge legalization ballot initiatives (or even speak against them during the state campaigns), they have turned a blind eye to recreational marijuana usage by ranking such activities as beneath their "prosecutorial priorities."

In reality, fewer than 1 percent of inmates in a state prison system are incarcerated due to first-time marijuana use or possession. And many of those who are incarcerated have pled down from more serious charges. The fact is most inmates are incarcerated for multiple, non-marijuana drug offenses, often involving trafficking or violence.

In the end, the administration is undermining effective responses to real problems by peddling a false narrative regarding incarceration and implementing public health policies at odds with its own objectives.

### ROLE OF DRUG SUPPLY IN EFFECTIVE POLICY:

### To Stop the Drug Epidemic, Control Supply

Observers agree that the U.S. is in the midst of an opiate epidemic, the most prominent effect being the increasing number of overdose deaths accelerating sharply since 2010. Opiate deaths as of 2014 stand at nearly 29,000 per year, a function of both misused prescription opiates as well as the greatly increased supply from Mexico of illicit heroin and fentanyl now found on domestic streets.

The opiate crisis is only one factor in our current exploding American drug problem. Comparable recent surges in supply and use are found with methamphetamine also from Mexico, accompanied by recent increases in cocaine production and availability, sourced to Colombia, and finally, significant increases in nationwide marijuana supply and prevalence, particularly high-potency products smuggled interstate from states that have "legalized."

A primary source is, as I have noted, is Colorado, where the drug is being offered for recreational, commercial sale, notwithstanding its continued status federally as a Schedule I Controlled Substance, illegal to produce or use and deemed without acceptable medical use.

While overdose deaths are most pronounced with opiates, cocaine and methamphetamine also produce acute, even life-threatening, drug consequences, and their increase can be detected in both nationwide mortality reports and emergency department episodes.

Marijuana is likewise increasingly associated with medical emergencies, and while deaths from acute episodes are rare, the health consequences of use, especially for adolescents, are major, and appear most threatening in terms of mental and cognitive impairment, psychosis, and persisting mental disability, including associations with schizophrenia, all found with persistent use, especially when initiated in adolescence with high-potency products.

In passing, it must be stressed that a focus on opioids as a cause of adverse drug use consequences, while certainly understandable, can be potentially misleading if it leads us to neglect a comprehensive strategy against all illicit drugs of abuse. To provide but one example, there has been extensive policy focus on responding to

the opioid crisis by resort to antidote medications, or medication-assisted therapies, or efforts to stem opioid medication proliferation and diversion.

While these interventions may be necessary, we must realize that there are no such effective policy counterparts available for responding to drugs like marijuana, methamphetamine, or cocaine, for which such resources or opportunities for intervention are simply not available.

Yet an effort to control the supply and availability of each of these drugs would be effective in mitigating the toll that they impose.

We face serious threats from heroin, synthetic opioids, pharmaceutical diversion, methamphetamine, and cocaine. In each of these cases, the root cause underpinning the crises are the greatly increased production, available supply, and sheer magnitude of quantity and potency of these drugs in U.S. markets. The supply has led to a large criminal army of dealers and supply networks, as it has swollen the ranks of the addicted. We have been down this path before, and know that the consequences of an unopposed drug supply become intolerable. Yet we also know that we have powerful tools to reverse this course.

At present, at the national level, there is silence regarding drug supply, as President Obama's policy rejects the primacy of supply control efforts as futile and alienating. In opposition, we argue that the true impact of increased drug supply is the most important thrust of an effective national policy, and rebuilding such programs is an imperative, without which we will be overwhelmed by the illicit markets that now threaten to consume a generation. This reality is supported by an honest assessment of drug control history, and has contemporary empirical support.

Simply put, the way to overcome our current catastrophe of drug use is to effectively attack the surging abundance of production and supply.

Further, in addition to reducing availability and use, controlling supply will augment the effectiveness of programs the objectives of which are prevention as well as treatment and recovery.

The impact of drug supply on drug use and consequences is much misunderstood, even misrepresented, in current policy debates, as are the positive effects of reducing that supply on all drug control programs and objectives. Note that virtually everyone concerned with drug use calls for reducing the demand for

drugs, convinced quite reasonably that if demand were quenched, the problem would cease.

Yet an <u>estimated</u> 27 million Americans in 2014 were past-month users of an illegal drug, with the figure rising yearly. Beyond rhetoric, how does the federal government reduce that demand? Programs in prevention, largely educational efforts, may defer new entrants, and programs in treatment provide avenues to recovery, notwithstanding recent efforts to define drug use as a "chronic, recurring condition" suffered by the brain, inclining to the temptation to just accept its presence. But evidence that federal programs drive out the demand for intoxication is dismayingly weak.

Moreover, we have for years been offering nationwide programs, funded by billions, on prevention and treatment, and still demand persists. It can be argued that yet more resources and yet more science can be directed at drug treatment, but the evidence is overwhelming that while prevention and treatment are necessary dimensions of drug control, they cannot be sufficient. To be effective, the front ranks of our response must be controlling the spread of the pathogen itself — making drugs scarce, expensive, risky, and feared. Prevention and treatment only then gain traction.

Conversely, fully eliminating the drug supply would be sufficient to drug control purposes, but full elimination is nearly impossible to realize. That said, evidence is strong that substantially reducing the drug supply, when sustained over time, does lower drug use, and does ameliorate attendant damage, thereby shielding potential users while healing and liberating current users.

### The Evidence Regarding Heroin:

Consider this evidence. Heroin use in the United States was in decline in the mid-2000s. There were no adverse changes in the federal drug treatment system, and prevention efforts directed at heroin were unchanged. Yet heroin use began to rise, increasing sharply in 2010 and continuing an ascent through today. That is, there has been a disease outbreak.

As ONDCP Director Botticelli <u>testified</u> before the Senate this year, "The past five years have seen an alarming increase in deaths involving heroin, rising from 3,038 in 2010 to 10,574 in 2014. This increase has been accompanied by a sharp rise in the availability of purer forms of heroin that allow for non-intravenous use, and at a relatively lower price, and an increase in the initiation of heroin use (from

116,000 people in 2008 to 212,000 in 2014)."

The dynamic of difference was the sharp increase in heroin production and means of distribution, greatly increasing availability, largely a function of significantly expanded Mexican <u>production</u>, that today yields an accessible market product of unprecedented low cost and high purity. The rise in production to 70 metric tons in 2015 represents an increase in two short years of 170 percent.

### MEXICAN Poppy/Heroin Production

Section 1. Control of the section of	2015	2014	2013	2012	2011
Hectares under cultivation		17,000	U	10,500	U
Potential pure production (metric tons)	70	42	26	26	30

In past decades, according to the Drug Enforcement Administration's Heroin Signature Program (as supplemented by understanding from the Domestic Monitoring Program), significant heroin sources directed at the US have included South West Asia, South East Asia, Mexico, and South America, principally from Colombia.

During the decade of the 2000s heroin production from Colombia diminished as a primary source, as a function of programs such as eradication, interdiction, and organizational pressure; the decrease coincided with comparable pressure on Colombian cocaine, the primary source of that drug to the US.

This time period witnessed the increasing role of Mexican sourced heroin to the US, both traditional black tar and increasingly, so the DEA now argues, from white heroin apparently produced in a manner similar to the South American product; as such, it is unusually pure and potent. This heroin sourced to Mexico is now being adulterated with synthetic opioids such as fentanyl, and yet more potent synthetics are on the horizon.

The effect has been to great increase the lethality of the heroin threat, both to users and to first-responders. It further offers a challenge to the administration of overdose antidotes such as Naloxone as the principle response.

The parallel prescription opiate crisis contains the same lesson. Administration authorities argue that excessive prescribing of opiate medications generated the epidemic (just as they further argue that imposing restrictions on access to opiates "caused" a turning toward heroin). Leaving aside the merits of their history, the Administration in this case fully recognizes the critical role of drug supply and availability in driving drug use outcomes, and have sought to restrict access and overprescribing. What is remarkable is their unwillingness to apply an equivalent understanding against all illicit drugs.

### The Evidence Regarding Colombian Cocaine:

But the same principle -- that supply fosters outbreaks as a virus drives flu -- applies to the illicit substances. The case can be made even stronger by examining recent facts concerning cocaine, which has but one global source – the three nations of the Andes, of which the overwhelming producer of U.S. supply (95 percent) has been Colombia.

By effective, sustained supply control programs operated in-country (comprehensive efforts combining eradication, establishing the rule of law, and alternative economic development) coupled with interdiction in drug transit arenas, the volume of cocaine produced in Colombia and directed at U.S. targets (controlled in distribution through Mexican cartels) plummeted from 700 metric tons of potential pure cocaine in 2001 to only 165 metric tons in 2012. The drop was 76 percent, and cocaine thereby became scarce, costly, risky, and adulterated.

Through Plan Colombia, the joint program sustained across successive U.S. and Colombian administrations, achievement was driven by year over year aerial eradication of the crop. Scientific field studies established that for every year of sustained eradication, productivity of the coca fields fell in consistent increments; over five years, there was a measured decrease in field productivity well more than half.

Many economists who speculate about the drug market do not accept the impact of producer country supply reduction efforts such as Plan Colombia. They argue that raising the price of coca in Colombia has only marginal impact on the market in the U.S, since the major mark-up in value is provided by cross-border smuggling and distribution, where the value of a kilo of cocaine rises from roughly \$1,500 in country to between \$25,000 to \$45,000 in the U.S. From their perspective, what is the point of eradication if it only lifts the price in Colombia by a few hundred dollars?

These economic analyses, however, do not portray real drug markets. It doesn't matter how much you're willing to pay in Miami for a kilo of top quality cocaine when there is no cocaine supply to satisfy the demand. Unlike other global commodities, there are not multiple market alternatives for cocaine when supplies dwindle. Producing cocaine is a specialized activity, fraught with risk and disincentives, coercion and violence, and it thrives in ungoverned spaces. The crop is not an annual, like poppy, and years of farmer effort can be destroyed quickly, while re-planting is intensely laborious. The impact favors movement of farmers to licit alternative crops as a form of sustainable agriculture.

We further know that the induced shortages in Colombian production were manifested all along the supply chain. With reduced flow, interdiction efforts became more effective in Colombia and the transit areas moving to the U.S. Law enforcement noted that Mexican cartels were unable to satisfy deliveries, and cocaine flow at the border decreased, leading to urgent calls from dealers and sharp declines, beginning in 2007, in cocaine purity, accompanied by increases in price per pure gram. Lost revenue from cocaine sales forced cartels to scramble for alternatives, and set in motion battles for control of remaining supplies and supply lines. The cocaine market was moving towards collapse.

Importantly, there was no "balloon effect" from reductions in Colombia felt in either Peru and Bolivia, as cocaine production throughout the <u>Andes</u> declined from 1,055 metric tons in 2001 to only 560 metric tons by 2012, a 47 percent decline, led by Colombia's plummet.

The impact led to many positive developments on the U.S. home front. Work place cocaine positives were cut deeply between 2007 and 2013. Cocaine overdose deaths and emergency department episodes fell. Regular cocaine use declined by as much as half. With nothing on offer but a more expensive, less pure product, now harder to find, treatment began to take hold, and people moved away from cocaine. An entire array of damaging drug consequences began to heal. Lives were saved.

There is a coda to this argument about controlling drug supply, as tragic as it is unnecessary. By 2012, following the Obama policy line, U.S. and Colombian policy began to shift away from aggressive supply reduction, and a reverse experiment regarding the effectiveness of supply control was set in motion.

First, broad areas of Colombia were closed to eradication, giving license to

produce cocaine within those borders. Cocaine cultivation began to return, while cocaine production rose between 2012 and 2014, 165 metric tons of cocaine rose to 250, more than 50 percent. In the U.S., overdose deaths almost immediately rose.

Then in May of last year, aerial eradication was completely banned in Colombia, based on false scares about the health impact. Devastation has now followed in short order. Cocaine production is flooding the Colombian forests. Indeed, the White House has just acknowledged that potential pure production is now 420 metric tons for 2015, a rise of 155 percent from its 2012 low. We fear there may already be even greater production in the offing. Already, revolutionary-groupsturned narco-traffickers are in league with hungry Mexican cartels like Sinaloa, partnering to return the deadly cocaine circus of the 1980s to U.S. streets.

We can anticipate the devastating consequences on the home front, as the leading edge of the cocaine flood moves its way north, its flow abetted by a weakened Administration stance in Central America, while transit arenas have experienced reduced interdiction assets, and Mexican cartels are poised to re-capture market share. Let there be no doubt – given an unprecedented policy accomplishment, this Administration threw it away, when they refused the clear lesson of supply control.

### Summing Up: The Neglect of Strategic Drug Supply and the Rise of Synthetics:

We are witnessing drug policy cause and effect. Sadly, similar stories can be told with regards to not only heroin and prescription opiates, but drugs like methamphetamine, where use was cut nearly in half by U.S. restrictions on precursor chemicals, only to come back once Mexican cartels found ready industrial supplies of chemicals, evidently derived from China. Supply reduction pressure must be sustained and adapted in order to work.

And then there's the current debacle of marijuana, demand for which had been successfully reduced prior to 2009, falling 25 percent among youth. But with legal, "recreational" state sales of the drug, added to the production of so-called "medical marijuana" in multiple states, supplies nationwide are surging, and prevalence of use is climbing steeply, most rapidly in the very states where supply is most abundant.

Increased drug supply and growing markets fund those controlling the trade, and they capitalize by increasing supply of yet other drugs. Marijuana use by youth, through its well-attested 'gateway' capacity, will generate use and sales of yet

other drugs that will be introduced to communities through the legal marijuana gateway. The black market providing all drugs can be seen to thrive in the environment of legal drugs, that vastly increases supply and approved access.

There can be no doubt that legal, commercial marijuana, as found in Colorado, will lead to many more users of marijuana, stronger cartel control, and yet more drug supply of other drugs, leading to many more users in a vicious cycle already underway. There may be time to reverse this cycle, before the large revenues from "legal" drugs insulate and perpetuate its political standing.

But we know what the first and most important strike must be – shut down the burgeoning pathogen at its source. Reduce drug supply. Other benefits will follow.

There are two critical lessons about how the Administration's policies have been deficient. First, they largely address the consequences of the epidemic, but provide little support for programs intended to reduce the spread and hold of the behavioral disease of drug use.

Second, the policies, by ignoring supply reduction, the attack on trafficking organizations, and the critical role of international engagements in source countries (the President's most recent budget actually cuts funding for international drug control programs by \$952 million), the policies have been at best tactical dodges but not strategic initiatives capable of solving the problems.

The work to stem the tide demonstrated by Drug Enforcement Administration and numerous other drug control agencies (such as State INL, CBP and ICE) is commendable, but insufficient. Still, Administration policy has neglected (when it has not undercut) at the national policy level control of border movement, international drug control partnerships, and suppressing trafficking networks and gang distribution, as all the while it has simultaneously emphasized enabling of legal recreational marijuana production, sales and distribution.

The result is that any achievements that have been made in controlling drug flow by respective agencies have had to push against the dominant policy tide and have not enjoyed robust national policy support.

The rise of synthetic opioids tells us that the heroin threat has morphed already into a more deadly form. Synthetics present a model of production more akin to methamphetamine, which means industrial chemical production in makeshift laboratories in the midst of urban centers, freed from attachment to agricultural

products, drug production from which we are able to estimate from national technical means through crop sampling estimates.

Testimony regarding the amounts seized by the Customs and Border Protection (CBP) agency capture the extraordinary volume of opioids moving across our borders, not only heroin production, (production of which, as have seen, has risen through 2015 to 70 Metric Tons, but recent seizure increases showing a surge in synthetic fentanyl crossing the border.

For synthetics, the underlying production estimate is simply not known. That said, as the figures presented show a rise through 2015, at best, we can anticipate that the horrendous overdose toll represented in the literature today, which represents known deaths from 2014, will likely continue to rise even more steeply, given the available supply and distribution networks. If so, the impact will be catastrophic and well beyond the public health problem from which we are already reeling.

Coupled with the rising cocaine threat from resurgent Colombian production, the sharply rising methamphetamine threat, and the ongoing expansion of high potency marijuana, both licit and illicit, a looming disaster that will engulf public health, law enforcement, and national security is almost upon us, as this Administration prepares to leave office.

What are we doing in response? Compared to the public health reaction to the Ebola and Zika infectious threats, the funding has not been of the proper magnitude. But funding is not the complete measure of response. We must ask what strategic responses, with what resources and coordination, are being brought to bear?

The Administration has testified concerning their program to train Customs and Border Protection (CBP) personnel in the administration of the Naloxone overdose antidote to those they encounter at the border. It is not clear to this observer how such a priority program at the border will help stem drug flow. In fact, if criminal cartels, controlling plazas in Mexico and migrant smuggling routes were to insinuate drug trafficking mules into the flow of migrants streaming across the southern border, how would this program, however otherwise meritorious, be a sufficient response, and how would it protect the lives of Americans?

As I have argued, the risk from current Administration policy is that too much focus on opioids at the expense of a comprehensive, all-drug strategy (which supply reduction can address) will leave us unprotected. Further, with regards to

the opioids, a nearly exclusive focus on responding to the *sequelae* of initiation and dependency, rather than placing more effective emphasis on interrupting the spread of this behavioral disease by cutting supply and initiation, has proven inadequate.

Finally, within the larger opioid crisis, the response focus has been almost exclusively on the problem of prescription medication opioid diversion and misuse, with a corresponding neglect of illicit heroin and rogue synthetic opioid production and distribution.

Not surprisingly, it is this latter category of drugs that is climbing most steeply and causing increasing damage (prescription abuse having peaked, as a prevalence rate, in 2006, with small declines thereafter), while overdose deaths therefrom peaked around 2011 — as heroin deaths began to surge in 2010 — before the recent rise plausibly related to what may be misclassified illicit synthetic overdose deaths, such as those from fentanyl, that may account for as many as <u>5.500</u> of the most recent (2014) death toll.

That said, the Administration has at least followed the right course of action, strategically, regarding the diversion and misuse of licit prescription opioids. They have addressed the supply and availability of the drugs themselves, through pill-mill and doctor shopping crack-downs, through prescriber education initiatives, through continuing to expand Bush-era prescription monitoring programs, and through efforts such as restricting access to medicines such as hydrocodones through up-scheduling, as took place in October of 2014.

These steps to address the supply and availability of prescription opioids are proper initiatives, but the challenging policy question, as I have noted, is why have comparable actions against the supply and availability of illicit drugs — including opioids, cocaine, methamphetamine, and marijuana — not followed this correct strategic model?

Instead, Administration policy has neglect this critical strategic tool when it comes to illicit drugs, and the results of that neglect are unavoidably negative, currently presenting an epidemic crisis that is only rising, particularly as the supply of such drugs, based on seizure and production estimates, already outstrips significantly the magnitude of the production and supply that have produced our current crisis; that is, the flow is already increasing, and what is to follow will likely greatly increase the present disaster.

## Police Assisted Addiction Recovery Initiative (PAARI)

# Statement of Frederick Ryan, Chief of Police Arlington, Massachusetts, on behalf of the Police Assisted Addiction Recovery Initiative U.S. Senate Committee on Homeland Security and Governmental Affairs Wednesday June 15, 2016

Chairman Johnson, honorable members of the Committee, my name is Frederick Ryan and I serve as Chief of Police in Arlington, Massachusetts which is a suburb next to Boston. I also serve as Vice-President of the Massachusetts Major City Chiefs of Police Association and I sit on the board of the Police Assisted Addiction Recovery Initiative (PAARI.) I very much appreciate the opportunity to testify today and I'm honored to do so.

I'm here to talk about the opiate epidemic that has swept across America, an epidemic that has had devastating consequences to communities of all sizes and demographics. My views are shaped by what I have seen and done as a police officer on the streets for more than 30 years and what I have learned from individuals suffering from the disease of addictions. Let me summarize the points I want to make in the next few minutes:

- We as law enforcement cannot solve this problem on our own and we should stop
  telling America that wit more police resources that we can. In fact, a strategy that relies
  largely on law enforcement and arrest, especially aimed at low end users, only fuels the
  epidemic and complicates the chances long term recovery for people suffering from
  substance use disorders.
- Every "dealer" we arrest and take off the streets is quickly replaced by one or more
  rivals who sometimes compete for the new territory by cutting prices, increasing supply
  or marketing new and more dangerous products; such as Fentanyl laced heroin, often
  making the situation worse than it already was.
- Every person with a substance abuse problem that I have talked to has said arrest was never a deterrent. The physical and psychological need for the substance was far stronger than any seemingly rational deterrent that the police posed.
- Those suffering from substance use disorders are not our enemies, they are our sons, daughters, and neighbors and this notion that we are at "war" with them must be abandoned.
- The solution to the epidemic relies on reducing the demand for opiates. This epidemic
  was built one drug dependent victim at a time and the solution, while complex and
  multi-disciplinary, needs to be heavily based on modern evidence based treatments.
   There are really only two choices here, long term treatment or death, and we need to

Frederick Ryan Chief of Police 112 Mystic Street Arlington, MA 02474 www.arlingtonma.gov/police

- bring an immediate and genuine sense of urgency to this chronic disease and public health epidemic.
- Police officers and Chief of Police throughout the country are stepping forward to call
  for change. Through the leadership of Chief Leonard Campanello in Gloucester MA and
  businessman John Rosenthal, the Police Assisted Addiction Recovery Initiative (PAARI)
  which already includes more than 120 police departments and new entry points into
  treatment in 28 States. These departments, and many others that are joining PAARI
  every week, have stopped arresting people merely because they have the disease of
  addiction and are instead helping them and their families enter treatment and recovery.

I want to tell you how and why I came to these conclusions: Simply stated, we are not at war with our communities.

The epiphany for me that we had to change our approach occurred when being briefed by our crime analyst on trending overdose fatalities in our community. One very young lady who by all standards of measure was an American success story: college educated; her mom an educator and her dad a firefighter- overdosed on heroin. Police and EMS reversed the overdose and she was transported a Boston hospital. About a week later, the same young lady overdosed again. She was again transported to the very same hospital. Seven hours later, after being released from the emergency room, she overdosed and died. This overdose death was predictable, and therefore it was preventable. It highlighted the fact that we, the police department, possess the identities of those at highest risk of fatal overdose (those who have previously overdosed) and that with every non-fatal overdose there is an opportunity to help the individual enter recovery. Further, this overdose death depicted the very real fact that many emergency rooms in America do not have the desire or capacity to treat overdose victims in any meaningful way. Medical and substance use disorder treatment programs cannot be allowed to continue discharging to the street sick people at risk of immediate death. We would not tolerate this for any other chronic disease, such as cancer, heart disease or diabetes.

This experience led the Arlington Police Department to be the first in the nation to affiliate with PAARI. What was a desperate response to an epidemic threat in two distinct communities in Massachusetts (Gloucester and Arlington) resonated swiftly and broadly across the region and, indeed, the nation and legislation is moving swiftly through many states to empower police assisted recovery initiatives that focus on reducing the demand for opiates by increasing access to treatment and recovery.

Essentially there are two models; the Gloucester model in which individuals voluntarily present to the police department, ask for help and a police officer or volunteer "Angel" then navigates the complex process of finding treatment options, and the Arlington model which employs a Social Worker who accompanies a police officer and proactively reaches out to a known population of persons suffering from substance disorders and develops an intervention plan Frederick Ryan Chief of Police

112 Mystic Street

Arlington, MA 02474 www.arlingtonma.gov/police with the people suffering with addiction and their loved ones. In Arlington the Police Department hosts regularly scheduled community meetings to train on and dispense Naloxone to residents (not just first responders) and to build trust and reduce the stigma associated with addiction. In Arlington in 2014 and the first half of 2015 we were experiencing an average of one FATAL overdose per month with many more non-fatal and reversed overdoses. Following the implementation of our program on July 1, 2015 we had only one fatal overdose in the next eight months. Sadly, there was a fatal overdose this past weekend, indicating not failure, but the urgent need to do even more. We know our program has saved lives because we have found narcan kits that our officers and social workers distributed at the scenes of reversed overdoses. Through the Boston University School of Public Health, we're tracking all our program participants and, although early, we're seeing significantly lower relapse rates among the participants in our pre-arrest diversion programs in Gloucester and Arlington.

The Arlington and other police assisted recovery initiatives are only a year old and it is far too early to draw conclusions about our long term impact. After all, the disease of addiction is a chronic relapsing condition and it often takes several treatment episodes for a person to enter recovery. Nevertheless, there are important markers that demonstrate we are on the right course:

- We are saving lives now and providing individuals and their families with hope of recovery. Crimes often associated with addiction (larceny, burglary, etc.) are trending down in many PAARI communities and some members are reporting as much as a 25% reduction in these kinds of crimes.
- Many police departments are using drug dealer asset forfeiture funds and saving
  money. They are finding it is cheaper to the municipal government to divert people into
  treatment rather than arrest and trigger the criminal justice system. In Gloucester for
  example, the Chief found that it costs about \$250 in personnel time and facilities to
  arrest, house and turn a person over to the court the next day, but only about \$50 in
  personnel time and transportation costs to help find a detoxification or treatment bed
  for a person asking for help.
- Our new approach is restoring and building community trust in police. Hundreds of
  thousands of people respond favorably to our social media posts about the programs.
  Hundreds of people in our communities attend neighborhood meetings hosted by the
  police to learn how to help their loved ones with the disease of addiction. In follow up
  interviews, the participants themselves tell us that the police officers were the first
  people who really cared about them and saved their lives without judging them.
- Stigma and shame inhibit patients and their families from seeking treatment and support. The fact that law enforcement is recognizing this as a disease that needs to be placed into remission rather than a crime that requires incarceration has had a positive impact in communities throughout America.

Frederick Ryan Chief of Police 112 Mystic Street Arlington, MA 02474 www.arlingtonma.gov/police

### 473

#### Conclusion

You'll notice that in my testimony I never labeled those suffering from substance disorders as "addicts" and otherwise refrained from labeling these members of our communities. The very real individual and institutional stigma associated with addiction is among the greatest barriers to success, and it has inhibited the power and might of the United States government from a real sense of urgency to the opioid addiction epidemic and from adopting meaningful and effective policy changes to address the demand side of this public health crisis hitting every community-large and small.

I was proud to be a part of the law enforcement response to the Boston Marathon bombings. What I witnessed first-hand was nothing short of extraordinary, and the sense of urgency from all levels of government to ensure that every victim of those horrific crimes realized justice was admirable. Four people lost their lives that day, including an Arlington resident, and countless others were seriously wounded.

Today, in Massachusetts, we lose an average of four people every day to the opiate crisis. It's projected that more people will die this year from overdoses than automobile accidents. It's time that we bring a true sense of urgency to this public health epidemic and unleash the might of our government to address the demand side of the opiate crisis and municipal police departments and PAARI are very willing partners in the solution. As I stated earlier, there really are only two choices - long term treatment or death. Clearly we all know the answer and we look forward to getting started immediately.

Thank you for the invitation to speak and for your consideration to this very serious matter.

Frederick Ryan Chief of Police 112 Mystic Street Arlington, MA 02474 www.arlingtonma.gov/police

 $\bigcirc$