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OVERSIGHT OF THE FEDERAL GOVERNMENT'S APPROACH TO LEAD-BASED PAINT AND MOLD REMEDIATION IN PUBLIC AND SUBSIDIZED HOUSING

HEARING

BEFORE THE

SUBCOMMITTEE ON
HOUSING AND INSURANCE

OF THE

COMMITTEE ON FINANCIAL SERVICES

U.S. HOUSE OF REPRESENTATIVES

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OVERSIGHT OF THE FEDERAL GOVERNMENT'S APPROACH TO LEAD-BASED PAINT AND MOLD REMEDIATION IN PUBLIC AND SUBSIDIZED HOUSING

Tuesday, June 26, 2018

U.S. HOUSE OF REPRESENTATIVES,
SUBCOMMITTEE ON HOUSING AND INSURANCE,
COMMITTEE ON FINANCIAL SERVICES,
Washington, D.C.

The subcommittee met, pursuant to notice, at 10:06 a.m., in room 2128, Rayburn House Office Building, Hon. Sean Duffy [chairman of the subcommittee] presiding.

Present: Representatives Duffy, Posey, Luetkemeyer, Stivers, Hultgren, Rothfus, Trott, Budd, Cleaver, Beatty, Kildee, and Gonzalez.

Chairman DUFFY. The Subcommittee on Housing and Insurance will come to order.

Today's hearing is entitled, "Oversight of the Federal Government's Approach to Lead-Based Paint and Mold Remediation in Public and Subsidized Housing."

Without objection, the Chair is authorized to declare recess of the subcommittee at any time. Without objection, all members will have 5 legislative days within which to submit extraneous materials to the Chair for inclusion in the record. Without objection, members of the full committee who are not members of the subcommittee may participate in today's hearing for the purposes of making an opening statement and asking our witnesses questions.

The Chair now recognizes himself for 5 minutes for an opening statement.

First, I want to thank our panel for participating in today's hearing, looking at the impact of lead-based paint and mold on the health of our children. Last year, I participated, held a hearing in Hayward, Wisconsin on AHASDA, and one of the issues we discussed was how mold infestation was impacting the health of Native American children that depend on HUD (U.S. Department of Housing and Urban Development) for their housing needs.

Before the hearing, I toured a mold-infested house with Ms. Moore, who is on the committee also from Wisconsin. I have to tell you, it was absolutely outrageous. The fact that we had rooms in this small house that were shut down because they are full of mold, mold all over window sills, mold going 3 feet up a wall and a little

baby, little kid's bed is butted up to the mold. You went inside the house and you could barely breathe, the fact that kids in America live in these kind of houses is absolutely outrageous. And Ms. Moore experienced the same.

We even invited a local doctor that treated these children to testify on the respiratory problems that can arise from living in unhealthy conditions such as mold-infested homes, which, again, you can't breathe in this house. It was so full of mold.

I know that some of you couldn't make it out to the hearing, Ms. Moore did, but the issue of mold in our homes isn't just a Wisconsin issue alone. Mold impacts those relying on public housing in every part of the country including in large urban areas like New York City. This has been made very clear to us from Ms. Velazquez, who is going to be here later at the hearing. And we also have someone here from the New York Housing Conference.

So some of you may wonder why are we looking at lead-based paint remediation in addition to mold. Well, if your house was built before 1978 it is likely that lead-based paint was used. While the use of lead-based paint was banned in 1971, it took a few years for the Consumer Product Safety Commission to implement new regulations and for remediation programs to be started.

I was recently in Milwaukee and was made aware of how much the city is struggling with increases of elevated lead levels in the blood of children who live in Milwaukee. There are more issues that have come up and the fact that we live in 2018 and again have kids that have these elevated levels is absolutely unacceptable.

According to Ms. McKeown's testimony, more than 200,000 children have been identified with lead poisoning in Wisconsin and 90 percent of them were living in homes that were built before 1950. She also points out that low-income families are impacted more than other families in the community. In fact, without objection, I would like to submit for the record the 2016 Report on childhood Lead Poisoning in Wisconsin from the Wisconsin Department of Health Services.

While Ms. Velazquez and I have mainly been talking about mold in New York City's public housing units, just 2 weeks ago the city of New York agreed to spend over $2.2 billion to remediate lead-based paint and that the New York City Housing Authority has been placed under direct Federal oversight because of a potential cover-up. Outrageous.

In addition to New York City's story, both the HUD inspector general and the GAO issued reports on HUD's lead grant in rental assistance programs this past month. It seems that the timing for this hearing is appropriate, as both reports call for increased reporting and oversight of HUD's remediation programs. Between the Wisconsin report, the HUD IG report, and the GAO (Government Accountability Office) report, I think we have plenty of statistics and analysis on the impact of lead poisoning in America.

I want to know from those of you who are here at the table on our panel that we are actually working to protect our youth from lead poisoning if the process in place is actually working. Is it too difficult to navigate? Do you agree with the assessment of the HUD IG and the GAO reports? What partnerships have you formed that

work and what partnerships have fallen flat? What is the good, the bad, and the ugly, if you will? Can we do more in the private sector as opposed to depending on the Federal Government to fix this problem?

The GAO report notes that in some cases non-Governmental funds have been used. Of 20 grantee applications elevated by the GAO report, eight indicated that they anticipated some form of non-Governmental contributions from non-profit organizations and discounts from contractors. How can we use that model to help not only remediate but ensure that children are being tested?

It is an important issue. It is impacting families' lives, kids' lives, the health of our communities. And so I want to thank you for all being here today and sharing your wisdom and insight. We appreciate it.

With that, my time has expired. I now recognize the Ranking Member, the gentleman from Missouri, Mr. Cleaver, for 5 minutes.

Mr. CLEAVER. Thank you, Mr. Chairman. I appreciate you placing this issue of lead-based paint on the docket for this hearing.

There is a serious danger in lead-based paint. Years ago, as a boy growing up in public housing, I can remember across the street, Lester Lacy's house. His little sister would eat the paint as it would fall off the wall. Well, it took me a while to find out, actually I was an adult, that lead-based paint is actually sweet. And a lot of kids are drawn to it because it tastes good. Now, they are doing enormous damage to themselves and some of it is irreparable damage.

We had the Nation's first HOPE VI project, so when we built HOPE VI we were able to tear down our largest public housing complex called Wayne Manor. It was a catastrophe. It was built after Pruitt-Igoe and we tore it down. And then we had to bury it because of all of the lead-based paint and, in some cases, asbestos.

And we have just looked at this problem for years and we have never seriously addressed it. This has nothing to do with which Administration has been across political lines and we have not dealt with this problem. There are probably thousands of people, adults walking around now damaged from eating that lead-based paint.

And the CDC (Centers for Disease Control and Prevention) says we have over 4 million kids right now who are living in environments where there is lead-based paint and these kids have these high levels of micrograms of this lead in their bodies.

And we are not able to tear down all the public housing. I wish we could and start all over. It is not going to happen. But we can do remediation and some of the remediation at least that was started, I am anxious to get your response to this. In the early days, they did remediation by simply painting over the lead-based paint. And that still creates some discomfort here with me and so I am interested in knowing whether that is continuing today, and I don't know what kinds of studies we have had that say that that is actually a safe way of remediation.

And I think all children deserve to live in safe homes. And we have a responsibility as adults and we have a responsibility in particular to deal with HUD as they try to deal with this problem.

And at some point, Mr. Chairman, I would love to be a part of the process that can declare that under this committee, sub-

committee we were able to eliminate that problem in the United States of America. And I know it is costly and I know that a lot of people are going to be concerned about the cost. We have no idea what the cost is right now of the lead-based paint having been ingested and damaging the adults that are walking around.

And I have to say I am pleased that HUD is working to align its definition to lead exposure. And the more we are able to deal with this, I think we can get rid of these lifelong developmental consequences. And if there are some solutions that you have today, I can tell you that this committee is ready to receive them.

Thank you, Mr. Chairman. I will yield back the rest of my time. I would rather deal with it in questioning later.

Chairman DUFFY. The gentleman yields back. Well said.

We now welcome our witnesses to today's hearing. First, I want to welcome Mr. Jeffrey Kirkland, the Acting Deputy Inspector General for HUD. Next, we have Ms. Karen McKeown, the State Health Officer and Administrator of the Division of Public Health in the greatest State of Wisconsin Department of Health Services.

Welcome. And now for the introduction of Mr. Patterson, I want to recognize the gentlelady from Ohio, Mrs. Beatty, for his introduction.

Mrs. BEATTY. Thank you so much, Mr. Chairman and Ranking Member, for allowing me to have this honor to welcome to our committee today to testify, my good friend Mr. Jeffery K. Patterson who is the CEO of the Cuyahoga, which is in Cleveland County Metropolitan Housing Authority. Let me just say this. He comes to us as no stranger to working his way up from safety to development in the ranks of housing, so thank you for being here and making our State proud.

Chairman DUFFY. Welcome, Mr. Patterson.

We now recognize Mrs. Rachel Fee, Executive Director at the New York Housing Conference, Incorporated. And next Ms. Emily Benfer, the Distinguished Visiting Scholar and Senior Fellow at the Solomon Center for Health Law and Policy at Yale Law School.

Welcome. And finally but not least, Ms. Julie Brewen, CEO of Housing Catalyst.

All of you, welcome. Thank you for taking the time and being here today.

In a moment, the witnesses will be recognized for 5 minutes to give an oral presentation of their written testimony. Without objection, the witnesses' written statements will be made part of the record following their oral remarks. Once the witnesses have finished presenting their testimony, each member of the subcommittee will have 5 minutes within which to ask you all questions.

I would note that on your table there are three lights. Green light, that means go; the yellow light means you have 1 minute left; and the red light means your time is up. Pretty self-explanatory, like stoplights at an intersection, self-explanatory. Your microphones are sensitive. Please make sure they are on and you are speaking directly into the microphone.

With that, Mr. Kirkland, you are now recognized for 5 minutes.

STATEMENT OF JEREMY KIRKLAND

Mr. KIRKLAND. Chairman Duffy, Ranking Member Cleaver, and members of the subcommittee, thank you very much for the invitation to be here today to discuss this important topic and the critical work of HUD's Inspector General.

I am Jeremy Kirkland and I am the Acting Deputy Inspector General. HUD's mission is to create strong, sustainable, inclusive communities and quality affordable homes for all, including utilizing housing as a platform for improving quality of life.

HUD has primary responsibility for addressing lead hazards in federally assisted housing. Lead toxicity is a preventable health problem. And as you can see from the audit report before you, the department lacks adequate oversight of the reporting and remediation of lead-based paint in public housing and the voucher program. This overall inconsistency must be addressed.

While my testimony will focus on lead-based paint, it is important to note that we have also identified lead issues from other sources including water and soil. HUD's current procedures to address lead exposure are not necessarily preventative. The flag that triggers reporting and therefore action is a child whose blood test reveals certain indications of lead.

However, even with the levels of lead being detected in the blood of these children, we cannot determine the full extent of the problem, as the data being shared with HUD is flawed or, in some cases, does not exist.

In 2001, HUD required housing authorities to complete inspections to measure lead levels. It wasn't until 2016 that HUD established a system to track and follow up with those housing authorities that were missing lead inspections. HUD indicated that their staff lacked the expertise to review the reports issued following these inspections. HUD did not train its staff on how to interpret these reports until 2017.

Of additional concern, HUD does not require housing authorities to report and mitigate cases of lead exposure in housing built after 1977. Our audit identified instances of lead-based paint exposure in post-1978 housing. However, current regulations target only pre-1978 properties.

Negligent, inconsistent, and, at times, nonexistent reporting by housing authorities sometimes hiding behind the privacy provisions in the Health Insurance Portability and Accountability Act combined with the failure of HUD to have consistent reporting standards have hindered an ability to collect meaningful data. As a result, the data that is provided can lack key information, like the child's name and unit number and can make verification or follow up difficult if not impossible and render it useless.

This, coupled with the process of self-reporting by housing authorities, and little verification by HUD, leaves the department without the ability to determine the extent of lead in HUD housing and has invariably resulted in exposure.

An example of stories we have heard is the story of a mother who reported to the housing authority peeling and chipped paint and a fear of lead in her apartment. She requested that the housing authority inspect. The housing authority claimed an inspection found no lead paint hazard. It was later claimed that a housing authority

inspector forged the mother's signature on the inspection report. Several months later, this mother learned that one of her children registered a dangerously high blood lead level.

In conclusion, our work finds that HUD lacked assurance that housing authorities properly identified and mitigated lead hazards, thus increasing the potential of exposing children due to unsafe living conditions. I know in our many conversations with the secretary on this topic he is seeking to address the problems highlighted and we will continue to produce products assessing their way forward.

I look forward to working with the department and with Congress to ensure safe, decent and sanitary housing and also look forward to answering your questions.

[The prepared statement of Mr. Kirkland can be found on page 64 of the Appendix.]

Chairman DUFFY. Thanks, Mr. Kirkland.

Ms. McKeown, you're recognized for 5 minutes.

STATEMENT OF KAREN MCKEOWN

Ms. MCKEOWN. Chairman Duffy, Ranking Member Cleaver, and distinguished subcommittee members, thank you for the opportunity to appear before the House Financial Subcommittee on Housing and Insurance to discuss the important role of public health in preparing for and responding to the consequences of lead poisoning.

In this testimony, I will be highlighting three points: Lead is dangerous, lead poisoning is preventable, and we must take action to protect our children. But, first, I want to tell you a story about a little girl in Wisconsin.

This little girl had normal lead levels at her 1- and 2-year checkups. Her parents then separated when she was 3. Her mom lived in a new apartment building and her dad moved into an older home. Her dad noticed that when she stayed with him she would play at the windows, wiping her hands along the window trough and then putting them in her mouth. Remembering what he had heard about lead poisoning, he alerted the little girl's mom who asked their pediatrician to do another lead test. This time her lead level was almost 80 micrograms per deciliter, an extremely high level that required her to be hospitalized for chelation, a medical treatment that lowers blood lead levels.

Lead is dangerous. There is no safe level of lead in the body. Lead can affect multiple organs and especially the nervous system and brain. Young children are the most vulnerable with the highest risk period being between 18 and 36 months. This is largely because at this age, children are just beginning to move around and explore their environments and, as you know, toddlers put everything into their mouths.

Children who have been lead-poisoned have lower IQs and experience learning disabilities. They may also demonstrate behavioral issues such as difficulty controlling their impulses that persist into adolescence and adulthood. In other words, the consequences of lead poisoning are devastating and permanent.

Lead poisoning is preventable. The most common source of lead poisoning in the U.S. is lead-based paints and lead-contaminated

dust. Knowing this, lead hazards can be identified and addressed before a child ever becomes lead-poisoned. Yet, too often this does not happen, so it is vitally important that children be tested according to guidelines to catch elevated lead levels as quickly as possible.

Once a child with lead poisoning is identified, the most important action is to remove the source of lead exposure. Yet, lead abatement or remediation requires resources which families may not have. The most gut-wrenching experience for those who work on this issue is finding a lead-poisoned child and then realizing there aren't resources to help them remove the hazards.

We must take action to protect our children. Unlike many other diseases which can be treated by medical professionals alone, lead poisoning also requires prompt action by public health, families, property owners, and construction trades to reduce hazards from lead-based paint.

In the case of the little girl I described earlier, four local public health departments collaborated across jurisdictions to ensure they had searched for possible sources of lead in the places where she spent time.

Since this work cannot be done by any single entity, it relies upon a system-based integrated approach. When any part of the system breaks down, children can fall through the cracks.

After reading the HUD inspector general's report, I was struck by the need for improved data sharing and tracking to ensure children do not get lost in the complexity of the system's intended to protect them.

Like so many other health issues, lead poisoning disproportionately affects communities that also struggle with other challenges such as poverty, unemployment, and housing needs. Indeed, this is the heart of the tragedy. We tell children that education is their path to a better life and yet, as a result of lead poisoning, far too many children find it difficult to achieve their dreams of a brighter future.

In conclusion, I want to reiterate that lead is dangerous with lifelong consequences for young children. Lead poisoning is preventable, but preventing it will require resources as well as systems that facilitate collaboration.

Remember the little girl in Wisconsin? One year and three chelation treatments later she is still struggling with high lead levels. The family has been traumatized by this experience. The parents are desperate for their daughter to be OK and their lives to return to normal.

It is too late to prevent lead poisoning for this little girl, but we can take steps to prevent it for thousands of other children this year and every year. Indeed, we must take action. The children are depending on us.

Thank you for your interest and concern. I am happy to answer any questions you may have.

[The prepared statement of Ms. McKeown can be found on page 87 of the Appendix.]

Chairman DUFFY. Thanks, Ms. McKeown.

Mr. Patterson, you are recognized for 5 minutes.

STATEMENT OF JEFFERY PATTERSON

Mr. PATTERSON. Chairman Duffy, Ranking Member Cleaver, and members of the subcommittee, my name is Jeffery Patterson. I am Chief Executive Officer of the Cuyahoga Metropolitan Housing Authority in Cleveland, Ohio and Vice President of the Council of Large Public Housing Authorities (CLPHA), which is a national non-profit membership organization that works to strengthen neighborhoods and improve lives.

Providing a safe, accessible, and healthy environment is critical to helping our families, seniors, and persons with a disability and other vulnerable populations live with dignity and respect. Today, my testimony will focus on several areas that Congress could focus on to help correct the conditions and risks posed by environmental health hazards.

The Capital Fund Program is the funding that most housing authorities rely on to address conditions of health hazard abatement. The Capital Fund appropriations have steeply declined. The capital needs backlog has grown. It was estimated at $26 billion by HUD 8 years ago and now is estimated at $50 billion by industry stakeholders and continues to grow.

This chronic underfunding of the Capital Fund contributes to the deteriorating housing stock, greatly diminished health and other life outcomes for public housing residents. Congress provided the Capital Fund with its largest boost in any one Fiscal Year last year, $800 million. While this represents a significant amount and was gratefully received by housing authorities, this is not nearly enough to cover the needs of the community.

At our housing authority, some of our properties date back to the 1930's with approximately 3,000 units that contain lead-based paint. While we maintain the paint conditions in these units through a process of inspections and repair, these measures are temporary and deteriorate with normal activities of life leading to endless cycles of inspection and repair. The cost to completely remove lead-based paint from housing thereby eradicating exposure of infants and children to these toxins exceed the annual Capital Fund allocation of our PHA (public housing authority) many times.

In your invitation to testify, you asked me to speak or comment on the HUD Office of Inspector General report. While I cannot speak specifically to what HUD did or did not do, I can say that housing authorities are endeavoring under often difficult circumstances and very limited resources to meet the many obligations, responsibilities, and conditions that are required when it comes to mitigating lead-based paint hazards in their developments.

Things such as the Rental Demonstration Program, which offers the housing authorities the ability to leverage private capital through a variety of tools, allow us to be able to try to do things to remediate those issues. The Moving to Work program is another example of a program that allows flexibility for housing authorities and others to be able to take the necessary steps to address those concerns.

HUD's Healthy Homes program is a cost-effective and widely popular initiative that housing authorities are encouraged to work together with a diverse array of community health stakeholders

and residents to reduce environmental hazards and improve community health.

The ability to work collectively and in a collaborative manner with agencies across inter-Governmental alliance is critical in being able to address this matter. CLPHA is pleased that the 2019 committee report by the Senate Appropriations Committee is recommending HUD award $95 million in grants to remediate lead-based paint hazards. The $95 million is another set-aside under the Housing Choice Voucher program. We would strongly encourage funding be authorized and allocated as new moneys rather than placing an additional strain on the Housing Choice Voucher program already beset with competing needs.

In closing, with progress there are always new ways to do things: New programs, improved methods, better data, better materials. As my testimony shows, there are programs that exist, there is expertise that can exist. What housing authorities and other housing providers lack is resources.

Mr. Chairman, members of the committee, we appreciate the increased attention that all of you have brought to this matter. And we appreciate the fact that you have elevated this discussion to a point where folks could really focus on it, collaborate and do any things that need to be done to help the youth and those that are exposed to lead. So I thank you for your time. Thank you for allowing me to testify today and I am prepared to address any questions. Thank you.

[The prepared statement of Mr. Patterson can be found on page 96 of the Appendix.]

Chairman DUFFY. Thank you, Mr. Patterson.

Ms. Fee, you are recognized for 5 minutes.

STATEMENT OF RACHEL FEE

Ms. FEE. Thank you. Good morning. I am Rachel Fee, the Executive Director of the New York Housing Conference, a nonprofit affordable housing policy and advocacy organization. Our mission is to advance city, State, and Federal policies to support the development and preservation of decent and affordable housing for all New Yorkers.

I would like to thank Committee Chairman Duffy, Ranking Member Cleaver, and members of the Financial Services Subcommittee for holding this important hearing today and the opportunity to testify.

The built environment in which we live profoundly impacts our physical health and wellbeing. Numerous studies have demonstrated the positive impact of affordable housing on health outcomes and health savings. On the other end of the spectrum, poor housing quality can have serious, detrimental, and costly consequences.

In New York City, 400,000 residents call public housing home in 176,000 buildings managed by the New York City Housing Authority (NYCHA). The future of this housing has enormous implications not only for its residents, but for the surrounding neighborhoods and the city as a whole.

Currently, there are over 160,000 work orders outstanding, representing deficiencies in residents' homes. When deficiencies relate

to leaks, pests, peeling paint, and mold, tenants' health is potentially at risk. Behind these work orders are at least $25 billion of outstanding capital repairs in NYCHA developments. These are desperately needed building upgrades for systems that have outrun their useful life decades ago.

Since 2001, NYCHA's Federal capital and operating funding have been reduced by $1.5 billion. New York's capital needs make up about half of the national capital repair backlog, estimated by industry experts at $50 billion.

Despite a 2013 class action lawsuit relating to pervasive mold and despite the U.S. Attorney and the Southern District's investigation into lead-based paint noncompliance and other health and safety issues, we still have nearly 200,000 families on the waiting list for public housing, underscoring its value.

Our Nation knows the devastation of a public health crisis as witnessed by Flint, Michigan's contaminated water supply. Without investment, public housing could be the Nation's next massive health crisis. There is both a humanitarian and a monetary cost associated with the health impacts of aging infrastructure which include asthma, respiratory illness, and elevated lead levels.

The total annual cost of asthma to the U.S. economy is almost $82 billion. A 2017 study found that eradicating lead paint hazards from older homes of children from low-income families would provide $3.5 billion in future benefits at a cost of $2.5 billion. But there is no price tag for an impacted child who can never reach his full potential.

Representative Velazquez has called for Congress to commission a study on the health impacts of deteriorating building conditions for public housing residents. We concur with this recommendation.

We also agree with the recommendations from the Office of the Inspector General report dated this month to improve HUD's oversight related to lead reporting, monitoring, and abatement. In addition, we support the expansion of HUD's lead-based paint hazard control and the lead hazard reduction grant programs including eligibility for all public housing authorities to apply.

While these are important programs, they only abate for lead and do not address underlying building repair issues. While the health hazards resulting from poor quality housing are serious and costly, the solutions are simple. Targeted capital investment is the key to preserving decent, safe, and healthy living conditions. This can be achieved through targeted public housing capital and the Rental Assistance Demonstration program, which Congress recently expanded.

Our Nation is already paying the price for substandard public housing conditions in our healthcare spending. Let us invest Federal dollars the right way, by restoring safe and healthy housing conditions and dignity to its residents to preserve our public housing infrastructure.

Our three recommendations are as follows. Increase public housing capital to $5 billion annually with at least $300 million targeted toward health hazards; commission a study on the health impacts of deteriorating building conditions and the impact on public housing residents; and include public housing preservation in a national infrastructure plan.

Thank you for your time today.

[The prepared statement of Ms. Fee can be found on page 57 of the Appendix.]

Chairman DUFFY. Thank you, Ms. Fee.

Ms. Benfer, you are recognized for 5 minutes.

STATEMENT OF EMILY BENFER

Ms. BENFER. Chairman Duffy, Ranking Member Cleaver, and members of the subcommittee, thank you for the opportunity to testify on the critical issue of lead-based paint and mold in public and subsidized housing.

I am Emily Benfer, Distinguished Visiting Scholar and Senior Fellow at Yale Law School. It is an honor to testify before you today on this urgent health and safety threat for our children.

For the 1.6 million households that reside in federally assisted housing, lead hazards and mold can result in permanent and severe health impairments. Lead poisoning causes irreversible brain damage and affects bodily functions, growth, cognition, behavior, and development.

The financial consequences of lead poisoning include upwards of $280 billion in public spending on healthcare cost and special education alone. According to HUD, a significant number of children currently reside in public and subsidized housing that contain lead-based paint. At the same time, 70 percent of Superfund sites are within a mile of public housing were HUD multi-family housing exposing residents to lead-soil, arsenic among other toxins.

Similarly, housing program residents across the country suffer the adverse consequences of mold. A study of the 2011 U.S. Census found that public housing units are 4 times as likely to have roach infestations and 3 times as likely to have leaks than private market housing.

These substandard housing conditions often create common asthma triggers. For children, asthma is the leading cause of school absences, accounting for 10.5 million lost school days and, in some cities, school absences are the basis for termination from public housing. Children cannot escape these hazards without greater Federal interventions.

The recent OIG and GAO reports on lead-based paint in public and subsidized housing determined that HUD lacks both performance measures and plans to address non-compliance withdrawals as well as oversight of lead-based paint reporting and remediation in its programs.

Based on existing regulatory authority, HUD could do much more to protect children from lead poisoning and mold. First, HUD should implement primary prevention strategies that would prevent exposure and thus prevent lead poisoning and asthma.

As noted in the GAO report and the House report to the 2017 Consolidated Appropriations Act, HUD's current practice of visual assessments for lead is insufficient and more rigorous standards should be implemented to ensure that lead hazards are identified before children are lead-poisoned.

In 2017, a bipartisan group of Senators including Senators Scott, Durbin, Young, Portman, and Donnelly introduced the Lead-Safe Housing for Kids Act. Based on legislation introduced in the 114th

Congress by Representatives Ellison, Quigley and Kildee, the bill directs HUD to conduct lead risk hazard assessments prior to occupancy in all housing programs. Until HUD engages in this strategy, children will continue to function as sensing devices for lead hazards and will continue to have their lives permanently altered for the worse.

Second, HUD should engage in oversight compliance and long-term planning necessary to ensure the health and safety of residents especially children. The OIG and GAO reports found that public housing authorities self-certify compliance, leaving wide margins for fraudulent reporting.

HUD has no procedure for addressing non-compliance other than offering technical support to faltering PHAs. This has resulted in exposure to mold and the continued lead poisoning of children in numerous districts across the country.

Third, funding should be dedicated to improving the conditions of federally assisted housing to prevent exposure to health hazards. Due to a backlog of public housing capital needs estimated as high as $50 billion, PHAs do not have sufficient funding for the operation or maintenance of public housing.

Greater funding would allow PHAs to fully address the root causes of mold and remediate lead hazards. At the same time, despite the proven effectiveness of HUD's community development block grant, home lead-based paint hazard control, and lead hazard reduction demonstration grant the programs remain underfunded and not accessible to the most at-risk communities.

Ultimately, to end lead poisoning as a major public health threat, HUD would need to increase the budget for lead hazard remediation and abatement. Lead hazards and mold pose a great threat to the health and livelihood of residents especially children. To uphold its duty to provide safe, decent, and sanitary housing, HUD must eradicate this completely preventable health-harming condition in federally assisted housing. Any other approach places children's lives at grave risk.

Thank you for the invitation to testify on this important issue and I look forward to your questions.

[The prepared statement of Ms. Benfer can be found on page 30 of the Appendix.]

Chairman DUFFY. Thank you.

Ms. Brewen, you are recognized for 5 minutes.

STATEMENT OF JULIE BREWEN

Ms. BREWEN. Good morning Subcommittee Chairman Duffy, Ranking Member Cleaver, and honorable subcommittee members. My name is Julie Brewen and I am the CEO of Housing Catalyst, the housing authority of the city of Fort Collins, Colorado. We own and operate about 1,200 units of affordable housing and administer about 1,200 Housing Choice Vouchers and a number of other successful properties and programs. Housing Catalyst is committed to creating vibrant, healthy, sustainable properties. I am also a board member for the National Association of Housing and Redevelopment Officials, NAHRO.

Housing Catalyst, along with other public housing authorities across the country, remains steadfast in ensuring that children in

HUD-assisted housing are not exposed to lead-based hazards. In fact, PHAs have been more than successful over the years in minimizing and eradicating lead-based hazards from their properties.

A joint report by HUD and the CDC found that children living in federally supported housing have approximately 20 percent lower blood lead levels on average than similar children in low-income families living in homes where there is no Federal assistance. Although this demonstrates considerable progress, PHAs continue to work tirelessly to ensure that their properties remain free of lead-based hazards.

One of the most important factors in ensuring that PHAs are able to provide safe, secure, lead- and mold-free public housing for their residents is full funding of the Public Housing Operating Fund and the Public Housing Capital Fund.

The public housing inventory faces a mounting capital needs backlog, but Capital Fund appropriations continue to lag dangerously behind accruing modernization needs. In 2018, HUD provided enough subsidy for only 80 percent of the capital needs estimated to accrue during the Fiscal Year according to HUD's 2010 Capital Needs Assessment. At the same time, funding for operations has endured deep cuts, forcing PHAs to forego critical maintenance functions and further jeopardizing the long-term sustainability of many properties.

In 2011, a full capital needs assessment of Housing Catalyst's public housing portfolio confirmed what we knew anecdotally. The capital needs and expenses of operating scattered site public housing far outweighed the average $204,000 per year in capital funds Housing Catalyst was receiving.

With respect to lead, in the 1990's, we had to encapsulate some homes with exterior lead present, and the encapsulation has a life span of just 20 years. Today it would cost $50,000 to address the needs of just one of these houses or roughly a quarter of our annual average capital fund subsidy on just one of our 154 units.

In light of these financial limitations, Housing Catalyst was accepted to participate in HUD's rental assistance demonstration program which allowed the agency to acquire and construct properties that meet our high standards for health and safety.

I believe that for many housing providers like us, RAD (Rental Assistance Demonstration), and the newly updated Section 18 Demolition and Disposition Regulations provide a mechanism to help ensure healthy homes for communities' most vulnerable families. It is critical that Congress and HUD take a commonsense approach toward lead and mold abatement. Mandated full abatement of lead in public housing properties without adequate funding is impossible.

Since 2001, Housing Catalyst has experienced just over $1,660,000 of cuts, which is significant for the size of our public housing portfolio. Had RAD not been an option for us, we would have had to make very difficult choices. There are many housing authorities across the country like Housing Catalyst who are committed to working in proactive ways to focus on the health of the families we serve. We have adopted a comprehensive Green Operations and Maintenance Manual, which includes using only low VOC paints and nontoxic cleaning products.

And as a developer, when we build and design new properties or acquire and substantially rehabilitate existing properties, we focus on healthy building practices that include construction design, materials, and systems for healthy indoor air quality among other health and sustainability focuses.

I truly appreciate your interest and concern and I encourage you to continue to address this issue with a commonsense approach. Thank you.

[The prepared statement of Ms. Brewen can be found on page 51 of the Appendix.]

Chairman DUFFY. Thank you, Ms. Brewen. I want to thank the panel for their testimony. The Chair now recognizes himself for 5 minutes for questions.

I am looking at how much money we have spent since 2009. My analysis is we have spent about $1.2 billion dollars on this issue. Mr. Kirkland, does that number sound about right to you?

Mr. KIRKLAND. It sounds close, obviously, give or take a little bit, but I think that is pretty accurate.

Chairman DUFFY. And is it the assessment of the panel that that is not enough money? It seems like it would do a hundred—we did $145 million this year in regard to lead paint mitigation. It is—that is not—that is not—that is not doing it? And we have been doing that for, what? Fifteen, 20 years, is that fair, Mr. Kirkland?

Mr. KIRKLAND. That is fair.

Chairman DUFFY. And so, again, over 10 years, it has been $1.2 billion. Are we making a dent in the public stock? Are we making—are we making a headway? Are we seeing the number of poisoned children in America going down because of the money we are spending, is it leveling off, is it going up? What are we seeing with kids and in—that live in the public, in public housing? Anybody?

Ms. MCKEOWN. I can't speak to public housing specifically, but when we look at the trends in Wisconsin, we are seeing the number of children who are lead poisoned going down; it is still too many children, over 4,000 a year is still too many. And as I listened to the other panelists, what is not clear to me, is have the steps that have been taken, are those going to last, are those going to have to be repeated over and over?

Chairman DUFFY. Great question.

Ms. MCKEOWN. Which means the same money would have to be spent?

Chairman DUFFY. Are we resolving the problem for the long term or is this a short-term solution, Ms. Fee?

Ms. FEE. So, in New York City, we have in NYCHA's Public Housing about 9,000 children that are living in apartments with evidence of lead-based paint. So, that is—

Chairman DUFFY. Give me—give me that number again?

Ms. FEE. Nine thousand according to the New York City Housing Authority. And that number could be higher, that is just what they have reported. The attorney—the U.S. Attorney from the Southern District thinks that that number could be substantially higher.

So, in terms of what we are investing in abatement, I think there are a couple issues here. The first is, if you can abate, encapsulate, or remove the lead paint, you can make that a safe and habitable living environment. But if you have other issues going on in a

building, like we do in much of New York City's Public Housing Authority, if you have leaking roofs, if you have leaking pipes, if you have water penetration because your building envelope is not sealed, you have moisture coming in through the brick that needs to be repainted. Without fully upgrading these building systems, that paint is going to peel again.

If we are looking at mold, you can replaster, you can paint, but we are going to see that mold return. Right now, I think the return rate is about 30 percent, so we are spending money abating for molds, and in 30 percent of the cases it is growing back, because we are not investing the dollars to deal with the underlying building issues.

Chairman DUFFY. So, is that advice that you would give us, just try to deal with the underlying problem, so it is not a reoccurring theme?

Ms. FEE. Absolutely, I think that we need to invest significant amounts of money in the Public Housing Capital Fund to upgrade building systems, and target it toward where it is really needed the most kept—pressing capital needs that are impacting the health of the residents. So we are looking at roofs, plumbing, sealing the building envelopes.

Chairman DUFFY. Ms. Brewen, did you want to comment on this? No?

Ms. BREWEN. Yes, thank you. For us, our only viable option was the RAD program, which allows us to sell these 154 public housing properties and replace them with newer substantially renovated properties. The families that we serve that are very vulnerable have few choices to public housing, and for us because of the backlog of capital needs, weighing roofs versus lead. It just wasn't an option, we really chose to replace our units for our most vulnerable families.

Chairman DUFFY. And this is the burning question for us, how do—how do we—how do we spend money and spend money well? And how much do we have to spend? Mr. Kirkland?

Mr. KIRKLAND. Chairman Duffy, I think one of the concerns that obviously came out of our report is a lack of consistency in approach. And as we talked about the abatement and mitigation issue, HUD relies on each housing authority to address that issue on its own.

I think as you look at many of the policies of HUD, 24 of the 45 field offices that have oversight of the mitigation process where it comes to lead, don't even have policies on how to deal with the intake and the processing of those issues. So, a consistent approach I think is necessary first and foremost. And I think that was a glaring aspect of our report.

Chairman DUFFY. And I wish I had more time, my time is—I wanted to go to Ms. McKeown, I can't, but I think the scenario that you brought up with the—with the kids was not a public housing unit, it was a private unit, is that right? And how do we now address not just the public housing facilities, but how to deal with private rentals as well, which is a whole other set of problems. But my time has expired and now I recognize the Ranking Member, the gentleman from Missouri, Mr. Cleaver for 5 minutes.

Mr. CLEAVER. Thank you, Mr. Chairman. I am going to follow up with the Chairman's express concerns, because Mr. Kirkland, you are probably the natural person to raise this question, with whom I can raise this question. We have 2.75 in the Public Housing Capital Fund or close to that, something like that. And now the President zeroed it out in his budget, but we were able to get some significant dollars, the problem that I am—I don't understand, if we are interested in solving this problem, we ought to do something that would demonstrate that we are interested.

For example, if we have four million kids living in places where they are exposed to high levels of lead and a significant number of the 4 million are living in public housing, why can't we declare war on lead paint and put the resources and we may, I don't know how far these capital—Public Housing Capital Funds can go, are these funds eligible to deal with remediation?

Mr. KIRKLAND. We can certainly look into that, I don't have an immediate answer for you, but I would certainly have my staff. But, yes, I did get word that, yes, we can use those funds.

Mr. CLEAVER. Can anybody tell me why we can't just say, OK, 2019, we are going to reduce the number of units with lead-based paint in it by 75 percent, and solve this problem? Because if we go like we have been going, my grandchildren will be still dealing with this issue. I know—is this weird? Am I being weird?

Ms. BENFER. Ranking Member Cleaver, I am with you, let us 100 percent declare war on lead poisoning, I think that we know how to solve this problem, we have known for years, the science is behind us, and it is a matter of really holding HUD accountable for oversight, for quality assurance, for no more self-reporting of whether or not we have complied with this. And first and foremost, primary prevention practices. We have to identify the hazards and remediate them before children are exposed.

Otherwise, this will be a problem for our grandchildren and their grandchildren, because they will be dealing with the consequences of the cost to society. There are 450,000 units, federally assisted housing units that have lead-based paint, and were built before 1978, that is the universe that we are dealing with here.

Mr. CLEAVER. Now, do we include Section 8 Housing as well? Does any—does anyone disagree with me, if so, don't raise your hand—

Ms. FEE. Wait. I concur, I think that we need to fight lead paint, I think in terms of public housing, we have laid out a plan to restore conditions in public housing, it is $5 billion a year, you would want to look at that over 10 years, and reduce that capital backlog. We have to keep funding operating so that the buildings can be maintained, but we first have to address underlying building systems.

Mr. CLEAVER. Mr. Patterson?

Mr. PATTERSON. Yes, Ranking Member Cleaver, I agree with what you have been saying, I do think that it takes a lot, it will take funding, it will also take I think a collaborative effort across the board with different agencies working to support each other as well as share information where they are able to ascertain and understand where the problems are and then make sure that we can get that approach.

But it will be a war, it will be—have to make a sustained effort over time to be able to address this. But I do believe with that collaboration, and with that emphasis and that funding we will be able to address it. It is the same thing in terms of using programs like the RAD program, the Moving to Work Program where there is flexibility to be able to address it, but it does need to be an overall strategy coordinated across the board in order to be able to get this matter addressed.

Mr. CLEAVER. And so we need multiple agencies to sit down and work together, probably HUD, maybe even EPA, but certainly HUD, and maybe HHS, I don't—I don't know, all I know is that I am talking to myself in some of this, maybe the American public would love to see us solve a problem after discussing it, or are we going to discuss it for another couple of decades? I just think this is an opportunity we ought to exploit and do something so that we can do this, and I don't—I am—I am going to put some time on it, because I am frustrated that we might be talking about this next year.

I have gone over, Mr. Chairman.

Chairman DUFFY. The gentleman yields back.

The Chair now recognizes the gentlelady from Ohio, Mrs. Beatty, for 5 minutes.

Mrs. BEATTY. Thank you, Mr. Chairman, and thank you, Ranking Member, and thank you to our witnesses. Please excuse my dark glasses. I had eye surgery. So, the light bothers it.

But, Mr. Chairman, I would like to go on record so these witnesses, when they go back to their individual States that they can say at least one member here today said how honored I was to see witnesses from both sides of the aisle giving such scholarly testimony and also having the issue at heart more than playing to us on either side of the aisle, and it has been greatly appreciated regardless if you are the Democrat or Republican witness.

I found it to be very informative. I found it to be very factual and hopeful to me, because one of the things, I grew up working in public housing and it was one of my first jobs after graduating from college and I had the distinct honor of going in and inspecting units. So, I saw many children who were affected by or actually gnawing on window ledges with lead-based paint.

I am disturbed; my staff has presented me a chart and I may want to enter it into the record in the State of Ohio. So, Mr. Patterson, I will go to you with this question. It talks about the number of young children under 72 months old and when you look at the statistics that they have there, some 1,500 kids less than 72 months of age who were tested and confirmed to have high blood levels for exposure to lead. Now, all of these are not in Cleveland. My city, the capital, Columbus, shares in that. What is disturbing is most of—well, the majority are in minority or predominantly minority communities, communities with public housing that are housed with predominantly African-Americans and other minorities.

Can you or do you know what it would cost for you to completely mitigate the threat of lead-based paint exposure to children in your facilities?

Mr. PATTERSON. I don't have a number that I can specifically say, but I could tell you it would be a very, very large number. We have over 3,000 units now just within our housing authority that are affected by lead paint. That is out of our housing stock of plus–9,000.

So, over the years, we have been able to go in through development activities and things like that to be able to address some. But those units that are there are still a problem. It boils down to trying to eradicate the problem or trying to just deal with the problem on a short-term basis.

Mrs. BEATTY. OK.

Mr. PATTERSON. To really eradicate the problem, that means going in and doing a full removal, in some instances, redevelopment of a site in order to provide these individuals with the safe quality housing that they deserve.

Mrs. BEATTY. OK. And that is a good segue for me. As we certainly know, Secretary Carson, a physician, when he was sworn in to become the Secretary of the Department of Housing and Urban Development, he said he was going to renew HUD's focus on lead hazards in affordable housing.

Well, today, we heard from each one of you that the Public Housing Capital Fund is certainly a key funding mechanism for public housing authorities to do just that, to eradicate the lead-based paint. However, the Administration's fiscal 2019 budget request from HUD zeroed out the Public Housing Capital Fund.

So, I would like to ask for the record each of you to answer the final question with a yes or no. Will zeroing out the funding for the Public Housing Capital Fund assist HUD and public housing authorities around the country to eradicate lead-based paint exposure within affordable housing? And we will start right here.

Ms. BREWEN. No, Congresswoman.

Ms. BENFER. No.

Ms. FEE. Absolutely not.

Mr. PATTERSON. No. It will not.

Mr. MCKEOWN. I am not familiar with the different funds. So, I am not able to speak to that. Sorry.

Mrs. BEATTY. So, well, let me put it this way. If you do not have any money to do it and you just said you need it, will it help if you do not have the money?

Mr. MCKEOWN. If other funding is not supplied, then yes or then it would be a problem.

Mr. KIRKLAND. This issue will obviously take funding to be able to address the issue.

Mrs. BEATTY. OK. Thank you.

And my time is up. I yield back.

Chairman DUFFY. The gentlelady yields back.

Without objection, we are going to do a second round. And so, the Chair recognizes himself for 5 minutes.

We spent over $1 billion in the last 10 years. Over the last 20 years, I am sure we are kicking a couple of billion dollars. We have a set of units or homes or apartments that are a problem.

Mr. Kirkland, with a couple of billion dollars, how many of these properties, what percent of these properties have we mitigated, remediated, fixed?

Mr. KIRKLAND. One of the major concerns and obviously our audit identified ones that were identified and mitigated. However, I think the most fundamental problem is we can't even answer that question. As HUD, we do not have enough data and have not collected enough data to be able to fundamentally answer the questions of which ones have. And without the consistent approach, without the fundamental aspect of sharing of data, I don't know that even HUD can answer that question.

Chairman DUFFY. So, we know the percent of the funds that go into mitigation versus the percent of the funds that go into administration?

Mr. KIRKLAND. I do not know that.

Chairman DUFFY. I am sensitive to the point of saying, hey, and Mr. Cleaver made this point, we will be dealing with this problem with his grandkids, right? We are not fixing the problem. But when we can't actually answer fundamental questions about how well we are spending our money and the answer to the problem is spend more money, that is a really hard thing for us to process.

So, shouldn't we develop a plan that says maybe over 10 years or 15 years, we are going to resolve this problem in America. What does it look like? What does the legislation and the rules have to look like and this is how much money it is going to take to fix the problem. Wouldn't that make sense? Does anyone disagree with that assessment?

Does anyone say the answer is the current system and just spend more money? And by the way, we can't actually even tell us how successful we have been. Can anybody tell us how successful we have been with the probably couple of billion of dollars we spent? We are probably making some progress, but we can't even quantify it.

And so, I am sensitive to the feedback for more money, but I think what we have to do in a bipartisan effort and in collaboration and in consultation with experts like yourselves is figure out a path forward. Figure out what the plan needs to look like, what we need to do with each of these properties and how much money it is going to take and how long we are going to spend that money. Does that seem like a fair assessment of what we should actually be doing to address the problem?

And, Mr. Patterson, would you agree with that?

Mr. PATTERSON. Yes, I would. I think that what you said has a lot of merit. I do think that we need to have a strategic approach to how we are going to go forward and how we are going to get this addressed. But again, I think it takes a lot of collaborating and a lot of folks putting in the time and rolling up their sleeves and being able to address this not on just a 1-year basis but on a sustained basis until we eradicate the problem.

Chairman DUFFY. A holistic approach over time. This is what the plan looks like. It might take 10 years. It might take 15 years, but it is not going to be here when Mr. Cleaver's grandkids are in Congress and taking a seat, right?

Mr. PATTERSON. Yes, sir.

Chairman DUFFY. Ms. Fee?

Ms. FEE. Chairman Duffy, I just want to say that the attention on lead and mold is very important. But I do think we have to look

beyond this to the total building conditions especially for public housing. So, we could just focus on lead, but we will have reoccurrence if we don't address these underlying building conditions again.

So, I just want to make a couple of other comments. On mold, we have had just last year 42,000 complaints of mold in public housing in New York City. That is impacting tens of thousands of residents. We also had 320,000 residents who experienced a heat or hot water outage between October 2017 and February 2018. In addition, we have chronic elevator failures. In 70 percent of NYCHA buildings, there was an experience in an elevator not working at some point in a time.

Chairman DUFFY. Let me just interject. I have to tell you—on the mold situation, what burns me is in Hayward with the LCO tribe, we had sent them—I am going off the top of my head now, several hundreds of thousands of dollars to fix a mold problem on the reservation.

They did a plan. They were going to do I think it was 14 homes with that money. And lo and behold, they did three—three homes which by the way, you could have torn the current homes down and build new ones and it would have been less expensive than what they were saying they were spending on the mitigation of the three homes. And so, spending money well is really important whether it is on the building side, on the mold side, or on the paint side, and we are all under pressure on dollars. But this is an important issue.

And to get more money, we have to say, "We are spending the money you give us now really, really well. This is how it is used, but it is not enough. It is not enough to address the problem." And until we get that feedback and drill into this, it is hard to get I think the Congress to spend more. And what I like is there is a willingness of people to work together and I think we almost have to have a taskforce on this issue that will work together to get a long-term solution to address at least this space. We can have another hearing; there are a lot of issues that we have in this space. Today, we are dealing on paint and mold.

My time has expired by over a minute. So, hopefully someone else can get to you. But now, I am going to yield to Mr. Cleaver for 5 minutes.

Mr. CLEAVER. I will take the entire period, Mr. Chairman.

But, Mr. Kirkland, the IG report is damning. I do not know whether everybody here realizes some of the things that are in it that are just absolutely—we should not tolerate those in the Government. When you look at the fact that you found that there is no oversight of the reporting of remediation, how are we going to deal with the problem and we are not even getting accurate or—and probably in some instances, no reporting at all.

And the worst part for me is that there were no goals established which is why I brought the issue earlier, HUD did not even establish the goals. Now, I am just following Secretary Carson. Obviously, this has been around a while. I could care less about who is sitting in office over there. What I want is to see the problem resolved.

And when you read this report, it is a haphazard system we are running over here. Nobody is in charge. Nobody is setting—the question that the Chairman and I have been talking about, why don't we say we are going to do this in 10 years or whatever. If your report is accurate and I happen to be one of these people who believe in Government, so, I believe that your report is accurate, there are no goals. They just wake up in the morning and go in HUD, however you HUD. But we have a problem.

Have I misread your report?

Mr. KIRKLAND. Ranking Member Cleaver, HUD has recently implemented a tracking system to track this information. Unfortunately, it totally relies on the housing authorities to report that information in. So, we did identify a number of flaws in the process and also I think there are concerns with the consistency of approach.

Many different offices within HUD have a role where it comes to lead and mold and unfortunately, there is no consistency of approach as to those issues.

Mr. CLEAVER. But your office, you don't get into it, giving directions on how to fix the problem. You, IG, just identify the problems.

Mr. KIRKLAND. We work to identify the problem and refer it to the department to find ways to fix the problem.

Mr. CLEAVER. Well, the good news I think from this hearing is that the Chairman and I and I think the same with others on this subcommittee are interested in doing just what has not been done, I think are interested in trying to put together a program and I don't know, we might need to—I think the Chairman and I will talk about it. We have been whispering to each other since this hearing began.

I think we are going to try to figure out some way to do exactly what has not been done and let us let the voters feel good for a change about something that has been successfully dealt with that we can actually remediate this problem. And my grandchildren, two or three of them have not been born yet. And so, I do not even know—we may have to wait for my great grandchildren unless we set a goal.

And the other issue is, is there anyone who can say what the difficulty is if you are actually running a public housing authority with providing the data?

Mr. PATTERSON. Ranking Member Cleaver, I do not know that I am in a position to say yea or nay, maybe a legal requirement in that nature, but I am not certain.

Mr. CLEAVER. Well, I am just wondering. If we are having difficulty getting the data, is it creating some kind of expense with the public housing authority? Do we have the personnel to do it? If we are not getting that information, there is a reason that that is not happening.

Yes. Ms. Brewen?

Ms. BREWEN. So, we took advantage of a grant opportunity in the 1990's to have all of our properties assessed and then we created a mitigation plan for all 154, not a large number, but it can be done. We do have all of those records, but we did it voluntarily. And then, we applied for what was then HUD's comprehensive improvement assistance program and did all of the abatement.

Now, as I mentioned, some of that has a lifespan of 20 years and now, we are looking at another $50,000 on just one unit. So, that gives you both sides.

Mr. ROTHFUS [presiding]. The gentleman's time is expired. And I will recognize myself for 5 minutes of questioning.

Mr. Kirkland, I want to touch—start with you. Your report describes some of the past failures of public housing authorities to address lead-based paint contamination. What if any responses are you seeing today from public housing authorities in response to those findings?

Mr. KIRKLAND. The findings that we identified associated with the public housing authorities, the ones that they reported to us do appear that they are addressing the ones that were reported.

Mr. ROTHFUS. What changes do you see them making?

Mr. KIRKLAND. The concern that we have is we are not sure that we are getting the full picture of the universe out there because we rely solely on self-certification of this process and because the process does not even—is not a proactive process. It relies on a child first testing at a higher level of lead. The concern is we don't know the universe out there and we are not confident at all that we are getting the full picture.

Mr. ROTHFUS. Can you tell us about some of the responses that you are seeing, actual actions that they are taking?

Mr. KIRKLAND. We did as part of our audit reach out to 3,800 housing authorities. I believe we received responses from 2,600 housing authorities. Of all of those, we only had self-identified I think 80-somewhat cases of lead in all of those housing authorities. We feel that that number does not seem appropriate or adequate and that was those that were self-reported to us.

Mr. ROTHFUS. Ms. McKeown, in your testimony you wrote that, quote, "addressing lead poisoning at the State and local level requires a multifaceted and sustained approach to protect children and families." Can you describe how State and local agencies interact with Federal agencies?

Mr. MCKEOWN. Sure. So, local health departments are the ones that see children, write orders for remediation or abatement. If the house were owned by HUD or by a housing authority or run by them, they would be interacting with them in that way.

Communities also apply for HUD grants to be able to remediate housing beyond HUD-owned or run housing. CDC also plays a role. CDC provides the systems that allow data sharing so that when a lead-poisoned child is identified, they are able to track that and report that. So, there could be an opportunity there to allow greater access to that information and better data sharing.

Mr. ROTHFUS. Would that be an example of—and can we make changes there? Again, I guess I am looking for where can we be improving on interaction between State and local Governments and the Federal agencies?

Mr. MCKEOWN. CDC is in the process of developing a new database that local health departments will be able to access in real-time and get alerts from in real-time rather than depending on us to get the information and share it with them. So, there could be an opportunity to explore that and see if housing authorities could also have access to that.

When we have tried to share information with housing authorities in the past, there have been challenges. When we send the information, they are not able to receive it in a way that is meaningful for them. And so, there is an opportunity to do better matching so that HUD and housing authorities can identify that a child in public housing has been identified as lead poisoned.

Mr. ROTHFUS. What additional roles can the private sector be playing in addressing the lead-based paint contamination issue?

Mr. MCKEOWN. Most frequently, the private sector is the one doing the actual remediation. So, working with them to make sure that they are able to do the best possible job is one way. It would be interesting also to explore ways to have job training programs so that people from the affected communities were also able to participate in being trained and then appropriately helping to do remediation or abatement.

Mr. ROTHFUS. Mr. Patterson, you briefly mentioned the Moving to Work (MTW) program in your testimony. While I understand that your housing authority is not currently in the program, several other housing authorities in the region are MTW participants including Portage Metropolitan Housing Authority. Can you describe how MTW housing authorities have used the flexibilities afforded by the program to address lead-based paint and mold contaminations?

Mr. PATTERSON. I think that the flexibility that the program allows in terms of regulations and things of that nature allow certain housing authorities to be able to reallocate funds from one area to another area to be able to address remediation as well as allow people to have the flexibility to structure their organization and be responsive in terms of being able to address those concerns.

Mr. ROTHFUS. My time is expired and thank you.

I will now recognize the gentlewoman from Ohio, Mrs. Beatty, for 5 minutes.

Mrs. BEATTY. Thank you, Mr. Chairman, and thank you, Ranking Member and again to the witnesses.

As I was sitting here listening to where I think Chairman Duffy was going with his statement as it related to finance or money or not just putting more money out there because we did not have the data, it put me on pause for a moment, because while I am for spending money well, where I am for strategies and agree with that, here is where I am in listening and reading your testimony and with my own experience.

We just had—and I just read the Inspector General's June 18, 2018 report, which outlines everything that you would be looking for with the public housings to give you. So, if we are going to set up a study committee, we already know what you are looking for. So, it appears that HUD has not provided enough oversight or regulation. So, I am going to split the baby. I don't want public housing people all upset with me when you say because simple in my mind, you would say, "Well, let us set up these things and have more oversight." They will say, "We do not have enough appropriate funding to do that."

But then, we hear from people like Ms.—is it Brewen—we hear from her that on their own, they have something that sounds incredible and is working. What I can tell you, that there is no public

housing authority that has the buildings before 1977 that likes the idea of having lead-based paint and they want to be rid of that just like we do.

So, why wouldn't we create something like an incentive program? So, if you come up with your plan as you have done or use yours or someone's as a model, then, there would be an incentive to put the funds into it, because what we know is it is going to cost money. One of the reasons when we had tucked away in one of our recent bills, the Bill 2155, the Economic Growth Regulatory Relief and Consumer Protection Act, tucked away in that bill was one of the reasons I opposed the bill because it was a provision that would relax the frequency of inspections and environmental review requirements for small public housing authorities, meaning, lowering the standards of the visual assessment for lead standards.

So, we know what the standards are. We know that children under the age of 72 months are affected by it. So, we know it is real. We know it exists. So, if we have that data, I don't know why we cannot have a plan to eradicate it and we have to pay for it. So, hold on to that thought.

Then, we have RAD. So, people are on both sides of RAD, I have supported it because I believe in the public-private partnerships and it has been one of the ways that we have been able to deal with the issue. So, I am not opposed to the Chairman's more long-term strategy to put together this big task force, but I am not for doing that for 18 months and studying it. We already have the facts. We already know that it exists. We already know what buildings and where they are because we know if you look at the newer buildings, if you take Westerville or Hilliard, more suburban communities in my district, it is a big fat zero.

If you go to the Columbus Metropolitan Housing or over in Cleveland and you look in those inner city neighborhoods, the buildings are older. There are more children housed there. Why isn't Congress putting moneys in there to save our children? All the housing authorities have logos, not picking on Cleveland, but I liked yours. So, it is a good and a bad. Strengthening our neighborhoods, improving lives—well, you are not going to improve lives if we do not put more money into those facilities and into capital funds to take care of something that you already know exists.

Not only you, the other directors, we know where it exists. We have that. We know how the children are affected. We know the units they are affected in. So, I do not get why we wouldn't fund the Capital Fund to take care of it, and plus the Secretary of housing made that as one of his commitments. So, it is not about money. We should be put, not knowing where the money should go in my opinion. We should fund it and take care of it.

And I yield back.

Chairman DUFFY [presiding]. The gentlelady yields back.

The Chair now recognizes the gentleman from North Carolina, Mr. Budd, for 5 minutes.

Mr. BUDD. Thank you, Chairman Duffy, and thanks to our panelists for your time.

Ms. Fee, I am over here to your right. Thanks. Yes. So, what are some steps or actions that PHAs can take to further reduce or

eliminate mold and lead-based paint in subsidized housing without HUD or without Congressional intervention?

Ms. FEE. So, that is a tough question. Right now, the public housing authorities are set up where the operating funds and capital are coming from HUD. In New York, we have a commitment from both New York City Mayor and New York Governor to also contribute capital funds to support public housing, and that is really because we are reaching a crisis in terms of the living conditions in public housing.

So, outside of that, we have seen RAD be a successful model for bringing private investment in. I know that the New York City Housing Authority has also focused on involving philanthropy in all sorts of programs. In terms of mold and lead, I have not seen any solutions out there that don't involve the Federal Government. I think that they have a role to play as does the city and State and our community partners.

Mr. BUDD. Thank you. So, continuing on, your testimony mentions NYCHA's failure to perform lead inspections as described in the complaint from the United States Attorney for Southern District of New York and this failure was inexcusable.

So, a couple of questions related to that, what steps has NYCHA taken to proactively correct these failures?

Ms. FEE. So, I understand I can't speak for the New York City Housing Authority, but I understand from on some of their reporting that they have conducted visual inspections for lead-based paint that previously were not being performed, and they have paid special attention to the apartments that are housing children under the age of 6 years old.

And right now, in this—we are waiting to see if this consent decree will be approved and I expect that once there is a Federal monitor in place, there will be a more concrete plan for how to move forward on some of these issues.

Mr. BUDD. Are those best practice changes that they are making that they are going to continue making those changes because of their previous failures?

Ms. FEE. I think so. I think that they have also established a new role for a compliance officer who is going to oversee these kind of issues.

Mr. BUDD. Good.

Ms. FEE. So we are glad that there is this attention being put on the issues and that there will be increased oversight.

Mr. BUDD. Did the United States Attorney's office provide any recommendations to NYCHA on this? And if so, were there—what actions has NYCHA taken to implement those changes from the U.S. Attorney's office?

Ms. FEE. So, I cannot speak to that in great detail. I know that there were several management deficiencies cited in the actual complaint and some requirements for moving forward. But again, I think that I would expect that we see a more concrete action plan once a monitor is in place and it is my understanding in the terms of the consent decree which has to be approved by a court that there will be some goal posts for substantial completion or substantial compliance with some basic standards for healthy and safe living conditions.

And in addition to the compliance around lead inspections, the housing authority currently has a class action lawsuit that they have been in related to mold and there is a special mold master appointed by a Federal court as well. And we haven't seen that problem be corrected. That is since 2014 and I think part of the issue is there were not sufficient resources to address underlying conditions.

Mr. BUDD. OK. Well, thank you, Mrs. Fee and I have a few more moments.

But, if you would, Mr. Chairman, I will yield back.

Chairman DUFFY. The gentleman yields back.

Mr. BUDD. Thank you.

Chairman DUFFY. The Chair now recognizes the newly created position of Vice Ranking Member, the gentleman from Michigan, Mr. Kildee, for 5 minutes.

Mr. KILDEE. Thank you, Mr. Chairman, and thanks to the panelists and I apologize if anything that I raise has already been addressed. I was in another meeting.

So, some of you may know I come from Flint, Michigan. It is my hometown. It is where I was born and raised. And it is a community that 4 years ago discovered unfortunately that the drinking water was significantly contaminated with lead and I won't go into all the reasons behind it. But I wonder if any of you might comment on the risks certainly in public housing and supported housing sector, all the work we do around lead, 15 parts per billion is the Federal action level. But I have yet to find a serious scientist or health professional that can tell me that any level of lead is safe.

And in Flint, when at the peak of the crisis, we were seeing lead in water testing at 13,000 parts per billion in some places. It just strikes me that this is an area where we have to pay much more attention and create much greater focus.

And I will finish this by reiterating in a different way the point that my colleague, Mrs. Beatty, was making. The costs of not doing this right are being played out right now in my own hometown. For the price of a few hundred dollars a day or even for maybe $20 million or $30 million over a decade eliminating lead service lines that lead to not only houses but commercial facilities, to public housing, eliminating those lead service lines would have cost millions for sure.

But right now, we are at about $500 million having been committed to remediating the problem that was a result of the failure to act in the first place. I wonder if any of you have thoughts on lead in drinking water and the impact that it has in public housing or in housing generally, which disproportionately unfortunately falls on low-income individuals. I have legislation that would actually bring that standard down to 5 parts per billion.

But I wonder if any of you might comment on experiences you have had or concerns that you might have around lead in drinking water and how that exacerbates this problem.

Ms. BENFER. I believe that HUD should require public housing authorities and property owners to determine the presence of lead service lines and to require a timeframe for full replacement. Based on the experience in Flint and across the country, we know that this is incredibly harmful. It violates the warranty of habitability,

the public health, the nuisance code, it could in federally assisted housing, the Americans with Disabilities Act, Fair Housing Act, and so on and this can't be considered safe, decent, and appropriate housing for our residents.

In the Consolidated Appropriations Act of 2017, Congress dedicated significant funding for lead contaminated water and the General Accountability Office to assess lead service lines across the United States and found that the country is coated with lead service lines, and in some cities, it was required until the 1980's. So, this is part of the crisis and it should certainly be part of the remediation that goes on in federally assisted housing to prevent lead poisoning among residents.

Ms. FEE. Mr. Kildee, I certainly see the parallels with your hometown of Flint, Michigan and what could be a pending health crisis in public and assisted housing if we are not strategically investing to keep these buildings in good repair.

Mr. KILDEE. Yes, sir.

Mr. KIRKLAND. I do agree that the Federal Government's HUD has and should have taken a more proactive role when it comes to lead in water and I certainly think that there is some significant work to be done in that arena.

Mr. KILDEE. Thank you. I guess the only point I would make in closing is that it has become fairly evident to me that the current standard for lead in drinking water is a standard based on convenience, not on health. Fifteen parts per billion keeps the lion's share of public water systems serving everyone in compliance, whereas if we had a health-based standard which would be far lower, we would tip a lot of public water systems upside-down and put them in a status of noncompliance and that is an inconvenient place to be. I think we ought to have a health-based standard.

And I appreciate this is not the central focus of this meeting, but it is really important I think to point out that there are dangerous levels of lead in drinking water which exacerbate the problem of lead exposure that comes in other forms.

I appreciate the panel's testimony and I yield back.

Chairman DUFFY. The gentleman yields back.

I want to thank our witnesses for their testimony and insight today. We appreciate your help and would look forward to working with you as we try to work in a bipartisan effort to resolve this issue.

The Chair notes that some Members may have additional questions for this panel, which they may wish to submit in writing. Without objection, the hearing record will remain open for 5 legislative days for Members to submit written questions to these witnesses and to place their responses in the record. Also, without objection, Members will have 5 legislative days to submit extraneous materials to the Chair for inclusion in the record.

Without objection, this hearing is not adjourned.

[Whereupon, at 11:37 a.m., the subcommittee was adjourned.]

A P P E N D I X

June 26, 2018

Testimony of

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Before the Subcommittee on Housing and Insurance
Committee on Financial Services
US House of Representatives

"Oversight of the Federal Government's Approach to Lead-Based Paint and Mold Remediation in Public and Subsidized Housing"

June 26, 2018

Introduction

Chairman Duffy, Ranking Member Cleaver, and Members of the Subcommittee, thank you for the opportunity to testify today on the issue of lead-based paint and mold remediation in public and subsidized housing. I am Emily Benfer, Distinguished Visiting Scholar & Senior Fellow at Yale Law School's Solomon Center for Health Law & Policy. It is an honor and privilege to testify before you today on this critical issue.

Over the past ten years, my scholarship has focused on the social determinants of poor health, including housing conditions that result in lead poisoning and asthma in private and federally assisted housing. In addition, I founded and directed a medical-legal partnership clinic in Chicago, Illinois, that addressed the underlying social issues resulting in poor health among low-income patients of a Federally Qualified Health Center. In many cases, children developed asthma and lead poisoning due to substandard housing conditions. In addition, I collaborated with the Sargent Shriver National Center on Poverty Law (Shriver Center), Green & Healthy Homes Initiative (GHHI), and over 30 national experts and nonprofits to petition the U.S. Department of Housing and Urban Development (HUD) for rulemaking, which led to the 2017 amendments to the Lead Safe Housing Rule, and I was a member of a team of lawyers responding to the lead poisoning of public housing residents in East Chicago, Indiana. In 2019, I will be joining the Columbia Law School faculty to continue to address the social determinants of poor health caused by housing conditions and the environment as the founding director of a health equity and social justice advocacy clinic for law, public health and medical students.

Based on my experience and review of the June 14, 2018 HUD Office of the Inspector General Report entitled, "HUD's Oversight of Lead-Based Paint in Public and Housing Choice Voucher Programs" (OIG Report) and the June 19, 2018 U.S. Government Accountability Office Report entitled, "Lead Paint in Housing: HUD Should Strengthen Grant Processes, Compliance Monitoring, and Performance Assessment" (GAO Report), it is my assessment that **HUD has failed to protect children in federally assisted housing from lead poisoning and other health harming environmental hazards, such as mold, due to a *lack* of**

1) **Action by the agency to implement primary prevention strategies that would prevent exposure and, thus, lead poisoning and asthma;**

2) **Oversight, compliance, and long-term plans necessary to ensure the health and safety of residents, especially children; and**

3) **Funding to improve the conditions of federally assisted housing.**

In this testimony, I will provide an overview of the risks to and repercussions on children that have resulted from these failings and recommendations to improve HUD's ability to provide decent, safe, and sanitary housing to low-income families.

Lead Hazards and Mold in Federally Assisted Housing Can Result in Permanent and Severe Health Impairments

Nationwide, inadequate housing conditions, age, and affordability of housing sustain poor health trends.[1] A recent Harvard report estimated that 8.3 million households lived in inadequate housing conditions in 2015, placing occupants at elevated risk of poor health outcomes.[2] In federally assisted housing, over 1,652,000 households with children are more likely to be clustered in low-income, segregated areas with a deteriorating housing stock.[3] **Children occupy more than one third of public housing and Housing Choice Voucher (HCV) program households and approximately one third of the project-based Section 8 households.**[4] The large number of child occupants and high risk of substandard conditions underscore the need to protect against lead and mold exposure in federally assisted housing.

Lead Poisoning

Over 37 million homes in the United States have lead-based paint that will become a lead hazard if not closely monitored and maintained.[5] Of those, 23 million homes contain significant lead hazards. 3.6 million homes with lead hazards are occupied by children under the age of six, the age group most at risk for lead poisoning because their brains and nervous systems are still developing.[6] In addition, 1.1 million of the homes with significant lead hazards are occupied by low-income families with children under age six.[7] **According to HUD, "a considerable number of children under age six currently reside in HUD-assisted housing units that contain lead-based paint."**[8] People living in federally assisted housing are susceptible to lead poisoning because many of the units were built before lead-based paint was banned and the home is not maintained or the units are located in areas with elevated risk of lead poisoning.[9] **HUD estimates that 450,000 housing units within the federal assistance programs were built before 1978, which increases the likelihood of lead-based paint content, and occupied by children under age six**.[10] At the same time, seventy percent of Superfund sites are within a mile of public housing or HUD multi-family housing, exposing residents to lead-soil and arsenic, among other toxins.[11] In fact, between 2012-2015, $5.6 million in federal funds were used in the HCV program to subsidize the rent in homes with a known and uncontrolled lead hazard in Chicago alone.[12] During the same time period, over 200 children in the Chicago-based HCV program developed lead poisoning between 6 micrograms per deciliter (μg/dL) and 19 μg/dL.[13] It is estimated that thousands of children were lead poisoned at lower levels. **Of greatest concern, this poisoning is entirely preventable.**

Lead poisoning presents an urgent health and safety threat to children,[14] causing irreversible neurological harm that affects bodily functions, growth, cognition, behavior, and development.[15] The overwhelming scientific research proves, and Children's Health Protection Advisory Committee, the Centers for Disease Control and Prevention, the American Academy of Pediatrics, and the Environmental Protection Agency agree, that **no amount of lead in the blood is safe and children require a wide margin of safety**.[16] Very high levels of lead exposure can cause seizures, coma and death. At the lowest levels of exposure, lead poisoning can lead to permanent brain damage, reduced IQ, diminished intellectual and academic abilities, academic failure, juvenile delinquency, high blood pressure, learning disabilities, behavioral problems, developmental delay, and premature death.[17] At a blood lead level of three μg/dL,

children demonstrate decreased end of grade test scores; at a blood lead level of four μg/dL, three-year-olds face an increased likelihood of being classified as learning disabled in elementary school; and at a blood lead level of five μg/dL, children are thirty percent more likely to fail third grade reading and math tests and to be non-proficient in math, science, and reading.[18] In fact, global childhood lead exposure contributes to approximately 600,000 new cases of intellectual disabilities diagnosed in children each year.[19] In addition, lead poisoning increases the risk of chronic renal failure, heart disease, and premature death in adulthood.

According to a 2017 report from the Health Impact Project, children who have been lead poisoned "are more likely to struggle in school, drop out, get into trouble with the law, underperform in the workplace, and earn less throughout their lives, independent of other social and economic factors."[20] And while secondary in importance to the health impacts, "the financial consequences of these outcomes include billions of dollars in public spending on special education, juvenile justice, and other social services."[21] Lead poisoning amounts to $11-53 billion in healthcare costs, $165-233 billion in lost lifetime earnings, $25-35 billion in lost tax revenue, $30-146 million in special education expenses, and $1.7 billion in direct costs of crime.[22] Ultimately, **the elimination of solely lead paint hazards from older homes occupied by low-income families would provide $2.8 billion in health, education, and increased revenue benefits to federal and state governments for the 2018 cohort of children alone**.[23]

Asthma

Asthma is among the leading adverse health consequences of substandard housing conditions and the most common chronic pediatric disease in the United States.[24] Nationally, asthma affects 6.1 million children and 16.5 million adults.[25] Children living in poverty are more likely to be diagnosed, to experience more severe symptoms, and to have ongoing asthma symptoms than their more affluent peers.[26] Asthma requires constant health monitoring, daily medication, and vigilant avoidance of triggers.[27] Substandard housing conditions, such as the presence of cockroaches, rodents, mold, leaks, and poor air quality, often create common asthma triggers.[28] **A study of the 2011 U.S. Census Bureau report found that public housing residents are four times as likely to have roach infestations and three times as likely to have leaks than private rental apartments**.[29] Another study found that low-income public housing residents in Illinois experienced poor housing conditions that cause asthma at extremely high rates: fifty percent of residents experienced a cockroach infestation, thirty-three percent lived with mold or mildew, twenty percent endured a rodent infestation, and thirty-three percent had plumbing problems.[30] Public Housing and HCV program residents across the country suffer the adverse consequences of mold.[31]

The ability of asthma to affect and limit activities can be severe. Among adults, twenty-five percent with asthma are unable to work or carry out activities of daily living;[32] in 2008, **asthma alone caused 14.2 million missed days of work.**[33] For children, asthma is the leading cause of school absences.[34] **In 2008, there were 10.5 million missed days of school due to asthma.**[35] In some cities, school absences are a basis for termination from public housing.[36] **The economic cost of asthma as a result of medical expenses, lost work, missed school days, and premature death is estimated at as much as $56 billion.**[37] Despite highly effective treatment guidelines for asthma, the overall morbidity (attack rates, emergency department visits, and

hospitalizations) and mortality rates among children have not decreased.[38] It is irrefutable that environmental hazards—especially in housing—have devastating consequences for health, even when effective treatment options are available.

Recommendations

Eliminate the Risk of Lead Poisoning in Federally Assisted Housing

Children cannot escape becoming lead poisoned without greater federal interventions. HUD has repeatedly stated its renewed commitment to lead safe homes and lead poisoning prevention, but as both the GAO and OIG reports found, has yet to adopt primary prevention strategies, engage in compliance and oversight mechanisms, or dedicate the necessary funds to prevent exposure to lead hazards in all federally assisted housing programs.[39]

Engage in Primary Prevention Strategies to Protect Children from Lead Poisoning

The country's most vulnerable children remain unprotected from the dangers of lead poisoning because, in the HCV program and project-based Section 8 receiving less than $5,000 per unit, the **current regulations only require a lead hazard risk assessment *after* a child has suffered lead poisoning and permanent neurological damage. In all other programs some form of pre-occupancy lead hazard inspection is required. There is no valid rationale for HUD's ineffective approach that applies different levels of protection from lead poisoning based on the type of housing.[40] All children, regardless of type of housing program, deserve to be protected from the neurotoxin.** As in the past, until HUD engages in primary prevention strategies, these children function as "sensing devices" for lead hazards[41] and will continue to be "the proverbial 'canary in the coal mine.'"[42]

To protect children from exposure to lead hazards, HUD must:

1. Require pre-occupancy lead hazard risk assessments in all federally assisted housing

HUD must adopt a healthy housing standard for federally assisted housing.[43] The CDC Advisory Commission on Childhood Lead Poisoning Prevention determined that visual assessments, the only lead inspection in the HCV program and project-based Section 8 receiving less than $5000 per unit,[44] "should now be considered unacceptable."[45] As recently as March 2018, HUD Secretary Ben Carson agreed that visual inspections alone are not sufficient to identify lead hazards in multiple programs.[46] In fact, HUD has classified lead-dust and lead-soil in the residential environment as among "the most important preventable exposure sources for children."[47] Risk assessment, which should include visual assessment plus the collection of dust, soil, water, and paint samples in homes, is proven to more accurately identify lead hazards than visual assessment alone.

HUD has justified using this ineffective and inequitable tiered approach, rather than initial lead hazard risk assessments, on 1) lack of legal authority[48] and 2) the need to conduct a cost benefit analysis.[49] In the 2017 Consolidated Appropriations Act, the Senate Report expressly clarified and confirmed that HUD has the authority to conduct more rigorous lead hazard

inspections in all federally assisted housing, stating: "HUD has the statutory authority necessary to require more stringent inspections when checking homes for lead paint." As the House Report noted, HUD's current visual lead inspections have proven insufficient,[50] and more rigorous standards, such as requiring risk assessments prior to a family moving into a home, should be implemented to ensure that children living in federally assisted housing are protected from lead poisoning."[51] In addition, the 2018 GAO Report recommended that HUD request from Congress the authority to use a specific, stricter inspection standard in the HCV program than visual assessments.[52] HUD disagreed with the recommendation claiming it needed the flexibility to conduct an analysis of the benefits and costs before requesting or adopting changes. **As long as lead-based paint exists, and children continue to be poisoned in federally assisted housing, there is no justification for delay and HUD should not be allowed to ignore the findings of Congress and the GAO.**

It is of paramount importance that Congress direct HUD to engage in pre-occupancy lead hazard risk assessments in all federally assisted housing occupied by children. In 2017, a bi-partisan group of Senators, including Senators Scott (R-SC), Durbin (D-IL), Young (R-IN), Portman (R-OH), Donnelly (D-IN), Duckworth (D-IL), Menendez (D-NJ), and Kaine (D-VA), introduced S. 1845, Lead-Safe Housing for Kids Act.[53] The Lead-Safe Housing for Kids Act was based on a bill introduced in the 114th Congress by Representatives Kildee (D-MI), Quigley (D-IL) and Ellison (D-MN) and directs HUD to replace ineffective visual assessments with lead hazard risk assessments in all federally assisted housing programs. National and local non-profits, experts, and associations—including the GHHI, Shriver Center, American Academy of Pediatrics, American Hospital Association, National Housing Trust, and National Center for Healthy Homes—have endorsed the Lead-Safe Housing for Kids Act.

2. Adopt the Universal Physical Condition Standards that include the identification of lead hazards in all federally assisted housing

In May 2017, Congress indicated its preference for Universal Physical Condition Standards (UPCS) inspections over Housing Quality Standards inspections.[54] UPCS inspections are more detailed and require greater documentation than HQS inspections. However, UPCS inspections do not require lead hazard inspection. For example, in its current form, the UPCS-V Decision Trees only includes a visual inspection of lead-based paint. It also includes numerous inspection items that could have "peeling paint or needs paint" and "peeling or cracking paint," including doors, walls, ceilings, floors, and windows.[55] (The inspectable item of "patio/porch/balcony" does not include a decision related to peeling or cracking paint, despite the possibility of deteriorated paint.[56]) However, the presence of peeling or cracking paint does not result in a "fail" outcome or trigger a lead hazard risk assessment. The only time a unit fails inspection for a lead hazard is when a "target unit" does not have a lead-free certificate and deteriorated lead-based paint is present.[57] This only captures a fraction of potential sources of lead hazards and relies upon a lead paint inspection, which may or may not be conducted.

HUD should incorporate risk assessments into the newly created Universal Physical Condition Standards inspection protocol for HCV program units constructed before 1978. This will eliminate the cost and any delays associated with a second inspection solely for the purpose of identifying lead hazards. In addition, PHAs can support the certification of existing staff

members as risk assessors or enter into staffing or equipment sharing agreements with local public health departments. Again, this is a clear and simple path to preventing the poisoning of children; HUD must be made to follow this path that will literally save children's lives. Please see the comments on the UPCS-V demonstration (Docket No. FR-5928-N-01) submitted on July 5, 2016 for additional details.[58]

3. Update the lead-paint, lead-dust, and lead-soil standards to accurately identify the presence of lead that is hazardous to health

Congress recently acknowledged that the standards for lead-dust and soil are based on pre-1995 research and are no longer sufficient to identify lead hazards. Congress therefore requested that EPA review and update the standards accordingly.[59] The United States Court of Appeals for the Ninth Circuit ordered EPA to issue a proposed rule updating its lead dust hazard standard and the definition of lead-based paint within 90 days of the decision becoming final and a final rule within 1 year of the proposed rule.[60] On June 25, 2018, EPA released a proposal to lower the dust-lead hazard standards. While the Lead-based Paint Poisoning Prevention Act (LPPPA) gives EPA express authority to define lead-dust and lead-soil, HUD has the authority to amend its standards immediately to prevent a "threat of adverse health effects in pregnant women or young children" and to identify lead "at or in excess of the levels determined to be hazardous to human health."[61] In fact, HUD established lead hazard definitions years in advance of the EPA in promulgating the Lead Safe Housing Rule 1999.[62] Most recently, HUD's Office of Lead Hazard Control and Healthy Homes established more stringent, health-based requirements for dust-lead action levels for risk assessments and clearance for Lead-Based Paint Hazard Control and Lead Hazard Reduction Grantees, effective April 1, 2017. These new lead dust action levels are based in science and demonstrate both HUD's recognition of the need and its ability to update standards for all HUD programs.[63] Failure to apply these standards to all HUD programs will maintain a tiered approach that values children's health by the program they participate in.

Currently, HUD's standards for lead-paint, lead-dust, and lead-soil are not based in the prevailing science and, as a result, HUD cannot fulfill its duty to provide safe, decent, and habitable housing. Without health-based standards, risk assessments prior to occupancy and clearance testing following interim controls, renovation, or abatement are unreliable and potentially place occupants in danger.[64] For example, in one study, tests using the current residential floor lead-dust standard failed to identify 85% of housing units of children who had a blood lead concentration of 10 μg/dL.[65] Similarly, children's blood lead concentrations increase by 3.8 μg/dL for every 1000 ppm increase in soil lead concentration.[66] The current standards are hazardous to health, often resulting in lead poisoning and its permanent neurological harm and must be amended and set at the lowest detectable level to protect human health.

In addition, HUD should update the definition of lead paint. HUD has the express authority under LPPPA to revise its standard for lead-based paint in housing constructed prior to 1978.[67] LPPPA directs HUD to periodically review its standards as the technology makes lower detection feasible and the medical evidence warrants a lower level.[68] Congress' foresight was fortunate, as the technology and science on lead-based paint have dramatically improved since the standards for lead-based paint were last reviewed in 1992 – *i.e.*, 25 years ago – and detecting paint with content levels of lead that are low, but still extremely dangerous, is possible today.

The current technological and medical evidence necessitate that HUD update the lead-based paint definition. Failure to do so means that HUD will be turning a blind eye to information that we have and know to be true – and that could save a child's life.

EPA indicated that it would work with HUD to establish a lower lead content standard in lead-based paint.[69] In 2012, in response to a request from the EPA's Office of Pollution Prevention and Toxics, EPA's Science Advisory Board issued a final report that supported updated standards.[70] HUD has both the statutory authority and obligation to act to ensure that the standards reflect current science, and there is no rationale that could justify creating an "illusion of safety" and placing children in both private and federally assisted housing in grave danger.[71]

4. Amend the Lead Safe Housing Rule to extend protections to zero-bedroom dwelling units

In May 2017, Congress amended LPPPA to remove from the definition of target housing the exception for zero-bedroom dwellings, in which any child under the age of six resides or is expected to reside. In many cities where affordable housing is scarce, families and single parent households commonly live in efficiency, or zero-bedroom dwelling units, where their children could be exposed to lead-based paint hazards in pre-1978 housing. To protect these children and to comply with Title X, as amended, HUD must update the Lead Safe Housing Rule at 24 C.F.R. 35.100, 35.115 by removing the zero-bedroom dwelling unit from the exemptions to the rule, as Congress has expressly required.

5. Include the identification of lead risks from lead water service lines in Environmental Investigations

In the 2017 Consolidated Appropriations Act, Congress dedicated significant funding to address lead-contaminated water and directed the General Accountability Office to assess the number of lead service lines in the United States.[72] It is critical that HUD identify lead exposure caused by lead service lines and subsequent lead in drinking water in federally assisted housing as part of its Environmental Investigations and ensure that full lead service lines are eliminated from federally assisted housing. While HUD guidelines have long recommended sampling water in limited circumstances, the recent findings of lead contamination in water in almost 2,000 water systems, serving more than three million Americans across the country, increased knowledge and highlighted the importance of eliminating exposure to the neurotoxin in all forms.[73] HUD should require PHAs and property owners to determine the presence or absence of a lead service line and develop a timeframe for full replacement.

PHAs can effectively address lead poisoning in federally assisted housing by taking an aggressive and committed approach to lead hazard remediation. In Baltimore, Maryland, after the Housing Authority of Baltimore City (HABC) failed to comply with federal lead-safe requirements, it faced nearly 200 toxic tort lawsuits and millions of dollars in judgments for failure to mitigate lead-based paint in public housing that resulted in lead poisoning of hundreds of residents. In response, HABC adopted the state's primary prevention standards, bringing over 18,000 units under state oversight, and modified its approach by allocating funding to remediate public housing units. HABC replaced windows, doors and other sources of lead poisoning. The

targeted approach dramatically reduced the incidence of lead poisoning in federally assisted housing.

Increase Oversight and Data Collection to Ensure Public Housing Authorities and Property Owners are in compliance with lead poisoning prevention laws

1. Increase oversight and compliance mechanisms

Media coverage related to lead poisoning in federally assisted housing, despite a mandate to abate public housing and protect residents from lead poisoning, has caused Congress to voice its concerns over HUD's oversight and quality assurance capacity.[74] Congress recently directed HUD to establish and "implement a process that improves data collection and analysis of actions PHAs are taking to comply with lead-based paint regulations in housing choice voucher units by March 31, 2017."[75] Congress also directed HUD to report on the incidences of lead poisoning in federally assisted housing, specifically the Housing Choice Voucher program. In addition, Congress directed HUD to issue Guidance and provide trainings on recent amendments to the Lead Safe Housing Rule and best practices in applying lead-safe standards, especially for maintenance and property management staff. Although HUD recently issued Guidance on the Lead Safe Housing Rule, public housing authorities have expressed concerns about implementation, suggesting the need for additional support and training.

The June 2018 OIG and GAO Reports determined that HUD lacked adequate oversight of lead-based paint reporting and remediation in its public housing and HCV programs. PHAs self-certify compliance, leaving wide margins for fraudulent reporting and HUD has no procedure for addressing noncompliance other than offering technical support to faltering PHAs. At the same time, HUD has not reported on its lead poisoning prevention progress and plan since 1997. These findings highlight the urgency of implementing adequate procedures and controls to ensure compliance with lead-safe requirements.

In addition, HUD should update and strengthen its enforcement program. Currently, HUD lacks stated methods to compel compliance with the Lead Safe Housing Rule, and for addressing violations. Current regulations, at 24 C.F.R. § 35.170, state only that designated parties "...shall be subject to the sanctions available under the relevant Federal housing assistance or ownership program and may be subject to other penalties authorized by law." HUD can and should go beyond this generic language. For example, HUD could include in its grant and contract documents clear and specific monetary holdbacks for the failure to adhere to lead poisoning prevention regulations. Similarly, HUD should ensure that PHAs comply with the data collection and record keeping requirements mandated at 24 C.F.R. §35.1225(g). Without a clear system for monitoring compliance and enforcement, these and other requirements hold little value. To ensure that lead hazards are correctly identified and repaired, HUD should require intervention on behalf of noncompliant designated parties and HUD should conduct monitoring activities to ensure compliance with the rule, with any costs recovered from the designated party.

2. Increase enforcement of the Lead Disclosure Rule

The Lead Disclosure Rule is mandated by Residential Lead-based Paint Hazard

Reduction Act of 1992 (Title X) and ensures that purchasers and renters of older housing units understand the dangers of lead poisoning, and their rights and obligations as a homeowner or renter. Lead disclosure is an important part of the nation's multi-pronged lead poisoning elimination strategy. The Lead Disclosure Rule is dependent upon, and thus is only as effective as, HUD's and EPA's vigilance in enforcing it. Healthy homes proponents, such as Green & Healthy Housing Initiative has recommended increasing enforcement activities and personnel to aid in educating the public about potential lead hazards in the pre-1978 property that they are about to rent or purchase. As a result of the enforcement of this Rule, over 188,000 non-compliant units have been made lead safe. The Disclosure Rule gives those tenants and homeowners the warning necessary to help them in seeking further testing or lead hazard remediation to protect children and pregnant women in particular in the home from harm. The Disclosure Rule can also be an effective tool to spur private investment and direct resources toward lead poisoning prevention and funding for enforcement. The Disclosure Rule must also be updated to remove any exemptions for zero-bedroom dwelling units, pursuant to the Consolidated Appropriations Act of 2017.

Increase Funding to Identify and Eliminate Lead Hazards in Private and Federally Assisted Housing Before Children are Exposed to Harm

In recent years, PHAs have not had sufficient funding for the operation or maintenance of public housing. There is an estimated backlog of public housing capital needs as high as $40 billion that grows at a rate of $3.4 billion per year.[76] Because of this, the public housing inventory has been losing an average of 10,000 units annually through demolitions and dispositions.[77] The current conditions of many properties inhibit investment and recapitalization efforts in the communities with the greatest needs. Greater funding would allow PHAs to use increased operations and administrative funds to fully address the lengthy accumulation of maintenance requests and capital funding needs for public housing. These funds could also be used to ensure that units are lead-safe and comply with the Lead Safe Housing Rule before occupancy by children.

HUD's Community Development Block Grant and HOME programs are critical to the health and safety of participants and the American people, especially children. Each year, HUD uses funds to provide grants to states for the purposes of lead hazard control and elimination. The Lead-Based Paint Hazard Control (LHC) and Lead Hazard Reduction Demonstration (LHRD) Grant Programs are critical to reducing lead-based hazards in the housing stock. As a result of these grants, lead hazards in over 190,000 housing units have been remediated or eliminated since 1994. In 2018, HUD is proposing to use these funds to address lead hazards in approximately 8,400 units.

Despite the proven effectiveness, these grant programs remain underfunded and not accessible to the most at-risk communities. This is due, in part, to the lack of a long-term lead poisoning prevention plan and inconsistent grant allocation standards. HUD can improve the effectiveness of these programs by evaluating selection criteria, providing guidance to reviewers, and using data to expand these programs to target a greater number of at-risk housing units and continue to reduce the prevalence of childhood lead poisoning. **To end lead poisoning as a major public health threat, HUD would need to increase the budget for lead hazard reduction and abatement funding from $110-$130 million to $2.5 billion annually for the**

next five years. HUD should allow grantees of the HUD Office of Lead Hazard Control and Healthy Homes and other HUD programs to use funds to replace leaded water fixtures and lead service lines in homes and environmental hazards in the community, in addition to paint related hazards.

At the same time, HUD should increase funding for the Community Development Block Grant (CDBG) program for housing rehabilitation and community infrastructure improvement. Lead poisoning prevention, ultimately, will require not only the removal of environmental hazards but, also, investing in safe and affordable housing, community development, poverty elimination. This program is critical to lead poisoning prevention because the issue plagues entire communities. Since 1974, CDBG has invested $149.4 billion in communities nationwide, assisting states and localities to achieve the kinds of infrastructure investment, job creation, and poverty elimination low- to moderate-communities desperately need. CDBGs should be disbursed in jurisdictions across the country in adherence to high standards and with a focus on its goal of ensuring decent and affordable housing to the most vulnerable in our communities.

The HOME program plays an important role in helping address home-based environmental health hazards such as lead hazards through larger scale housing rehabilitation projects. HOME funding should be maintained not only to promote housing affordability and stability in low income communities, but to also complement other lead hazard reduction and hazard remediation resources.

State and local governments can help address lead poisoning, including in federally assisted units, by developing programs that complement HUD lead hazard grants using new and creative approaches. In Maine, the Legislature just last week approved a new $4 million program with the goal of abating lead hazards in the 280,000 rental housing units with lead-based paint issues *before* children are harmed. The Maine State Housing Authority will oversee the program that anticipates makes larger contributions in homes that have resulted in lead poisoning and allowing the use of less expensive, RRP-certified firms to conduct renovations where a child has not yet been poisoned.

Address the Underlying Causes of Mold in Federally Assisted Housing Before Occupants Suffer Irreversible Health Harms

Housing Quality Standards require that mold on walls, ceilings or in bathrooms must be "corrected" or replaced.[78] The Universal Physical Condition Standards (UPCS) includes an inspection for evidence of leaks, mold, or mildew less than 1 square foot (level 1), between 1 and 4 square feet (level 2), or more than 4 square foot (level 3) and the UPCS-V inspection includes a pass/fall option for the presence of mold. In many public housing and tenant-based assistance programs, the common remedy for mold is painting over or washing the area rather than addressing the root cause. Exposure to mold and mildew can result in asthma, severe respiratory distress, allergic reactions, infection. It is critical that housing authorities address the underlying cause of the mold, such as leaks, uninsulated pipes, and lack of ventilation to protect the health of residents. PHAs must use plumbers and mold remediators to diagnose and address underlying plumbing problems or leaks causing mold and moisture, remove walls, ceilings and flooring with

mold or moisture, minimize resident's exposure, among other measures.[79] To protect residents from further harm, temporary relocation should be offered during prolonged repairs.

Recent healthy homes interventions demonstrate that it is possible to reduce indoor allergens, such as mold, that contribute to asthma. After countless children residing in federally assisted housing were treated in at The Johns Hopkins Hospital for acute respiratory distress and asthma attacks, HABC partnered with GHHI to launch the Healthier Homes Asthma Initiative. The initiative trains HABC staff to identify and eliminate environmental conditions that cause or trigger asthma attacks. Any child who suffers an asthma attack is relocated while the unit is remediated. In addition, the program trains and hires residents to become certified community health workers. The cost-effective national model dramatically reduced the incidence of asthma in public housing and the associated healthcare costs, while improving conditions and offering training and employment opportunities to residents.

Lead and Mold in Federally Assisted Housing Violate the Americans with Disabilities Act

HUD's current practices and procedures violate the Americans with Disabilities Act (ADA), Section 504 of the Rehabilitation Act, and the Fair Housing Act for residents whose asthma is exacerbated by mold or whose impairment would be worsened by exposure to lead hazards.[80] The United States District Court for the Southern District of New York held that the New York City Housing Authority's failure to correct conditions and remove mold preventing public housing residents from participating in the program and violated the ADA.[81] At the same time, numerous PHAs have granted reasonable accommodation requests in the form of pre-rental lead hazard risk assessments and lead hazard control in the HCV program.

If a child has a history of asthma, elevated blood lead level, or other disability that could be exacerbated by exposure to an environmental hazard,[82] he or she is a qualified individual with a disability, as defined by the Fair Housing Act (FHA), Title II of the Americans with Disabilities Act, and Section 504 of the Rehabilitation Act.[83] Asthma substantially limits the major bodily function of respiration and lead poisoning substantially limits the major bodily function of the neurological system and results in impairments that substantially limit multiple major bodily functions and major life activities.[84] Participants with elevated blood lead levels, asthma or other impairments will not have equal opportunity to access and participate in the federally assisted housing if uncontrolled lead or mold is present in a unit. Exposure to lead hazards or mold will aggravate or worsen these children's disabilities. These participants are entitled to a reasonable accommodation in the form of housing that is mold-free and lead-safe or lead-free. The only way to ensure that participants with lead poisoning, asthma or other impairments have equal opportunity to participate in federally assisted housing through the completion of repairs that remove the source of mold, and a lead hazard risk assessment and remediation prior to occupancy.[85]

Conclusion

It is critical that HUD uphold its duty to provide decent, safe, and sanitary housing that will enable families to thrive. Federally assisted housing should never be the source of harm to a resident; they should be the "gold standard" of healthy housing. Units with substandard

conditions, such as lead and mold, pose a great threat to the health and livelihood of residents, especially children, and cannot be considered "housing" under federal standards. HUD must eliminate the root causes of lead poisoning and asthma in housing before children are exposed by implementing primary prevention strategies, engaging in oversight, compliance and long-term planning, and dedicating funding to eradicating health harming conditions in federally assisted housing. Any other approach places children's lives at risk.

Thank you for the invitation to testify today on this important issue and I look forward to your questions.

Appendix

Select Examples of Mold and Lead Hazards in Federally Assisted Housing

The following examples demonstrate the need to improve the conditions in federally assisted housing nationwide and to increase HUD's compliance and oversight activities in order to protect residents from lead poisoning, asthma and other severe health impairments. These examples are not exhaustive.

Alabama

- **Tuscaloosa Housing Authority** (THA): HCV Program participant notified THA that her home was infested with mold and causing health problems. THA did not send a Housing Quality Standard (HQS) inspector to the unit within 15 days, as required by federal law and the mold continued to grow in the unit.

California

- **Jordan Downs Public Housing Complex, Los Angeles:** The Housing Authority of the City of Los Angeles informed the 2,400 residents that the area was free of health risks, despite documentation of high levels of lead, arsenic and cadmium in the soil, exceeding state thresholds for concern. Health coordinators have reported allergic reactions, asthma, difficulty breathing, low birth weights, cancer and mental disorders among residents.

Illinois

- **Alexander County Housing Authority** (ACHA): Numerous public housing complexes administered by ACHA were infested with mice, roaches, bedbugs, and other pests. Many units have structural, health and safety deficiencies, including mold, lead hazards, exposed asbestos, and insufficient electrical and plumbing systems. ACHA failed to conduct lead inspections or control any lead hazards. Despite this, units regularly passed inspection and requests for repairs were ignored or repaired in a substandard manner.
- **Chicago Housing Authority:** Hundreds of children have developed lead poisoning in Chicago-based HCV program units.
    - Tolanda McMullen's son was lead poisoned in two separate HCV program units that passed inspection. The once healthy boy was diagnosed with severe developmental delays and autism after residing in the HCV program units. One unit was repaired in violation of the Renovation, Repair, and Painting Rule, causing additional lead poisoning. Ms. McMullen became homeless to avoid further exposure to lead hazards.
    - Lanice Walker's three youngest children were lead poisoned in her HCV program unit, resulting in developmental delay, behavioral problems, and neurological disorders. The unit had caused lead poisoning of at least one other child in the past. Ms. Walker required legal assistance to exercise her children's rights under the Americans with Disabilities Act to obtain lead-safe housing.
    - A mother of three relocated to Chicago with a portable HCV. Her pre-1978 unit initially failed inspection for deteriorated paint and passed upon reinspection. Two children residing in the unit were diagnosed with lead poisoning after a few

months in the unit. The Chicago Department of Public Health found lead hazards throughout the unit. The same property had poisoned at least two other children.

Indiana

- **East Chicago Housing Authority** (ECHA): The West Calumet Housing Complex was deliberately built on the site of former lead smelting plants. Despite longstanding knowledge of the risks, ECHA did not inform residents of the dangerous toxins in the soil. When children developed lead poisoning, no risk assessments were conducted. Last year, the Complex was vacated and as a result of a lawsuit, residents had to be transferred to lead safe units. ECHA identified exposed lead paint in emergency transfer units but failed to disclose its knowledge of lead paint. In response, HUD offered training.

Louisiana

- **New Orleans Public Housing - Lead:** Children living throughout public housing in New Orleans experienced elevated blood lead levels resulting in a class action that was eventually settled.
- **New Orleans Housing Choice Voucher – Mold:** The Housing Authority of New Orleans ("HANO") conducts annual and special HQS inspections. HANO considers visible mold to be an HQS violation. In fact, HANO considers "serious mold" an emergency condition that requires a re-inspection after 24 hours, rather than 30 days. However, HANO will not fail the inspection if the mold is not visible to the inspector. Frequently landlords paint over mold in order to pass HQS inspection but do not actually treat or remediate the mold. The tenant is then forced to remain in a house that is making them sick, or risk losing their voucher for abandonment. Where the unit does fail inspection and re-inspection, HANO will release a participant's voucher so that they can move. Other area PHAs are not so reliable. In neighboring St. Bernard Parish, it took advocacy by legal services to get one client's voucher released even though the property failed re-inspection four months earlier and the unit was in abatement.
- **New Orleans Section 202 Housing – Mold:** Tenants at Peace Lake Tower in New Orleans East, a Section 202 property housing roughly 180 seniors, have experienced recurring water leakage and resulting mold and mildew on their ceilings and walls. In December 2017, Peace Lake Tower received a failing score of 24c at its REAC inspection, indicating multiple health and safety violations and triggering enforcement action by HUD. Despite the ongoing mold, mildew, water leaks, and other substandard conditions, the owner of the property certified in April, 2018 that the property had done a 100% survey of the property and corrected all deficiencies. After pressure from the local legal services office, who represent multiple tenants at the building, HUD agreed to expedite a re-inspection. The property owner has also refused to release results of air quality testing done at the property.

Maine

- **Maine Housing Authority** (MHA): When the family notified the MHA that their children had elevated blood lead levels of two to six times the Centers for Disease Control and Prevention reference value, the MHA accused the family of lying. The public health department issued an abatement order after finding lead hazards throughout the unit. The landlord ignored the abatement order and painted over chipping paint. Although

the unit had not undergone any repairs or lead hazard remediation, the MHA passed the unit.

- **Regional (Unnamed) Housing Authority:** After an infant developed lead poisoning in the HCV program, the PHA ordered a lead hazard risk assessment. Despite knowledge of lead hazards, the PHA did not inform the resident until four months after receiving results and has yet to abate the HAP contract, despite unmitigated lead hazards. The child has spent two years in the unit exposed to lead hazards.

New York

- **New York City Housing Authority (NYCHA)—Lead Hazards:** Over 202 children tested positive for elevated lead levels and about 48% of those children lived in a public housing unit with known or presumed lead-based paint. NYCHA falsely certified that it had complied with the Lead Safe Housing Rule.
- **NYCHA—Mold:** In Baez v. NYCHA, the federal district court determined that NYCHA failed to make reasonable accommodations and modifications to its policies and practices to effectively abate mold and moisture for its residents with asthma, as required by federal and state law. NYCHA has yet to fully comply with the order.
- **Rochester Housing Authority:** Between 2008 and 2012, children in one household were lead poisoned in five separate Housing Choice Voucher program units that passed RHA inspection. After the children were lead poisoned, the public health department confirmed the presence of lead-based paint hazards in each home.

Ohio

- **Parma Public Housing Agency (PPHA):** In 2017, two children participating in the HCV program developed lead poisoning after their Cleveland unit passed PPHA inspection. The landlord attempted to evict the family after they sought to have the hazard remediated. With the assistance of legal representation, they secured a court order to have the unit remediated. However, the owner failed to comply with the court order. The landlord owned multiple properties throughout the Cleveland area. In 2014, of children tested for lead in Cleveland, 13.7% had elevated blood levels. This percentage is likely an underestimate as only 41% of children receiving Medicaid were tested for elevated blood levels.

Texas

- **Austin**: Numerous units in the project-based Section 8 complexes Fairway Village Apartments and Travis Park Apartments have health and safety issues, including mold and visible plumbing leaks. Nevertheless, the REAC scores do not reflect the substandard conditions. Residents suffer from asthma, allergic reactions, and other health conditions related to these conditions.

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[3] *See generally Who Lives in Federally Assisted Housing?,* NAT'L LOW INCOME HOUS. COAL. (Nov. 2012), http://nlihc.org/sites/default/files/HousingSpotlight2-2.pdf.
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[17] WORLD HEALTH ORG., LEAD POISONING AND HEALTH (Aug. 2017), *available at* http://www.who.int/mediacentre/factsheets/fs379/en. Lead exposure is a risk factor for adult onset disability and disease, including neurological disorders, adult hypertension, heart disease, stroke, kidney malfunction, elevated blood pressure, osteoporosis, cognitive decline and cardiovascular disease. Gould, *supra* note 2, at 1164; Bruce P. Lanphear, *The Conquest of Lead Poisoning: A Pyrrhic Victory*, 115 ENV. HEALTH PERSP. A484, A484 (Oct. 2007) (citing Andy Menke et al., *Blood Lead Below 0.48 μmol/L (10 μg/dL) and Mortality Among US Adults*, 114 CIRCULATION 1388, 1388 (Sept. 18, 2006); Brian S. Schwartz et al., *Occupational Lead Exposure and Longitudinal Decline in Neurobehavioral Test Scores*, 16 Epidemiology 106, 106 (Jan. 2005); Marc G. Weisskopf et al., *Cumulative Lead Exposure and Prospective Change in Cognition Among Elderly Men: The VA Normative Aging Study*, 160 AM. J. EPIDEMIOLOGY 1184, 1184 (Dec. 15, 2004)) [hereinafter *A Pyrrhic Victory*]; Bruce P. Lanphear et al, *Low-level lead exposure and mortality in US adults: a population-based cohort study*, 3 Lancet Public Health e177-84 (2018); Bruce P. Lanphear et al., *Cognitive Deficits Associated with Blood Lead Concentrations <10 pg/dL in US Children and Adolescents*, 115 PUB. HEALTH REP. 521, 526–28 (2000); Bruce P. Lanphear et al., *Low-Level Environmental Lead Exposure and Children's Intellectual Function: An International Pooled Analysis*, 113 ENVTL. HEALTH PERSP. 894, 897–98 (Jul. 2005); Letter from Sheela Sathyanarayana, Chair, Children's Health Protection Advisory Committee, to Gina McCarthy, Administrator, Environmental Protection Agency (Jan. 8, 2015), (*available at* https://www.epa.gov/sites/production/files/2015-01/documents/naaqs_for_lead_letter.pdf) (At blood lead level of 0.1 μg/dL, lead poisoning was associated with a one-point IQ loss, as well as other neurological and other health and developmental harms.).

[18] *Id.*

[19] *Lead Poisoning and Health*, WORLD HEALTH ORG., http://www.who.int/mediacentre/factsheets/fs379/en/.

[20] *10 Policies to Prevent and Respond to Childhood Lead Poisoning,* HEALTH IMPACT PROJECT (2018), http://www.pewtrusts.org/~/media/assets/2017/08/hip_childhood_lead_poisoning_report.pdf

[21] *Id.*

[22] Gould, *supra* note 14, at 1164–65; *see* Kevin Drum, *An Updated Lead-Crime Roundup for 2018,* MOTHER JONES, https://www.motherjones.com/kevin-drum/2018/02/an-updated-lead-crime-roundup-for-2018/

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[24] Emily A. Benfer, *Health Justice: A Framework (and Call to Action) for the Elimination of Health Inequity and Social Injustice,* 5 AM. U. L. REV. 2 (2015)(lead article; reprinted in PUBLIC HEALTH & ETHICS, reader, Larry Gostin, ed. 2017).

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[26] Murphy & Sandel, *supra* note **Error! Bookmark not defined.**, at S57 ("Children living in poverty experience higher rates of asthma across all ethnic groups . . . ."). In a 2012 summary of data collected from the National Health Interview Survey, the Centers for Disease Control and Prevention (CDC) reported that children in poor families were more likely to have been diagnosed with asthma (nineteen percent) or to have chronic asthma (thirteen percent) than children in families that were not poor (twelve percent and eight percent, respectively). *Id.*

[27] MARLA MCDANIEL ET AL., URBAN INST., MAKING SENSE OF CHILDHOOD ASTHMA: LESSONS FOR BUILDING A BETTER SYSTEM OF CARE 1 (2014).

[28] Johnna S. Murphy & Megan T. Sandel, *Asthma and Social Justice: How to Get Remediation Done*, 41 AM. J. PREVENTATIVE MED. S57, S57 (2011).; *see* Caroline Dekker et al., *Childhood Asthma and the Indoor Environment*, 100 CHEST 922, 922, 925 (1991) (examining the influence of the indoor environment on asthma in a

population of Canadian schoolchildren, indicating that gas cooking, exposure to environmental tobacco smoke, home dampness, and humidifier use are associated with the prevalence of asthma). Data show that the age of housing, housing type (apartments versus single family homes), floor level, and location affect respiratory and mental health outcomes. Megan Sandel & R.J. Wright, *When Home Is Where the Stress Is: Expanding the Dimensions of Housing that Influence Asthma Morbidity*, 91 ARCHIVES DISEASE IN CHILDHOOD 942, 943 (2006).

[29] Mold, mice and zip codes: inside the childhood asthma epidemic Jan 3, 2014 In plain sight, NBC News

[30] Victoria Persky et al., *Inner-City Asthma: The Role of the Community*, 132 CHEST 831S, 832S (2007).

[31] *See* Appendix, *Select Examples of Mold and Lead Hazards in Federally Assisted Housing.*

[32] ILL. DEPT. OF PUB. HEALTH, ADDRESSING ASTHMA IN ILLINOIS 3 (2009), http://www.idph.state.il.us/pdf/Asthma_State_Plan_3rd_Edit.pdf.

[33] CTRS. FOR DISEASE CONTROL & PREVENTION, ASTHMA'S IMPACT ON THE NATION: DATA FROM THE CDC NATIONAL ASTHMA CONTROL PROGRAM 1, 3 (2015), http://www.cdc.gov/asthma/impacts_nation/asthmafactsheet.pdf [hereinafter ASTHMA'S IMPACT ON THE NATION].

[34] CTR. FOR DISEASE CONTROL & PREVENTION, ASTHMA FACTS: CDC'S NATIONAL ASTHMA CONTROL PROGRAM GRANTEES 8 (July 2013), http://www.cdc.gov/asthma/pdfs/asthma_facts_program_grantees.pdf; *Asthma Facts and Figures*, ASTHMA AND ALLERGY FOUND. OF AM., http://www.aafa.org/display.cfm?id=8&sub=42#_ftnref12.

[35] CTRS. FOR DISEASE CONTROL & PREVENTION, ASTHMA'S IMPACT ON THE NATION: DATA FROM THE CDC NATIONAL ASTHMA CONTROL PROGRAM 1, 3 (2015), http://www.cdc.gov/asthma/impacts_nation/asthmafactsheet.pdf; *see Research Findings*, AGENCY FOR HEALTHCARE RES. & QUALITY, http://www.ahrq.gov/research/findings/index.html (compiling a list of various reports providing comprehensive, science-based information on common, costly medical conditions and new health care technologies and strategies).

[36] *See, e.g.*, MIAMI-DADE COUNTY, PUBLIC HOUSING AND COMMUNITY DEVELOPMENT ADMISSIONS AND CONTINUING OCCUPANCY POLICY, VIII.A.13 (2014), http://www.miamidade.gov/housing/library/reports/2014-plans/acop.pdf.

[37] ASTHMA'S IMPACT ON THE NATION, *supra* note 32, at 3. Medical costs are related to 479,300 hospitalizations, 1.9 million emergency department visits, and 8.9 million doctor visits for asthma treatment. *Id.* at 2–3; *see* Brigid Schulte, *Children's Hospital Aims to Cut Asthma-Related ER Visits*, WASH. POST (Oct. 12, 2013), http://www.washingtonpost.com/local/childrens-hospital-aims-to-cut-asthma-related-er-visits/2013/10/12/65a540fc-2c79-11e3-8ade-a1f23cda135e_story.html (proffering that asthma costs the U.S. economy as much as $56 billion a year in medical expenses, lost work and school days, and premature deaths).

[38] MCDANIEL ET AL., *supra* note 26 at 1.

[39] *Department of Housing and Urban Development Budget Hearing Before the H. Comm. On Transportation, Housing and Urban Development,* 115th Cong. (2017) (statement of Ben Carson, Secretary of Housing and Urban Development (Jan. 12, 2017); *Department of Housing and Urban Development Budget Hearing Before the H. Comm. On Transportation, Housing and Urban Development,* 115th Cong. (2017) (statement of Ben Carson, Secretary of Housing and Urban Development (June 8, 2017).

[40] Emily A. Benfer, *Contaminated Childhood: How the United States Failed to Prevent the Chronic Lead Poisoning of Low-Income Children and Communities of Color,* 41 HARVARD ENV. L. REV. 493 (2017); Emily A. Benfer, *Contaminated Childhood: The Chronic Lead Poisoning of Low-Income People and Communities of Color in Federally Assisted Housing,* HEALTH AFFAIRS HEALTH EQUITY BLOG (August 8, 2017).

[41] ADVISORY COMM. ON CHILDHOOD LEAD POISONING PREVENTION, CTRS. FOR DISEASE CONTROL & PREVENTION, LOW LEVEL LEAD EXPOSURE HARMS CHILDREN: A RENEWED CALL FOR PRIMARY PREVENTION 15 (2012), https://perma.cc/FL35-REMP.

[42] *Id.*

[43] GREEN & HEALTHY HOMES INITIATIVE, STRATEGIC PLAN TO END LEAD POISONING: A BLUEPRINT FOR ACTION (2016) http://www.greenandhealthyhomes.org/sites/default/files/GHHI-BlueprintforAction-Final.pdf

[44] Requirements for Notification, Evaluation and Reduction of Lead-Based Paint Hazards in Federally Owned Residential Property and Housing Receiving Federal Assistance, 64 Fed. Reg. 50,146 (Sept. 15, 1999) (Commenter statements to the original Lead Safe Housing Rule in 1999 remain true today: "Letting our standards be set by appropriation levels is dreadful public policy when the health of children [is] at stake.").

[45] ADVISORY COMM., *supra* note 38, 16.

[46] March 22nd Senate Banking Committee Hearing; see also Graham Vyse, *Castro: There's 'Not Nearly Enough' Being Done to Fight Lead Poisoning*, INSIDE SOURCES (July 24, 2016), http://www.insidesources.com/castro-theres-not-nearly-enough-done-fight-lead-poisoning/.

[47] U.S. DEP'T OF HOUS. & URBAN DEV., CONGRESSIONAL JUSTIFICATIONS 33-6 (2016), http://portal.hud.gov/hudportal/documents/huddoc?id=FY16-CJE-EntireFile.pdf.
[48] U.S. DEP'T OF HOUS. & URBAN DEV., CONGRESSIONAL JUSTIFICATIONS 33-6 (2016), http://portal.hud.gov/hudportal/documents/huddoc?id=FY16-CJE-EntireFile.pdf.
[49] U.S. Government Accountability Office Report entitled, "Lead Paint in Housing: HUD Should Strengthen Grant Processes, Compliance Monitoring, and Performance Assessment," June 29, 2018.
[50] S. Rep. 114-243, at 97-98 (2016); Consolidated Appropriations Act, Pub. L. No. 115-31, Explanatory Statement for Division K (2017).
[51] H. Rep. 114-606, at 94 (2016).
[52] GAO Report, *supra* note 46.
[53] S. 1845 (115th Cong. 2017)
[54] S. Rep. 114-243, at 97-98 (2016).
[55] UPCS-V Decision Tree *at* 6, 8, 9, 16, 17.
[56] UPCS-V Decision Tree *at* 15.
[57] UPCS-V Decision Tree *at* 18.
[58] Comments to Notice of Demonstration to Test Proposed New Method of Assessing the Physical Conditions of Voucher-Assisted Housing, 24 C.F.R. Part 982, Docket No. FR-5928-N-01, July 5, 2016 (submitted by Health Justice Project, Sargent Shriver National Center on Poverty Law, National Housing Law Project).
[59] S. Rep. No. 114-281, at 69 (2017).
[60] *See In Re A Cmty Voice v. U.S. Environmental Protection Agency*, 878 F.3d 779 (2017).
[61] 42 U.S.C. § 4851b (16-17).
[62] 24 CFR § 35.1320.
[63] U.S. Department of Housing and Urban Development, Office of Lead Hazard Control and Healthy Homes, *Revised Dust-Lead Action Levels for Risk Assessments and Clearance; Clearance of Porch Floors* (2017-01), January 31, 2017.
[64] Bruce Lanphear et al., *Lead-Contaminated House Dust and Urban Children's Blood Lead Levels,*86 AM. J. PUB. HEALTH 1416, 1420 (1996).
[65] *Id.*
[66] Bruce Lanphear et al., *The Effect of Soil Abatement on Blood Lead Levels in Children Living Near a Former Smelting and Milling Operation*, 118 120 PUB. HEALTH REPORTS 83, 87 (2003); Bruce Lanphear et al., *The Contribution of Lead-Contaminated House Dust and Residential Soil to Children's Blood Lead Levels: A Pooled Analysis of 12 Epidemiologic Studies*, 79 ENVIRON RES. 51, 51–68 (1998).
[67] 42 U.S.C. § 4822(c).
[68] *Id.*
[69] EPA response Citizen Petition to EPA (2009), available at https://www.epa.gov/sites/production/files/2015-10/documents/epa-response.pdf; *In re A Community Voice, et al, v. U.S. EPA, Gina McCarthy* (U.S. App 9th Cir. 2016).
[70] EPA Science Advisory Board, Lead Paint Hazard Standards for Residential Buildings, Public and Commercial Buildings, and Renovations of Exteriors of Public and Commercial Buildings (2012) https://yosemite.epa.gov/sab/sabproduct.nsf/0/9c733206a5d6425785257695004f0cb1!OpenDocument&TableRow=2.3#2.
[71] Council on Envtl. Health, *Prevention of Childhood Lead Toxicity,* 138 PEDIATRICS 1 (2016).
[72] H. REP. 115-632, at 5 (2016).
[73] Alison Young and Mark Nichols, *Beyond Flint: Excessive lead levels found in almost 2,000 water systems across all 50 states*, USA TODAY (Mar. 11, 2016) *available at* https://www.usatoday.com/story/news/2016/03/11/nearly-2000-water-systems-fail-lead-tests/81220466/
[74] *See, e.g.,* Molly Parker, *Senators raise concerns about lead exposure in Cairo; HUD says water filters are 'precautionary' and lead levels do not indicate and emergency,* SOUTHERN ILLINOISAN, May 17, 2017 http://thesouthern.com/news/local/acha/senators-raise-concerns-about-lead-exposure-in-cairo-hud-says/article_0cc5701a-7791-5ac9-b7c0-ea6364e1b740.html; *Deadline up, Families Remain in Lead-Contaminated Housing in Indiana,* NY TIMES, April 1, 2017 https://www.nytimes.com/2017/04/01/us/west-calumet-housing-complex-lead-indiana.html; Yoav Gonen, *NYCHA lied about doing lead paint inspections, shocking report claims,* NY POST, Nov. 14, 2017 https://nypost.com/2017/11/14/nycha-lied-about-doing-lead-paint-inspections-shocking-report-claims/.
[75] S. Rep. 114-243, at 97-98 (2016).

[76] Message from Diane Yentel, National Low-Income Housing Coalition President and CEO, on President Trump's Proposed Budget (March 9, 2017).

[77] *Rental Assistance Demonstration Newsletter*, U.S. Dep't of Hous. & Urban Dev.(Oct. 2015), http://portal.hud.gov/hudportal/documents/huddoc?id=RAD_Newsltr_Oct2015.pdf. Demolitions and Dispositions, before RAD, were the only way that a PHA could transform or dispose of its public housing inventory. PHAs can still apply to HUD to do a demolition or disposition (and in some cases it is required), although RAD has greater tenant and preservation protections in place.

[78] 24 CFR 982.405(a)

[79] IICRC S520, Standard and Reference Guide for Professional Mold Remediation; AIHA, Recognition, Evaluation, and Control of Indoor Mold, Institute of Medicine, Damp Indoor Spaces (2004)

[80] 42 U.S.C 12132, 12131(!)(A)-(B); 28 CFR 35.104, 35.130(a); 29 U.S.C. 794(a); 42 U.S.C. 3604(f)(1)(A)-(B).

[81] Baez v. NYCHA, 13 CIV. 8916 (SDNY 2013).

[82] For example, many children with disabilities that qualify them for early intervention and special education programs are vulnerable to further harm due to lead poisoning and qualify for a reasonable accommodation in the form of risk assessments prior to occupancy in a pre-1978 home.

[83] 42 U.S.C. § 3604(f)(3)(B); 29 U.S.C. § 701. See also, Fair Housing Act (FHA), as amended in 1998, Title II of the Americans with Disabilities Act (ADA), as amended in 2008, and Section 504 of the Rehabilitation Act. 42 U.S.C. § 3601, *et seq.;* 42 U.S.C. § 12101, *et seq.*; 29 U.S.C § 701, *et seq.*

[84] 42 U.S.C. § 12102(1)-(2).

[85] 42 U.S.C. § 3604(f)(3)(B); 29 U.S.C. § 701

HOUSING CATALYST
Building Community. Inspiring Change.

June 22, 2018

Good morning Subcommittee Chairman Sean Duffy, Ranking Member Emanuel Cleaver and Honorable Subcommittee Members:

My name is Julie Brewen and I am the CEO of Housing Catalyst – the housing authority of the City of Fort Collins, Colorado. Fort Collins is a city of 170,000 people about 65 miles north of Denver. We own and operate about 1,200 units of affordable housing, administer about 1,200 Housing Choice Vouchers, and operate a number of other successful properties and programs. Housing Catalyst is committed to creating vibrant, healthy, sustainable properties for our community's most vulnerable families.

Housing Catalyst was formed in 1971, at which time it acquired 154 units of scattered-site housing for its public housing portfolio. Units included single-family detached homes, some of which were deemed "historic," duplexes, and small multiplex properties. These properties now range from 40 to 126 years old.

I am also a board member for the National Association of Housing and Redevelopment Officials (NAHRO). This year, NAHRO celebrates its 85th anniversary as a membership organization for the affordable housing and community development industry. In 1933, the founders of NAHRO created the association to address their common concern for the nation's housing needs, and were determined to develop programs to address those needs. That remains NAHRO's charge today. Twenty thousand NAHRO members provide homes for more than 7.6 million people across the country in urban, rural, and suburban America.

Thank you for taking the time and having interest in the issue of lead and mold in our nation's public housing properties. We all know from data that lead is a serious health concern for all of us, but particularly for our most vulnerable families who must rely on public housing and other affordable housing programs.

Housing Catalyst, along with other public housing authorities (PHAs) across the country, remains steadfast in ensuring that children in U.S. Department of Housing and Urban Development (HUD)-assisted housing are not exposed to lead-based hazards. In fact, PHAs have been more than successful over the years in minimizing and eradicating lead-based hazards from their properties. A joint report by HUD and the Centers for Disease Control (CDC) released in September of 2016 in the *American Journal of Public Health* found that the average amount of potentially harmful lead in the blood of children in

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low-income families living in federally-assisted housing is significantly lower than comparable children not living in federally-assisted housing.[1] According to the report, "children living in federally supported housing have approximately 20 percent lower blood lead levels on average, than similar children in low-income families living in homes where there is no federal assistance." Although this demonstrates considerable progress, PHAs continue to work tirelessly to ensure that their properties remain free of lead-based hazards.

In the mid-1990s, national assessment was conducted on public housing units to determine if lead was present. Local mitigation plans were created and implemented using what was HUD's public housing Comprehensive Improvement Assistance Program (CIAP). Some homes only required minor modifications like removing shelving material from closets, while others were substantial – such as full encapsulation of exterior siding on historic single family homes.

Housing Catalyst is committed to ensuring the health and safety of the families we serve. We know that even low levels of exposure to lead and other toxins can cause children permanent damage. We have adopted a comprehensive "Green Operations and Maintenance Manual" for our ongoing operations, which includes using only low-Volatile Organic Compounds(VOC) paints, non-toxic cleaning products, and other items related to ensuring indoor air quality. Maintenance staff members are trained to fully understand and utilize HUD's Uniform Physical Condition Standards (UPCS), which includes assessing and reporting paint conditions for any chipping, peeling, or caulking paint. All of our Housing Quality Standards inspectors for the Housing Choice Voucher program are formally trained and directed to look closely for chipping, peeling, or caulking paint in the privately owned properties participating in our Housing Choice Voucher program. Key staff members are also trained in Lead Safe Work Practices.

Last year HUD published the "Requirements for Notification, Evaluation and Reduction of Lead-Based Paint Hazards in Federally Owned Residential Property and Housing Receiving Federal Assistance; Response to Elevated Blood Lead Levels" (lead-free) final rule. The final rule amended HUD's lead-based paint regulations on reducing blood lead levels in children under age six who reside in federally-owned or -assisted housing that was built pre-1978, and formally adopted the CDC definition of "elevated blood lead levels" (EBLLs) in children under the age of six. Under the final rule, PHAs are required to conduct an environmental investigation of the dwelling unit in which a child with an EBLL lived at the time the blood was last sampled and of common areas servicing that unit. The rule applies to project-based assistance provided by non-HUD federal agencies, project-based assistance, HUD-owned and mortgagee-in-possession multifamily property, public housing, and tenant-based rental assistance. The final rule also included

[1] http://ajph.aphapublications.org/doi/abs/10.2105/AJPH.2016.303432

a new protocol for responding to a case of a child under age six that has an EBLL to ensure quick remediation of the lead-based hazard. PHAs have been required to be in compliance with this final rule as of July 13, 2017.

The lead-free rule also directs local health departments to share addresses of properties where children with elevated lead levels were residing so that PHAs can cross reference with Housing Choice Voucher program landlords. While we have highly trained Housing Quality Standards inspectors who are focused on identifying any chipping peeling, or caulking paint, we are committed to the safety and health of our community's children and we appreciate this connection to our local and state Health Departments. Lead exposure can occur from a variety of non-housing factors, including take-home exposures from the work place, water sources, and soil. Eradicating lead exposure to children requires collaboration across multiple sectors. As some of these environmental factors that may lead to an EBLL remain outside the scope of the PHA, it is critical that Public Health Departments, Environmental Agencies, and Labor Departments work together to ensure residents of HUD-assisted housing are not exposed to lead hazards. These partnerships are critical for the successful eradication of lead-exposure for residents of HUD-assisted properties, and as such, the responsibility to identify lead-based hazards must be shared by all agencies.

Partnerships are the key in the continued battle to reduce and eliminate Elevated Blood Lead Levels. PHAs must work closely with everyone at the table when dealing with lead. They may also have to bring some new partners to the table. The Office of Lead Hazard Control and Healthy Homes has been a primary partner in providing guidance and a road map. Local Health Departments are also important partner not only in identifying cases of EBLL but also in education process of the PHA and the families the PHAs serve concerning the hazard of Elevated Blood Lead Levels. Education is also an area where partnerships can be forged. Many of the children that PHAs serve spend large amounts of time in early education programs, such as Headstart and even daycare programs, as well as kindergarten. Our children's educators are important links to educating parents of the consequences of lead exposure and additional sources of lead exposure. All of us as stakeholders need to reach out and strengthen the ties we have with our education partners to ensure that our children are learning in a lead-free education environment.

The most important factor in ensuring that PHAs are able to provide safe and secure lead- and mold-free public housing for their residents is full funding of the Public Housing Capital Fund and the Public Housing Operating Fund. The public housing inventory faces a mounting capital needs backlog, but Capital Fund appropriations continue to lag dangerously behind accruing modernization needs. At the same time, funding for operations has endured deep cuts, forcing PHAs to forego critical maintenance functions and further jeopardizing the long term sustainability of many properties. Each year, PHAs receive enough funding to address only about half of their

newly occurring physical needs. Recent unfunded regulations from HUD have increased PHAs' challenges in meeting the needs of their residents and properties. This chronic underfunding has a huge impact on the health and safety of residents who live in public housing. It is critical that PHAs receive proper funding to ensure that they are able to provide adequate lead and mold remediation while continuing to provide necessary capital needs upgrades to public housing properties.

In 2011, a full capital needs assessment of Housing Catalyst's public housing portfolio confirmed what we knew anecdotally; that the capital needs and routine expenses of operating scattered site public housing was not viable long-term given the operating subsidy formula. Significant capital needs far outweighed the average $204,000 per year in capital funds Housing Catalyst was receiving, and we were beginning to make trade-offs between roof replacements, sidewalk safety, failing windows, etc. With respect to lead, we had to encapsulate some homes with exterior lead present in the 1990s. This encapsulation has a life span of 20 years. Today, it would cost $50,000 to address the needs of just one of these houses, or roughly a quarter of our annual average capital fund subsidy on just one of the 154 units.

In light of these financial limitations, Housing Catalyst applied and was accepted to participate in HUD's Rental Assistance Demonstration Program (RAD), which allowed the agency to acquire new or substantially renovated multi-family properties, properties that meet our high standard for health and safety for the families we serve. In our case, we have utilized the Low Income Housing Tax Credit Program for these new units. We are the owner, developer and property manager. I believe that for many housing providers like us, RAD and the newly updated Section 18 Demolition and Disposition regulations, provide a mechanism to help ensure healthy homes for our community's most vulnerable families with children. When we design and build new properties or acquire and substantially rehabilitate existing properties, we focus on healthy building practices, which among other things include:

- Construction design, materials and continuous mechanical ventilation for indoor air quality and energy efficiency
- High efficiency, sealed combustion tankless water heaters
- High performance windows that improve air quality and provide energy efficiency
- Hard surface flooring to improve indoor air quality and keep carpet out of the landfill
- Low flow plumbing fixtures to conserve water use
- 100% built-in LED or CFL lighting conserves energy
- High tech thermostats
- All zero VOC paint and no formaldehyde wood products for indoor air quality

- Continuous mechanical ventilation for indoor air quality

We also focus on resident amenities that improve health. We include fitness equipment for residents to encourage exercise, walking trails throughout properties and connecting with adjacent neighborhoods to support active lifestyles, community garden for growing produce and building a sense of community and pride, playground equipment and open play areas that encourage children to be active, bicycle amenities to encourage biking such as covered bike parking, bike repair stations, easy access to bicycle routes, and close access to public transit.

Again, our commitment to the health of the families we serve aligns with your concerns about lead and mold hazards, and I applaud the Subcommittee and Secretary Carson at HUD for focusing on this issue. However, it is critical that Congress and HUD take a common-sense approach toward lead and mold abatement and remediation. Mandated full abatement of lead in public housing properties without adequate funding is impossible. It becomes impossible to prioritize a new roof vs. lead abatement vs. heaving sidewalk replacement when the deferred capital items far exceed the available and declining funding. Since 2001, Housing Catalyst has experienced cuts of $1,660,557, which is significant for our public housing portfolio. Had we not been accepted into the RAD program, or had the RAD program not been a viable option for our agency – and it is not viable for all agencies - the choices we would have had to make for our portfolio would have become more and more difficult.

PHAs need adequate funding to ensure units remain lead- and mold-free. In FY 2018, Congress appropriated $2.750 billion for the Capital Fund. This is enough to subsidize only 80 percent of capital needs estimated to accrue during the fiscal year according to HUD's 2010 Capital Needs Assessment. Although this is a significant improvement in funding levels compared to previous years, Congress needs to ensure responsible levels of funding are provided to the Capital Fund in years to come. Adequate funding of the Capital Fund will help ensure children who live in HUD-assisted housing remain safe from exposure to lead and mold in their homes. The public housing program is a critical component of our national infrastructure that provides homes to low-income families across the nation. It is imperative that PHAs are able to ensure that these homes are safe and secure.

In closing, I should mention that there are many housing authorities across the country like Housing Catalyst who are working hard in proactive ways to focus on the health of the families we serve, particularly those with children for home lead and mold pose a great threat.

Again, I appreciate your interest and concern, and I encourage you to continue to address this issue in with a common-sense approach. Thank you for the opportunity to address the subcommittee today.

TESTIMONY OF

RACHEL FEE

EXECUTIVE DIRECTOR

NEW YORK HOUSING CONFERENCE INC.

NEW YORK, NY

BEFORE THE

UNITED STATES HOUSE OF REPRESENTATIVES

SUBCOMMITTEE ON HOUSING AND INSURANCE

COMMITTEE ON FINANCIAL SERVICES

JUNE 26, 2018

I am Rachel Fee, the Executive Director of the New York Housing Conference, a nonprofit affordable housing policy and advocacy organization. We are a statewide coalition comprised of affordable housing practitioners, advocates and experts in real estate, finance and community development. Our mission is to advance City, State and Federal policies to support the development and preservation of decent and affordable housing for *all* New Yorkers.

I would like to thank Committee Chairman Duffy, Ranking Member Cleaver and Members of the Financial Services Subcommittee on Housing and Insurance, for holding this important hearing on the "Oversight of the Federal Government's Approach to Lead-Based Paint and Mold Remediation in Public and Subsidized Housing" and for the opportunity to testify.

The built environment in which we live profoundly impacts our physical health and well-being. Numerous studies have demonstrated the positive impact of affordable housing on health outcomes and health savings.[1,2,3,4] On the other end of the spectrum, poor housing quality can have serious, detrimental and costly consequences.[5,6] Today, I will discuss how capital investment can be targeted towards our nation's public housing infrastructure to reduce health threats for its 1.2 million residents across the nation, by focusing on the challenges we face in New York.

Targeting Capital Funding to Reduce Health Threats

In New York City, 400,000 residents call public housing home. That is a population larger than many cities and nearly as big as Miami's. The New York City Housing Authority (NYCHA) manages 176,000 public housing apartments located in 326 developments across five boroughs. The future of this housing has enormous implications not only for its residents, but for the surrounding neighborhoods, as well as the City as a whole.

Currently, there are over 160,000 work orders outstanding, representing deficiencies in residents' homes. When deficiencies relate to leaks, pests, peeling paint and mold, the health of tenants is potentially at-risk. Behind these work orders are at least $25 billion of outstanding capital repairs in NYCHA developments.[7] These are desperately needed

[1] National Housing Conference. 2016. Housing as a Health Care Investment. https://www.nhc.org/publication/housing-as-a-health-care-investment/
[2] Children's HealthWatch. 2017. Stable Homes Make Healthy Families. http://childrenshealthwatch.org/wp-content/uploads/CHW-Stable-Homes-2-pager-web.pdf
[3] NHC. 2016. How Investing in Housing Can Save on Health Care. https://www.tn.gov/content/dam/tn/health/program-areas/NHC_Invest_Housing_Save_Health_Care_2016.pdf
[4] DOHMH. 2017. Medicaid Redesign Team Supportive Housing Evaluation: Cost Report 1. https://www.health.ny.gov/health_care/medicaid/redesign/2017/docs/2017-05_cost_rpt.pdf
[5] Elise Gould. 2009. "Childhood Lead Poisoning: Conservative Estimates of the Social and Economic Benefits of Lead Hazard Control." Environmental Health Perspectives. vol. 117 no.7 https://ehp.niehs.nih.gov/wp-content/uploads/117/7/ehp.0800408.pdf
[6] American Thoracic Society. 2018. Asthma Costs the U.S. Economy More than $80 Billion Per Year. https://www.thoracic.org/about/newsroom/press-releases/journal/asthma-costs-the-us-economy-more-than-80-billion-per-year.php
[7] Citizens Budget Commission. 2017. NYCHA Capital, What You Need to Know. https://cbcny.org/research/nycha-capital

building upgrades for systems that have outrun their useful life decades ago. New York's capital needs make up about half of the national capital repair backlog, estimated by some industry experts at $50 billion.

Despite a 2013 class action lawsuit relating to pervasive mold in New York City's public housing and the appointment of a Special Mold Master, and despite the recent Consent Decree stemming from the U.S. Attorney's investigation of noncompliance with regulations related to lead-based paint and other health and safety concerns, we still have nearly 200,000 families on the waiting list for public housing. Public housing is a highly desired, scarce and invaluable resource for the nearly 2 million New Yorkers living in poverty, who desperately need affordable housing. Restoring decent and safe living conditions for residents of public housing is a moral obligation, which requires cooperation and funding from all levels of government. It is critical that the federal government commits adequate resources to preserve public housing, along with additional funding from the local and state government. New York City and New York State have already made their down payment towards this shared responsibility. It is equally important that public housing is well-managed by the New York City Housing Authority and that the U.S. Department of Housing and Urban Development effectively performs its important oversight functions.

While the health hazards resulting from poor quality housing are serious and costly, the solutions are simple. Targeted capital investment is the key to preserving decent, safe and healthy living conditions. Operating funds also must be sufficient to maintain conditions.

While we are extremely grateful for Congress' increase in public housing capital in this year's appropriations, funding for public housing has relentlessly declined over the last two decades. Under both Democratic and Republican administrations, we have witnessed a decline in funding that has resulted in deteriorating building conditions. Since 2001, NYCHA's federal capital and operating funding have been reduced by $1.5 billion in absolute dollars. Adjusted for inflation, the number is even greater.

While allocated funds are effectively deployed in New York towards critical needs such as roof replacement, major elevator repairs and improving heating systems, the resources are appallingly inadequate. The significant reduction in federal funding over time has severely impaired NYCHA's ability to replace roofs, repoint brick facades and upgrade plumbing systems. In many instances, these conditions have put the health and safety of residents at-risk due to mold and lead exposure.

Focusing first on mold, the root cause of mold is moisture. In aging public housing buildings, moisture is created by leaking roofs, penetration of rain water through decaying mortar in exterior brickwork, condensation through insufficient ventilation, and leaking plumbing systems. To effectively address these issues, buildings require new roofs, repointing and re-piping. These systems replacements can improve the health

and quality of life for tens of thousands of vulnerable residents: children, elderly and the disabled.

Building systems replacement can be financed through targeted Public Housing Capital through appropriations or it can be achieved through conversion of developments under the Rental Assistance Demonstration Program (RAD). We support Representative Nydia Velazquez' recommendation made with Representative Jose Serrano that public housing capital be increased to $5 billion annually with $300 million specifically targeted towards mold and other health related issues. In RAD, typically bond financing and Low Income Housing Tax Credits are leveraged to attract private investment for repairs. For this program to be adopted at scale, additional private activity bonds allocation or an increase allocation of Low Income Housing Tax Credits would be required in New York.

In terms of lead, it is a dangerous health hazard if ingested. This most commonly occurs through exposure to dust and chips from lead-based paint, or contaminated water. Lead poisoning can cause irreversible and severe neurological consequences for young children. According to the New York City Housing Authority, when lead is present in public housing, it is primarily found in the original paint primer, now under many layers of paint, on select components in residents' apartments such as radiators, door frames, pipes and ceramic fixtures. At least 92 of NYCHA's developments were built before New York City banned lead paint in 1960 or have a confirmed presence of lead. According to NYCHA, children under the age of six live in nearly 9,000 of these apartments. A visual inspection performed by NYCHA or its contractors revealed that over 80% of these units had a deficiency. While the majority of these deficiencies have since been corrected, it is important to note that continued high levels of moisture can cause a recurrence of peeling paint as well as friction with surfaces. This underscores the fact that it is not sufficient to simply spackle and paint an affected area. The underlying problem must be addressed, whether it's a leaky roof, broken pipe, or porous building façade. This also makes annual inspections by the housing authority as required by HUD an important component of maintaining healthy housing.

NYCHA's failure to perform lead inspections as described in the complaint from the United States Attorney for the Southern District of New York released this month was inexcusable. The Agency has let down residents and put children at-risk. This serious breach of public trust will not be easily repaired. HUD's oversight role is an important one moving forward. It must work with NYCHA following the appointment of a federal monitor. In addition to changes NYCHA has already begun implementing, we expect the monitor will ensure changes in management practices, as well as strategic capital investments targeted to underlying conditions needed to achieve substantial compliance with health and safety standards.

The Office of the Inspector General report dated June 14th, 2018 outlines areas where HUD can improve oversight relating to lead reporting, monitoring and abatement. While the recommendation to expand the inspection and abatement requirements of 24 CFR Part 35 to housing built after 1977 in cases in which a child with an elevated blood lead

level is reported will add to the staffing burden of housing authorities, this is a small cost to protect a child from permanent neurological damage.

The Inspector General also recommends that HUD implement adequate procedures and controls to ensure that public housing agencies comply with lead safe requirements. In February of 2017, HUD made meaningful updates to its policies and procedures to address such concerns. HUD field offices should also adopt procedures and controls related to these changes so that proper oversight of public housing authorities in lead compliance is achieved.

HUD also offers Lead-Based Paint Hazard Control (LHC) and the Lead Hazard Reduction (LHRD) grant programs, a resource for state and local governments to work with landlords to responsibly abate lead paint. There are substantial returns to investing in lead hazard control, particularly targeted at early intervention in communities most likely at risk. Given the high societal costs of inaction, these programs should be significantly expanded, and all Public Housing Authorities should be eligible for these funds to address local needs. Adequate resources must be equally provided to public housing authorities to conduct lead inspections and/or risk assessments and to train their workers and assess their portfolios. While this is an important program, it only abates for lead and does not address replacement of building systems, which might be needed to bring aging public housing into good repair. Unlike Public Housing Capital Program or RAD, this targeted funding is limited in its ability to fix underlying building issues.

The Cost of a Health Crisis

Our nation knows the devastation of a public health crisis stemming from failing infrastructure and lack of investment as witnessed by Flint, Michigan's contaminated water supply. Without investment, New York City's Housing Authority, which has a population more than four times that of Flint, could be the nation's next massive health crisis stemming from disinvestment. Congress will need to make a significant investment to protect the health and safety of residents. New York's capital backlog carries an enormous price tag, the product of decades of federal disinvestment, but the cost of inaction is even higher. We support Representative Velazquez' proposal to call for Congress to call for a study of the health impacts of deteriorating building conditions for residents. We recommend specific focus on the cost of healthcare services as well as quantifying the economic impact of work and school absenteeism

There is a both a humanitarian and monetary cost associated with the health impacts of aging infrastructure which include asthma, respiratory illness, and elevated lead levels. These afflictions are a major public health concern for public housing residents throughout the nation. In a National Health Interview Survey (NHIS) of approximately 35,000 households, children whose families receive rental assistance also report higher

rates of developmental and learning disabilities compared to children in the general child population (26.5% vs. 20 %).[8] Furthermore, NYC children in high-poverty neighborhoods are twice as likely to have elevated blood lead levels as children in low-poverty neighborhoods.[9] A 2017 study found that eradicating lead paint hazards from older homes of children from low-income families would provide $3.5 billion in future benefits at a cost of $2.5 billion, or approximately $1.39 per dollar invested. But there is no price tag for the debilitating neurological damage suffered by an impacted child who can never reach his full potential. Lead exposure results in IQ loss and behavioral problems leading to increased special education needs, lower lifetime earnings, higher chances of incarceration and teenage pregnancy.[10]

Asthma is the most common chronic condition among children. Some of the most common triggers for an asthma attack (dust mites, cockroaches and mold) are found in public housing and rental units affordable to low-income households. In a National Health Interview Survey (NHIS) of approximately 35,000 households, children receiving HUD assistance (Section 8 and Public Housing), report nearly double the asthma rates for children in the general population (21.2% vs. 11.3%).[11] A NYC Department of Health study of NYC children living in a high poverty neighborhood found that they are four times more likely to be hospitalized for asthma than children in a low poverty neighborhood. The annual per person medical cost of asthma treatment is $3,266, but the total annual asthma cost to the U.S economy, including medical care, school and work absenteeism is almost $82 billion.[12]

Conclusion

Our nation is already spending significant amounts of federal funding for health care services for residents living in substandard public housing conditions. This money should be redirected for the benefit of low-income families suffering from housing-related health conditions. Let us support healthy communities by investing federal dollars the right way by restoring conditions in public housing for its residents, to preserve this valued part of our nation's infrastructure.

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[8] HUD. 2018. A Health Picture of HUD-Assisted Children, 2016-2012. https://www.huduser.gov/portal//portal/sites/default/files/pdf/Health-Picture-of-HUD-Assisted-Children.pdf

[9] NYC Department of Health. 2016. Environment and Health Data Portal. http://a816-dohbesp.nyc.gov/IndicatorPublic/VisualizationData.aspx?id=2184,4466a0,14,Disparities,Rate%20%20BLL%3E=5%20%C2%B5g/dL,years=2005;2011;2016,dataLink=Neighborhood%20Poverty

[10] Health Impact Project, et al. 2017. 10 Policies to Prevent and Respond to Childhood Lead Exposure. http://www.pewtrusts.org/-/media/assets/2017/08/hip_childhood_lead_poisoning_report.pdf

[11] HUD. 2018 A Health Picture of HUD-Assisted Children, 2016-2012. https://www.huduser.gov/portal//portal/sites/default/files/pdf/Health-Picture-of-HUD-Assisted-Children.pdf

[12] American Thoracic Society. 2018. Asthma Costs the U.S. Economy More than $80 Billion Per Year. https://www.thoracic.org/about/newsroom/press-releases/journal/asthma-costs-the-us-economy-more-than-80-billion-per-year.php

Recommendations:

1. Increase public housing capital to $5 billion annually with at least $300 million targeted towards eliminating mold and other health hazards to improve health outcome for residents.
2. Commission a study on the health impacts of deteriorating building conditions on residents with a focus on costs to society.
3. Include public housing preservation as part of a national infrastructure investment plan.

Office of Public and Indian Housing, Washington, DC

HUD's Oversight of Lead-Based Paint in Public Housing and Housing Choice Voucher Programs

Office of Audit, Region 5
Chicago, IL

Audit Report Number: 2018-CH-0002
June 14, 2018

To: Dominique Blom, General Deputy Assistant Secretary for Public and Indian Housing, P

//signed//
From: Kelly Anderson, Regional Inspector General for Audit, 5AGA

Subject: HUD Lacked Adequate Oversight of Lead-Based Paint Reporting and Remediation in Its Public Housing and Housing Choice Voucher Programs

Attached is the U.S. Department of Housing and Urban Development (HUD), Office of Inspector General's (OIG) final results of our review of HUD's oversight of lead-based paint reporting and remediation in its public housing and Housing Choice Voucher programs.

HUD Handbook 2000.06, REV-4, sets specific timeframes for management decisions on recommended corrective actions. For each recommendation without a management decision, please respond and provide status reports in accordance with the HUD Handbook. Please furnish us copies of any correspondence or directives issued because of the audit.

The Inspector General Act, Title 5 United States Code, section 8M, requires that OIG post its publicly available reports on the OIG website. Accordingly, this report will be posted at http://www.hudoig.gov.

If you have any questions or comments about this report, please do not hesitate to call me at (312) 913-8499.

Audit Report Number: 2018-CH-0002
Date: June 14, 2018

HUD Lacked Adequate Oversight of Lead-Based Paint Reporting and Remediation in Its Public Housing and Housing Choice Voucher Programs

Highlights

What We Audited and Why

We audited the U.S. Department of Housing and Urban Development's (HUD) oversight of lead-based paint reporting and remediation in its public housing and Housing Choice Voucher programs. The audit was part of the activities in our fiscal year 2017 annual audit plan. The audit objective was to determine whether HUD had adequate oversight of lead-based paint reporting and remediation in its public housing and Housing Choice Voucher programs.

What We Found

HUD lacked adequate oversight of lead-based paint reporting and remediation in its public housing and Housing Choice Voucher programs. Specifically, it did not (1) ensure that public housing agencies appropriately reported and mitigated cases involving children with environmental intervention blood lead levels (EIBLL) in its public housing program, (2) establish policies and procedures for public housing agencies to report a child with an EIBLL who resided in a household assisted under its Housing Choice Voucher program and ensure that identified lead hazards had been mitigated, and (3) ensure that public housing agencies completed required lead-based paint inspections. In addition, for housing built after 1977, HUD did not require public housing agencies to report and mitigate cases involving children with EIBLLs residing in public or assisted housing. As a result, HUD lacked assurance that public housing agencies properly identified and mitigated lead hazards, thus increasing the potential of exposing children to lead poisoning due to unsafe living conditions.

What We Recommend

We recommend that the General Deputy Assistant Secretary for Public and Indian Housing (1) update HUD's regulations to expand the inspection and abatement requirements of 24 CFR (Code of Federal Regulations) Part 35 to housing built after 1977 in cases in which a child with an elevated blood lead level is reported and (2) implement adequate procedures and controls to ensure that public housing agencies comply with the lead safe requirements.

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Background and Objective

In 1971, Congress passed the Lead-Based Paint Poisoning prevention act, which prohibited the use of lead based paint in residential housing constructed, rehabilitated, or assisted by the Federal Government and set abatement standards for lead-based paint. To reduce the risk of lead poisoning in children, the U.S. Consumer Product Safety Commission issued a ban on lead-containing paint. The ban took effect in 1978 and applied to products manufactured on and after that date. However, Congress found that pre-1980 housing stock contained more than 3 million tons of lead in the form of lead-based paint; therefore, it passed the Residential Lead-Based Paint Hazard Reduction Act of 1992. The purpose of the Act included implementing a broad program to evaluate lead-based paint hazards in the Nation's housing stock and reducing the threat of childhood lead poisoning in housing owned, assisted, or transferred by the Federal Government. The requirements of the Residential Lead-Based Paint Hazard Reduction Act of 1992 were targeted to housing built before 1978, when lead-based paint was banned, and are implemented by the U.S. Department of Housing and Urban Development (HUD) as the Lead Safe Housing Rule at 24 CFR (Code of Federal Regulations) Part 35.

In 1991, the Centers for Disease Control and Prevention lowered its intervention level for children under 6 years of age from 25 micrograms of lead per deciliter of blood to 10 micrograms of lead per deciliter of blood when new data showed significant adverse effects of lead exposure in children at blood lead levels previously believed to be safe. In 2012, it lowered its reference level for lead in the blood of children under 6 years of age to 5 micrograms of lead per deciliter of blood. On January 13, 2017, HUD amended the Lead Safe Housing Rule at 24 CFR Part 35 to align with the updated guidance from the Centers for Disease Control and Prevention. According to the Centers for Disease Control and Prevention, at least 4 million U.S. households have children living in them that are being exposed to high levels of lead.

HUD's public housing program was established to provide decent and safe rental housing for eligible low-income families, the elderly, and persons with disabilities. Public housing comes in all sizes and types, from scattered single-family houses to highrise apartments. Nationwide there are approximately 1.2 million households residing in public housing developments that are owned and operated by local public housing agencies. The Housing Choice Voucher program allows very low-income families to choose and lease safe, decent, and affordable privately owned rental housing and is administered by public housing agencies. Nationwide there are approximately 2.2 million households assisted by the Housing Choice Voucher program. Nationwide, there are about 3,800 public housing agencies that administer HUD programs.

HUD's Office of Lead Hazard Control and Healthy Homes is responsible for rulemaking, evaluating overall performance, providing technical guidance, and imposing sanctions. The Office of Public and Indian Housing's Office of Field Operations oversees the regional and field offices and provides guidance and directives to its field staff regarding HUD oversight. Regional and field staff are responsible for implementing the oversight activities and controls. The Office of Field Operations and its regional and local field offices are responsible for coordinating with

and ensuring compliance of individual public housing agencies, and transmitting reliable program information to the Office of Lead Hazard Control and Healthy Homes.

The audit objective was to determine whether HUD had adequate oversight of lead-based paint reporting and remediation in its public housing and Housing Choice Voucher programs.

Results of Audit

Finding: HUD Lacked Adequate Oversight of Lead-Based Paint Reporting and Remediation in Its Public Housing and Housing Choice Voucher Programs

HUD lacked adequate oversight of lead-based paint reporting and remediation in its public housing and Housing Choice Voucher programs. Specifically, it did not (1) ensure that public housing agencies appropriately reported and mitigated cases involving children under 6 years of age with environmental intervention blood lead levels (EIBLL) in its public housing program, (2) establish policies and procedures for public housing agencies to report a child with an EIBLL who resided in a household assisted under its Housing Choice Voucher program and ensure that identified lead hazards had been mitigated, and (3) ensure that public housing agencies completed required lead-based paint inspections. In addition, HUD did not require public housing agencies to report and mitigate cases involving children with EIBLLs residing in public or assisted housing built after 1977. These weaknesses occurred because HUD lacked adequate policies, procedures, and controls for monitoring public housing agencies for compliance with its lead requirements. It also failed to determine the risk of lead exposure to children in public housing or assisted housing built after 1977. As a result, HUD lacked assurance that public housing agencies properly identified and mitigated lead hazards, thus increasing the potential of exposing children to lead poisoning due to unsafe living conditions.

HUD Lacked Adequate Oversight of Public Housing Agencies' Reporting and Remediation of Lead Hazards

HUD required public housing agencies to report cases involving children with EIBLLs in a public housing unit to the local HUD regional or field office.[1] HUD's field staff should then determine a protocol for collecting, processing, tracking, and responding to these notifications. They should also retain any documentation verifying the follow up with public housing agencies.[2] In addition, according to HUD, the Office of Field Operations was responsible for tracking the cases reported by these offices and providing the information to the Office of Lead Hazard Control and Healthy Homes.

Of the 45 HUD regional or field offices, 24 did not have established policies and procedures for monitoring and handling cases involving children with EIBLLs in the public housing program. In addition, 29 field offices maintained tracking logs of cases reported by public housing agencies; however, the field offices did not always verify that corrective actions had been taken by the public housing agencies.

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[1] 24 CFR 35.1130(e)

[2] PIH Guidance on the Lead-Safe Housing Rule and Lead Disclosure Rule for Field Office Staff memorandum dated February 22, 2008.

In addition, HUD's Office of Field Operations did not always maintain complete and accurate records to effectively track cases involving children with EIBLLs. As of May 2017, the Office's consolidated report had identified 33 cases involving children with EIBLLs during our audit period of January 1, 2014, through December 31, 2016. However, HUD's consolidated report did not correlate with the records maintained by its offices. For instance, the report showed that the Philadelphia office had six reported cases; however, the Philadelphia office could not provide corroborating documentation, such as a tracking log, and could not identify which public housing agencies had reported the cases or records of follow up. In addition, the consolidated report did not show reported cases for HUD's Chicago or Detroit offices; however, both offices maintained tracking logs, which identified children with EIBLLs.

Further, HUD's consolidated report did not contain detailed information. The report contained the number of cases reported and identified the applicable HUD field office. However, it did not identify the public housing agency that had reported the cases or provide information regarding the affected households. According to HUD, its field offices should not receive or track household and address information in an effort to protect the privacy of the affected households. Therefore, we contacted the field offices to identify the public housing agencies associated with the reported cases and then contacted the public housing agencies to obtain additional information. One of the public housing agencies we contacted could not provide records and did not know how many cases it had reported or which households had been impacted.

Public Housing Agencies Did Not Always Provide Support Showing That Cases Had Been Resolved or Appropriately Mitigated

Since HUD did not maintain complete and accurate records, we contacted more than 3,800 public housing agencies to determine the number of potential lead cases.[3] Of the more than 3,800 agencies, approximately 2,600 responded to our request for information.[4] The public housing agencies reported 84 potential cases[5] in public housing and 205 potential cases in the Housing Choice Voucher program during our audit period of January 1, 2014, through December 31, 2016.

For the public housing program, of the 84 potential cases involving households with a child under 6 years of age that had an EIBLL, we received information[6] for only 50 cases. The public housing agencies did not provide information regarding the remaining 34 reported cases.

We reviewed 15 of the 50 potential cases involving children with EIBLLs in the public housing program for compliance with HUD's requirements. Of the 15 cases, 3 (20 percent) had not been handled in accordance with HUD's requirements. Specifically, these cases lacked adequate

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[3] Potential cases involving a child with an EIBLL do not reflect the actual number of cases in the programs as the agencies may not have accurately reported cases that would have required intervention under HUD's previous regulations. However, HUD has since lowered the threshold, thus the cases could now require action.
[4] We did not receive a response from approximately 1,200 public housing agencies, so there may be more cases.
[5] We were not able to reconcile the 84 reported potential cases with HUD's consolidated spreadsheet due to the lack of information.
[6] The public housing agency provided identifying household information, such as the address and unit number, if applicable, of the affected program household.

clearance reports that contained required information or lacked documentation showing that lead hazards had been corrected.[7]

For the Housing Choice Voucher program, although we received reports of 205 potential cases involving households with children with EIBLLs who resided in an assisted household, we received information for only 184 cases. The public housing agencies did not provide information regarding the remaining 21 reported cases. For this program, HUD did not require public housing agencies to notify the local HUD field offices of cases involving children with EIBLLs. However, the agencies were required to mitigate the cases in accordance with HUD's lead requirements. We reviewed 24 of the 184 potential cases involving a child who had an EIBLL. Of the 24 cases, we determined that 10 cases (42 percent) had not been handled in accordance with HUD's requirements. Specifically, the 10 cases had the following deficiencies:

- 8 assisted housing units lacked clearance reports that contained the required information or lacked documentation that the identified lead hazards had been corrected, and
- 2 assisted housing units that were not abated of lead hazards did not relocate the households in a timely manner.[8] In both cases, the time between when the public housing agency received notification of lead hazards and the relocation of the household exceeded 185 days.[9]

HUD Did Not Ensure That Lead-Based Paint Inspections Had Been Completed for Public Housing Developments

HUD required public housing developments built before 1978 to complete lead-based paint inspections by 2001.[10] HUD's Real Estate Assessment Center (REAC) reviewed lead-based paint inspections and certificates for public housing properties as part of its oversight monitoring reviews. However, REAC's review was limited to ensuring that the reports were maintained at the development, instead of determining whether the inspections were sufficient. Prior to May 2016, issues were reported to the public housing agency, the local field office, and the Office of Lead Hazard Control and Healthy Homes, but were not centrally tracked. In May 2016, the Office of Field Operations established a system to track and follow up with those public housing agencies that were reported as missing lead inspections and disclosure forms. Once informed of the issue by REAC, the Office informed the affected public housing agencies that they must send the required missing inspection reports to HUD. According to the Office, between January 1, 2017 and January 31, 2018, it had received review results for 2,707 public housing

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[7]HUD regulations at 24 CFR 35.1340(c) state that when clearance is required, the designated party must ensure that a clearance report is prepared, which provides documentation of the hazard reduction or maintenance activity as well as the clearance examination.

[8] HUD's regulations at 24 CFR 35.1225(c) state that within 30 days after receiving the risk assessment report, the owner must complete the reduction of identified lead-based paint hazards or the unit is in violation of housing quality standards. Prolonged exposure of children with lead poisoning to lead hazards represents a serious health concern.

[9] It took 198 days from the date of the environmental risk assessment for one household to be relocated. For the other household, it took 321 days from the date of the environmental risk assessment to be relocated; however, only 185 days from when the public housing agency was first notified of the EIBLL status.

[10]24 CFR 35.1115(a).

developments,[11] thus far. Of the 2,707 developments, the associated public housing agencies' had not provided evidence of an initial inspection or of exemption from the requirement for 441.

As of February 2018, public housing agencies for 219 of the 441 developments had provided inspection reports; however, some of the public housing agencies had completed the lead inspections only after being informed of the noncompliance by HUD. The public housing agencies for the remaining 222 public housing developments had yet to provide support that (1) the initial lead-based paint inspections had been completed, (2) the development was exempt from the requirement,[12] or (3) an inspection had recently been completed.

In addition, neither REAC nor the Office of Field Operations had reviewed the inspection reports provided by the public housing agencies for sufficiency. HUD officials cited a lack of necessary expertise as the reason for the lack of such reviews. In 2017, HUD had begun training its employees to evaluate the lead inspection reports and was implementing new reviews and controls to ensure compliance with its updated requirements.

Reporting and Remediation of Lead-Based Paint Hazards in Housing Units Built After 1977 Were Not Required

The use of lead-containing paint in residential properties has been banned since 1978. In implementing the Lead-Based Paint Poisoning Prevention Act, as amended, and the Lead-Based Paint Hazard Reduction Act of 1992. HUD created regulations at 24 CFR Part 35 to specifically target lead-based paint requirements for housing built before 1978. However, HUD's regulations, which require the public housing agency to test and mitigate lead, do not apply to public or assisted housing built after 1977, even if the public housing agency is notified that a program household has a child under the age of 6 with an EIBLL.

During our audit, public housing agencies reported three program households with a child who had an elevated blood lead level residing in housing built after 1977.[13] Two of the three children resided in public housing, and the remaining child was a member of a household assisted under HUD's Housing Choice Voucher program. For the two children who resided in public housing, after they were diagnosed with lead poisoning, the public housing agencies performed limited lead testing of the associated units in the public housing properties and provided documentation showing that the units more than likely contained lead-based paint.[14] However, since the public housing properties had been built after 1977, HUD's requirements for a thorough environmental

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[11] Public housing agencies' public housing programs, collectively, consists of more than 7,000 developments.

[12] Exemptions from the inspection requirements included units built after 1977, zero-bedroom dwelling units, and housing for the elderly or a residential property designated exclusively for persons with disabilities, except if a child less than age 6 years of age resides or is expected to reside in the dwelling unit.

[13] An elevated blood lead level of 5 micrograms per deciliter of blood is a level below the required intervention by HUD's regulations; however, action could still be required based on State and local requirements. In 2017, HUD modified its regulations and adopted the elevated blood lead level (instead of the EIBLL) as the new level requiring intervention.

[14] The inspections for both housing units included a dust swab test, which identified the presence of some lead. However, the results determined that the allowable lead content was within the acceptable limit.

evaluation,[15] abatement of lead hazards, or relocation of the households did not apply. For the child residing in housing assisted under the Housing Choice Voucher program, testing for lead-based paint was not performed or required.

HUD Lacked Adequate Policies, Procedures, and Controls
HUD lacked adequate policies, procedures, and controls for monitoring public housing agencies for compliance with its lead requirements. Specifically, it did not ensure that its field offices had policies and procedures for monitoring public housing agencies for compliance with its reporting and remediation requirements. In addition, HUD's Office of Field Operations did not reconcile or validate the data received by the field offices to ensure consistency in reporting.

Further, HUD did not establish policies and procedures for public housing agencies to report a child with an EIBLL who resided in a unit assisted under its Housing Choice Voucher program to ensure that it did not pay assistance for unsafe housing units. HUD relied on the public housing agencies and the owners of the assisted housing units to comply with its lead requirements without providing adequate oversight. It also did not ensure that it actively followed up with public housing agencies that had not provided evidence of required lead-based paint inspections, nor had HUD established procedures for reviewing the required lead-based paint inspections for sufficiency. It also failed to determine the risk of lead exposure in children under 6 years of age residing in public housing or assisted housing built after 1977 as housing built after that date was considered to be lead free and was not included a part of target housing in the requirements of 24 CFR Part 35.[16]

HUD Had Revised Its Policies and Procedures for Lead-Based Paint Oversight
In February 2017, HUD updated the requirements of 24 CFR Part 35 and implemented new oversight measures[17] in conjunction with the updates. The changes addressed many of the deficiencies identified during the audit. Changes to 24 CFR Part 35 included

- adopting the elevated blood lead levels published by the U.S Department of Health and Human Services of 5 micrograms per deciliter of blood,
- requiring the reporting of elevated blood lead level cases in both the public and assisted housing,

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[15] According to HUD's Guidelines for Evaluation and Control of Lead-Based Paint Hazards in Housing, lead paint hazard evaluations for children with environmental intervention blood lead levels should include a laboratory analysis of paint chip samples or the use of a portable XRF lead-based paint analyzer. However, these additional tests were not required for properties built after 1977.

[16] Target housing was defined by Congress as any housing constructed before 1978, except housing for the elderly or persons with disabilities or any zero-bedroom dwelling (unless any child who is less than 6 years of age resides or is expected to reside in such housing) as part of the Residential Lead-Based Paint Hazard Reduction Act of 1992. Therefore, the definition of target housing was not determined by HUD.

[17] These changes were made and enacted after the scope of our audit and were not a result of the audit. Because these changes were recently enacted and HUD was still in the process of implementing new oversight measures, we were not able to evaluate the implementation of the changes.

- implementing a system to track and provide oversight of public housing agencies that report cases involving children with elevated blood lead levels, [18] and
- performing quality reviews of lead-based paint assessments.

Conclusion
HUD lacked adequate policies, procedures, and controls for monitoring public housing agencies for compliance with its lead requirements. It also failed to determine the risk of lead exposure to children under the age of 6 in public housing or assisted housing built after 1977. As a result, HUD lacked assurance that public housing agencies properly identified and mitigated lead hazards, thus increasing the potential of exposing children to lead poisoning due to unsafe living conditions.

Recommendations
We recommend that the General Deputy Assistant Secretary for Public and Indian Housing

1A. Obtain documentation from the remaining 55 potential cases (34 cases in the public housing program + 21 cases in the Housing Choice Voucher program) reported by the public housing agencies that failed to provide supporting documentation to determine compliance with HUD's requirements.

1B. Obtain documentation from the remaining 195 potential cases involving children with EIBLLs reported by the public housing agencies (35 reported cases in the public housing program + 160 reported cases in the Housing Choice Voucher program) that we did not review during the audit to determine whether the public housing agencies and owners, as applicable, complied with HUD's requirements or whether action is required under the requirements.

1C. Require the public housing agencies to support that the lead hazards were appropriately abated for the 11 cases (3 public housing program + 8 Housing Choice Voucher program) that lacked adequate clearance reports or lacked documentation showing that the identified lead hazards had been corrected.

1D. Ensure that the owners for the two Housing Choice Voucher program units, in which the families were relocated and abatement was not performed, do not provide housing for families with children under 6 years of age until the lead hazards are abated.

1E. Obtain documentation of a lead-based paint inspection or exemption for the 222 public housing developments that failed to provide evidence of compliance with HUD's lead-based paint inspection requirements.

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[18] Although HUD had implemented a new tracking system, the new tracking system would not show or send notifications when items were due or missing. It also would maintain and track only newly reported cases as of July 2017.

1F. Work with the Office of Lead Hazard Control and Healthy Homes to update HUD's regulations to expand the inspection and abatement requirements of 24 CFR Part 35 to housing completed after 1977 in cases in which a child with an elevated blood lead level is reported.

1G. Implement adequate procedures and controls at HUD's field offices to ensure that requirements of 24 CFR Part 35 are followed by public housing agencies, including monitoring the public housing agencies to ensure that required actions are appropriately completed and performed in a timely manner.

Scope and Methodology

We performed our audit work from April 2017 through March 2018 at the HUD Office of Inspector General's (OIG) offices located in Chicago, IL, Columbus, OH, Detroit, MI, and other locations as appropriate. The audit covered the period January 1, 2014, through December 31, 2016, but was expanded as necessary.

To accomplish our objective, we reviewed

- Applicable laws, HUD regulations, and program requirements, including 42 U.S.C. (United States Code) 1437, 4822, 4851, and 4852; the United States Housing Act of 1937 as amended; HUD's program requirements at 24 CFR Part 35; U.S. Department of Health and Human Services program regulations at 45 CFR Parts 160 and 164; Environmental Protection Agency regulations at 40 CFR 745.227; Notice PIH 2017-13; HUD's program Guidelines for Evaluation and Control of Lead-Based Paint Hazards in Housing; HUD's Compliance Toolkit, Housing Choice Voucher Program; PIH Guidance on the Lead-Safe Housing Rule and Lead Disclosure Rule for Field Office Staff Memorandum dated February 22, 2008.
- Protocol among the Office of Public and Indian Housing/Office of Field Operations, the Office of Field Policy and Management, and the Office of Lead Hazard Control and Healthy Homes.
- HUD's policies and procedures for lead-based paint oversight.
- HUD's records and reports regarding EIBLL reporting and lead-based paint inspections.
- Public housing agency support documentation, including lead-based paint inspection reports, environmental evaluations, and clearance reports.
- Information about public housing agencies and their public housing properties in HUD's systems, such as the Inventory Management System-Public and Indian Housing Information Center.

We also interviewed management and staff from the Centers for Disease Control and Prevention and HUD.

Sampling Information

We sent out survey questionnaires to more than 3,800 public housing agencies regarding known cases involving a child with an EIBLL. We received a response from approximately 2,600 of the more than 3,800 public housing agencies. Of the approximately 2,600 public housing agencies, 28 reported 84 potential cases involving a child with an EIBLL for the public housing program and 78 reported 205 potential cases for the Housing Choice Voucher program.

We requested additional information and documentation for the 84 cases in the public housing program and the 205 cases in the Housing Choice Voucher program. However, after multiple attempts, we received information and documentation for only 50 of the 84 public housing cases (from 24 public housing agencies) and 184 of the 205 Housing Choice Voucher program cases (from 64 public housing agencies).

We randomly selected for review the supporting documentation related to 11 of the 50 public housing cases and 19 of the 184 Housing Choice Voucher program cases and evaluated the support documentation against the relevant criteria to determine whether the actions taken by the public housing agency or owner complied with HUD's requirements or whether additional action may be required under the updated requirements. We chose a random sample due to the uniqueness of the cases and because a 100 percent review of the case files was not feasible since some public housing agencies did not provide requested information, which obstructed our ability to determine a universe. We also reviewed a nonrepresentative sample of an additional 4 public housing cases and 5 Housing Choice Voucher program cases that we considered to be of interest.[19] As a result of our sampling methods, the results cannot be projected.

To achieve our audit objective, we relied in part on information maintained in HUD's Inventory Management System-Public and Indian Housing Information Center. Although we did not perform a detailed assessment of the reliability of the data, we performed a minimal level of testing and found the data to be adequately reliable for our purposes.

We conducted the audit 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 objective(s). We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objective.

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[19] These additional cases were selected based on our knowledge of potential lead hazards and the completion dates of the housing units.

Internal Controls

Internal control is a process adopted by those charged with governance and management, designed to provide reasonable assurance about the achievement of the organization's mission, goals, and objectives with regard to

- effectiveness and efficiency of operations,
- reliability of financial reporting, and
- compliance with applicable laws and regulations.

Internal controls comprise the plans, policies, methods, and procedures used to meet the organization's mission, goals, and objectives. Internal controls include the processes and procedures for planning, organizing, directing, and controlling program operations as well as the systems for measuring, reporting, and monitoring program performance.

Relevant Internal Controls
We determined that the following internal controls were relevant to our audit objective:

- Effectiveness and efficiency of operations – Policies and procedures that management has implemented to reasonably ensure that a program meets its objectives.
- Compliance with applicable laws and regulations – Policies and procedures that management has implemented to reasonably ensure that resource use is consistent with laws and regulations.

We assessed the relevant controls identified above.

A deficiency in internal control exists when the design or operation of a control does not allow management or employees, in the normal course of performing their assigned functions, the reasonable opportunity to prevent, detect, or correct (1) impairments to effectiveness or efficiency of operations, (2) misstatements in financial or performance information, or (3) violations of laws and regulations on a timely basis.

Significant Deficiencies
Based on our review, we believe that the following items are significant deficiencies:

- HUD lacked adequate policies, procedures, and controls for monitoring public housing agencies for compliance with its lead requirements (finding).
- HUD failed to determine the risk of lead exposure for households with children under 6 years of age in public housing or assisted housing built after 1977 (finding).

Appendixes

Appendix A

Ref to OIG Evaluation

Auditee Comments and OIG's Evaluation

U.S. DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
WASHINGTON, DC 20410-5000

ASSISTANT SECRETARY FOR
PUBLIC AND INDIAN HOUSING

May 15, 2018

MEMORANDUM FOR: Kelly Anderson, Regional Inspector General for Audit, SAGA

FROM: Dominique Blom, General Deputy Assistant Secretary, P

SUBJECT: Response to Discussion Draft Audit Report – HUD's Oversight of Lead-Based Paint in Public Housing and Housing Choice Voucher Programs, OIG Audit Report 2018-CH-XXXX

Thank you for the opportunity you provided on May 9, 2018, to review and discuss the subject draft Office of Inspector General (OIG) audit report. I also thank your staff for their professionalism in handling all aspects of this audit. Establishing policies and procedures to ensure housing assisted through the Public Housing or Housing Choice Voucher (HCV) programs is safe and healthy is extremely important to PIH.

Comment 1

The OIG's review focused on the regulations and procedures that were in place prior to the January 13, 2017, amendment to the Lead Safe Housing Rule for the response to children with elevated blood lead levels. The OIG's findings primarily included activities conducted between January 1, 2014, through December 31, 2016.

As I committed in our meeting, PIH will review our current processes to ensure that they address the findings issued in this report, and if not, ensure that they are updated. I will also ensure that PIH staff follow up on all past incidences identified in the OIG's audit, obtain missing documentation, and ensure that any remaining lead hazards are controlled if the unit is still assisted through the Public Housing or Housing Choice Voucher (HCV) programs.

Comment 1

I sincerely appreciate the work of your staff to identify areas where PIH programs can improve its policies, procedures, and oversight. I look forward to working with the OIG to establish management decisions and target completion dates to implement these recommendations.

www.hud.gov espanol.hud.gov

OIG Evaluation of Auditee Comments

Comment 1 We agree that our review focused on the regulations and procedures that were in place before January 13, 2017, and acknowledge that HUD has made significant improvements. We commend HUD on taking action to improve the regulations and oversight for its programs. We look forward to working with HUD during the audit resolution process in regard to any additional oversight that may be needed.

Appendix B

Federal Requirements

United States Code at 42 U.S.C. 4822 requires the Secretary of Housing and Urban Development to establish procedures to eliminate as far as practicable the hazards of lead-based paint poisoning with respect to any existing housing, which may present such hazards and which is covered by an application for mortgage insurance or housing assistance payments under a program administered by the Secretary or otherwise receives more than $5,000 in project-based assistance under a Federal housing program. Beginning on January 1, 1995, such procedures should apply to all such housing that constitutes target housing, as defined in section 4851b of this title, and should provide for appropriate measures to conduct risk assessments, inspections, interim controls, and abatement of lead-based paint hazards. "...(B) periodic risk assessments and interim controls in accordance with a schedule determined by the Secretary, the initial risk assessment of each unit constructed prior to 1960 to be conducted not later than January 1, 1996, and, for units constructed between 1960 and 1978—

(i) not less than 25 percent must be performed by January 1, 1998;

(ii) not less than 50 percent must be performed by January 1, 2000; and

(iii) the remainder must be performed by January 1, 2002."

HUD's regulations at 24 CFR 35.1115(a) state that a lead-based paint inspection must be conducted in all public housing unless a lead-based paint inspection that meets the conditions of subsection 35.165(a) has already been completed. If a lead-based paint inspection was conducted by a lead-based paint inspector who was not certified, the public housing agency should review the quality of the inspection, in accordance with quality control procedures established by HUD, to determine whether the lead-based paint inspection has been properly performed and the results are reliable. Lead-based paint inspection of all housing to which this subpart applies must be completed not later than September 15, 2000.

United States Code at 42 U.S.C. 4851b defines target housing as any housing constructed before 1978, except housing for the elderly or persons with disabilities or any zero-bedroom dwelling (unless any child who is less than 6 years of age resides or is expected to reside in such housing.

United States Code at 42 U.S.C. 1437d(f)(1) states that each contract for contributions for a public housing agency must require that the agency maintain its public housing in a condition that complies with standards, which meet or exceed the housing quality standards established under paragraph (2).

United States Code at 42 U.S.C. 1437d (f) (2) states that the Secretary must establish housing quality standards under this paragraph, which ensure that public housing dwelling units are safe and habitable. Such standards should include requirements relating to habitability, including maintenance, health and sanitation factors, condition, and construction of dwellings.

HUD's regulations at 24 CFR 35.110 define EIBLLs as a confirmed concentration of lead in whole blood equal to or greater than 20 micrograms of lead per deciliter for a single test or 15-19 micrograms of lead per deciliter in two tests taken at least 3 months apart.[20]

HUD's regulations at 24 CFR 35.110 define a lead-based paint hazard as any condition that causes exposure to lead from dust-lead hazards, soil-lead hazards, or lead-based paint that is deteriorated or present in chewable surfaces, friction surfaces, or impact surfaces and that would result in adverse human health effects.

HUD's regulations at 24 CFR 35.115(a) state that subparts B through R of this part do not apply to the following: (1) a residential property for which construction was completed on or after January 1, 1978, or in the case of jurisdictions, which banned the sale or residential use of lead-containing paint before 1978, an earlier date as HUD may designate; (2) a zero-bedroom dwelling unit, including a single-room-occupancy dwelling unit; (3) housing for the elderly or a residential property designated exclusively for persons with disabilities, except this exemption should not apply if a child less than 6 years of age resides or is expected to reside in the dwelling unit (see definitions of "housing for the elderly" and "expected to reside" in 24 CFR 35.110); and (4) residential property found not to have lead-based paint by a lead-based paint inspection conducted in accordance with section35.1320(a). Results of additional test(s) by a certified lead-based paint inspector may be used to confirm or refute a previous finding.

HUD's regulations at 24 CFR 35.1100 state that the purpose of this subpart L is to establish procedures to eliminate as far as practicable lead-based paint hazards in residential property assisted under the U.S. Housing Act of 1937 (42 U.S.C. 1437 *et seq.*) but not including housing assisted under Section 8 of the 1937 Act.

HUD's regulations at 24 CFR 35.1115(a) state that a lead-based paint inspection must be conducted in all public housing unless a lead-based paint inspection that meets the conditions of section 35.165(a) has already been completed. Lead-based paint inspection of all housing to which this subpart applies should be completed not later than September 15, 2000.

HUD's regulations at 24 CFR 35.1120(a) state that each public housing agency must, in accordance with section 35.1325, abate all lead-based paint and lead-based paint hazards identified in the evaluations conducted under 24 CFR 35.1115. The public housing agency should abate lead-based paint and lead-based paint hazard in accordance with 24 CFR 35.1325 during the course of physical improvements conducted under modernization.

HUD's regulations at 24 CFR 35.1120(b) state that in all housing for which abatement of all lead-based paint and lead-based paint hazards required in paragraph (a) of this section has not yet occurred, each public housing agency must conduct interim controls, in accordance with 24 CFR 35.1330, of the lead-based paint hazards identified in the most recent risk assessment.

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[20] The regulations cited in this appendix were those in effect during our audit scope. Users should refer to the current version of the Code of Federal Regulations and should consult with their local HUD office for guidance on implementation of the current regulations.

HUD's regulations at 24 CFR 35.1130(a) state that within 15 days after being notified by a public health department or other medical health care provider that a child of less than 6 years of age living in a public housing development has been identified as having an EIBLL, the public housing agency must complete a risk assessment of the dwelling unit in which the child lived at the time the blood was last sampled and of common areas servicing the dwelling unit, despite the provisions of 24 CFR 35.1115(b). The risk assessment should be conducted in accordance with 24 CFR 35.1320(b) and is considered complete when the public housing agency receives the risk assessment report.

HUD's regulations at 24 CFR 35.1130(c) state that within 30 days after receiving the report of the risk assessment conducted under paragraph (a) of this section or the evaluation from the public health department, the public housing agency must complete the reduction of lead-based paint hazards identified in the risk assessment in accordance with 24 CFR 35.1325 or 24 CFR 35.1330. Hazard reduction is considered complete when clearance is achieved in accordance with 24 CFR 35.1340 and the clearance report states that all lead-based paint hazards identified in the risk assessment have been treated with interim controls or abatement or the local or State health department certifies that lead-based paint hazard reduction is complete.

HUD's regulations at 24 CFR 35.1130(e) state that the public housing agency must report the name and address of a child identified as having an EIBLL to the public health department within 5 working days of being so notified by any other medical health care professional. The public housing agency should also report each known case involving a child with an EIBLL to the HUD field office.

HUD's regulations at 24 CFR 35.1130(f) state that if the risk assessment conducted under paragraph (a) of this section identifies lead-based paint hazards and previous evaluations of the building conducted under section 35.1320 did not identify lead-based paint or lead-based paint hazards, the public housing agency must conduct a risk assessment of other units of the building in accordance with 24 CFR 35.1320(b) and should conduct interim controls of identified hazards in accordance with the schedule provided in 24 CFR 35.1120(c).

PIH Guidance on the Lead-Safe Housing Rule and Lead Disclosure Rule for Field Office Staff memorandum dated February 22, 2008, section 6.2, states that additionally, for the public housing program only, public housing agencies are required to report to the HUD field office each known case involving a child with an EIBLL (section 35.1130(e)). Although the regulations do not specify a period for action, information should be sent promptly. Field office staff should determine a protocol for collecting, processing, tracking, and responding to these notifications. Appendix 2 contains a sample discussion guide that field office staff may use when following up with public housing agencies that have reported an EIBLL child. The field office should retain any documentation verifying the followup with public housing agencies consistent with records retention policies.

HUD's regulations at 24 CFR 35.1200(a) state that the purpose of this subpart M is to establish procedures to eliminate as far as practicable lead-based paint hazards in housing occupied by families receiving tenant-based rental assistance including the Section 8 Housing Choice Voucher program.

HUD's regulations at 24 CFR 35.1225(a) state that within 15 days after being notified by a public health department or other medical health care provider that a child of less than 6 years of age living in an assisted dwelling unit has been identified as having an EIBLL, the designated party must complete a risk assessment of the dwelling unit in which the child lived at the time the blood was last sampled and of the common areas servicing the dwelling unit. When the risk assessment is complete, the designated party must immediately provide the report of the risk assessment to the owner of the dwelling unit.

HUD's regulations at 24 CFR 1225(c) state that within 30 days after receiving the risk assessment report from the designated party or the evaluation from the public health department, the owner must complete the reduction of identified lead-based paint hazards in accordance with 24 CFR 35.1325 or 24 CFR 35.1330. Hazard reduction is considered complete when clearance is achieved in accordance with 24 CFR 35.1340 and the clearance report states that all lead-based paint hazards identified in the risk assessment have been treated with interim controls or abatement or when the public health department certifies that the lead-based paint hazard reduction is complete. If the owner does not complete the hazard reduction required by this section, the dwelling unit is in violation of housing quality standards.

HUD's regulations at 24 CFR 35.1330 state that interim controls of lead-based paint hazards include paint stabilization of deteriorated paint, treatments for friction and impact surfaces where levels of lead dust are above the levels specified in 24 CFR 35.1320, dust control, and lead-contaminated soil control. Paragraph (a)(1) states that only those interim control methods identified as acceptable methods in a current risk assessment report should be used to control identified hazards.

HUD's regulations at 24 CFR 35.1340 (b)(2) state, "(i) Clearance examinations should include a visual assessment, dust sampling, submission of samples for analysis for lead in dust, interpretation of sampling results, and preparation of a report."

HUD's regulations at 24 CFR 35.1340(c) state that when clearance is required, the designated party should ensure that a clearance report is prepared that provides documentation of the hazard reduction or maintenance activity as well as the clearance examination. When abatement is performed, the report should be an abatement report in accordance with 40 CFR 745.227(e)(10). When another hazard reduction or maintenance activity requiring a clearance report is preformed, the report should include the following information: "(1) The address of the residential property and, if only part of a multifamily property is affected, the specific dwelling units and common areas affected. (2) the following information on the clearance examination: (i) The date(s) of the clearance examination; (ii) The name, address, and signature of each person performing the clearance examination, including certification number; (iii) The results of the visual assessment for the presence of deteriorated paint and visible dust, debris, residue, or paint chips; (iv) The results of the analysis of dust samples in micrograms per square foot, by location of sample; and (v)The name and address of each laboratory that conducted the analysis of the dust samples, including the identification number for each laboratory recognized by the Environmental Protection Agency under section 505(b) of the Toxic Substances Control Act. (3) The following information on the hazard reduction or maintenance activity for which clearance

was performed: (i) The start and completion dates of the hazard reduction or maintenance activity; (ii) The name and address of each firm or organization conducting the hazard reduction or maintenance activity and the name of each supervisor assigned; (iii) A detailed written description of the hazard reduction or maintenance activity, including the methods used, locations of exterior surfaces, interior rooms, common areas, and/or components where the hazard reduction activity occurred, and any suggested monitoring of encapsulants or enclosures; and (iv) If soil hazards were reduced, a detailed description of the hazard reduction activity and the method(s) used."

Environmental Protection Agency regulations at 40 CFR 745.227(e)10 state that an abatement report must be prepared by a certified supervisor or project designer. The abatement report should include the following information: "(i) Start and completion dates of abatement. (ii) The name and address of each certified firm conducting the abatement and the name of each supervisor assigned to the abatement project. (iii) The occupant protection plan prepared pursuant to paragraph (e)(5) of this section. (iv) The name, address, and signature of each certified risk assessor or inspector conducting clearance sampling and the date of clearance testing. (v) The results of clearance testing and all soil analyses (if applicable) and the name of each recognized laboratory that conducted the analyses. (vi) A detailed written description of the abatement, including abatement methods used, locations of rooms and/ or components where abatement occurred, reason for selecting particular abatement methods for each component, and any suggested monitoring of encapsulants or enclosures."

According to chapter 5, section II.F.2, of HUD's Guidelines for Evaluation and Control of Lead-Based Paint Hazards in Housing, lead paint hazard evaluations for children with EIBLLs should include a laboratory analysis of paint chip samples or the use of a portable XRF lead-based paint analyzer.

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United States House Financial Services Subcommittee on Housing and Insurance
Oversight of the Federal Government's Approach to Lead-Based Paint and Mold Remediation in Public and Subsidized Housing
June 26, 2018

Testimony of

Karen McKeown, RN, MSN
State Health Officer
Wisconsin Department of Health Services

Chairman Duffy, Ranking Member Cleaver, and distinguished subcommittee members: Thank you for the opportunity to appear before the House Financial Subcommittee on Housing and Insurance today to discuss the need to include public health in preparing for and responding to the consequences of lead and mold in homes. Our homes are supposed to be safe places where we can find refuge from harm, and yet too often children and adults in the U.S. are still exposed to high levels of lead, and asthma triggers such as mold, in their homes. Per the request of the Chairman, the focus of my testimony today is on lead poisoning and the role of public health.

Lead Poisoning is a Serious Problem

Although there have been significant reductions in lead-poisoned children over the years, far too many children are still poisoned by lead today (see Figure 1 on page 8). In 2013, CDC estimated there were an estimated 535,000 children ages 1 to 5 with elevated blood lead levels (above 5 µg/dL, the CDC reference value) in the United States. In 2015 (the most recent year for which national data are available), among states reporting to CDC, 3.3% of children tested had a blood lead level of 5 µg/dL or more. There is no "safe limit" for lead exposure.

Wisconsin's children are affected by lead poisoning in greater numbers than in many other states. (The same is true for Midwestern states generally.) Since 1996, more than 200,000 children have been identified with lead poisoning in Wisconsin, and in 2016 alone, there were more than 4,000 children identified with a blood lead level equal to or greater than 5 µg/dL, or 5% of children tested. A review of data from 1996-2005 found that 90% of lead-poisoned children in Wisconsin live in homes built before 1950, which are more likely to contain lead-based paint.

Even within Wisconsin, some communities and groups are more affected by lead poisoning than others. For example, Medicaid-enrolled children are three times more likely to be lead poisoned than non-Medicaid-enrolled children. Minority populations, and especially African American and Hispanic children, are more likely to be lead poisoned. Children from low-income families are at greater risk for lead poisoning, often because they have more limited housing options.

Among Wisconsin communities, the rate of lead poisoning is highest in the City of Milwaukee. In 2016, 10.8% of Milwaukee children tested were found to have lead poisoning, compared to 5% statewide. While only 27% of Wisconsin children tested for lead poisoning lived in Milwaukee, 59% of lead-poisoned children statewide lived in Milwaukee. Within Milwaukee, lead poisoning is most concentrated in areas with a high proportion of older housing and low-income families.

Why is lead dangerous? Lead is a poison that affects virtually every system in the body. It is particularly harmful to the developing brain and nervous system of fetuses and young children.[i] A child's blood lead level tends to be the highest between 18 and 36 months of age due to frequent hand-to-mouth behavior and increase in mobility, which makes lead-containing dust more accessible to the child. Moreover, young children absorb lead more readily than adults. Lead poisoning in young children can have profound and lasting consequences including lower IQ, speech delays, and hearing loss. Children may also develop behavioral problems, including aggression, hyperactivity, and poor impulse control leading to misbehaviors, skipping school, teen pregnancy and other risky behaviors.[ii] Lead is also known to pass from the mother to fetus and can cause pregnancy-related complications and affect early childhood development. [iii]

Why are blood lead levels elevated? While there can be multiple causes of lead poisoning in children, including water, toys, cosmetics, and food, lead-based paint remains the major source of high-dose lead poisoning in the United States.[iv] According to CDC, approximately 24 million homes in the United States contain deteriorated leaded paint and elevated levels of lead-contaminated house dust, of which 4 million are home to young children.[v] In Wisconsin, and most other northern states, a significant proportion of the housing was built prior to the 1940s, and during that timeframe, lead was a common component of paint. Lead in consumer paint was banned beginning in 1978, but any home built before 1978 potentially contains lead-based paint. In Wisconsin, most lead-poisoned children are exposed to lead from the deteriorating paint in their own homes.

Lead Poisoning Can be Prevented

Primary prevention. Primary prevention consists of preventing an adverse event from ever happening in the first place. Lead poisoning is entirely preventable but requires resources to address the lead hazards in home environments. Interim controls are used to temporarily reduce lead hazards in a home and include actions such as paint stabilization and covering painted surfaces like stairs and floors with carpeting or runners. Interim controls generally are not expected to last more than a few weeks to a few years without additional work to maintain conditions. Lead abatement, on the other hand, permanently removes, encloses or encapsulates lead-based paint hazards; this solution makes a home safe today and well into the future.

The lead-safe renovation of an older home makes it a safer environment. In particular, the lead-safe replacement of old windows, siding over old painted siding with vinyl or aluminum, and repair or replacement of roofs or other sources of water intrusion go a long way to making older housing safer for children. Lead-safe renovation requires that contractors buy in to their crucial role in providing a safer environment, including the need to contain their work areas, properly handle dust and debris, and do meticulous cleaning of work areas.

Secondary prevention. Secondary prevention involves identifying affected people early, before a problem becomes severe. The only way to know if a child is lead poisoned is through a blood

test to determine the level of lead in their blood, so blood screening is the first step in secondary prevention. Wisconsin's two-pronged strategy for blood lead testing includes universal testing in the two highest-risk cities, Milwaukee and Racine, and targeted testing of high-risk children in all other parts of the state. High-risk children should be tested at 12 months and 24 months of age so that elevated blood lead levels are detected early and interventions can be conducted to reduce the child's blood lead level.

Despite state screening guidance and federal Medicaid testing requirements, both in Wisconsin and nationally, many children at high risk for lead exposure are never tested for lead. This means that many lead-poisoned children are never identified and do not receive interventions to remove the source(s) of exposure, thereby increasing their risk for the myriad health, educational, and social problems associated with lead exposure.

To increase testing of Medicaid-enrolled children, Wisconsin distributed Medicaid provider report cards to provide direct feedback to physicians regarding their blood lead testing practices relative to the federal testing requirements and notify them of untested children under their care. Wisconsin has also encouraged WIC agencies to help fill the gap by providing blood lead testing, and as many as one-third of blood tests are now done by WIC agencies. Medical providers can access the web-based Wisconsin Blood Lead Registry to check a child's blood lead testing history online during an office visit, regardless of who provided the tests. The Lead Registry helps providers easily identify children who have not yet been tested or are due for another test.

Unlike other diseases for which medical treatments are effective, lead poisoning requires prompt action not only by medical professionals, but by public health, families, property owners and construction trades to reduce hazards from lead-based paint. All children with a blood lead level greater than 5 μg/dL should receive some form of intervention to reduce their exposure to lead, although the intensity and depth of intervention varies depending on the blood lead level, as well as state and local policies and resources. Priority for public health intervention is most often given to children with the highest blood lead levels. Public health interventions include in-home education by a public health nurse, environmental investigation by a lead risk assessor or hazard investigator, and follow-up blood lead level monitoring.

The most effective treatment for lead exposure is to remove the source(s) of exposure by eliminating the lead hazards within the child's environment. When an environmental investigation identifies a source of lead, the local health department issues work orders to the property owner to address the hazards (typically interim controls or abatement as described above). It is in the best interest of the child if the work to decrease lead hazards is accomplished quickly and is as long-lasting as possible.

When the property owner reports that lead hazard reduction work is completed, the local health department conducts clearance testing to ensure the work was done properly and the dwelling is lead-safe. If the property owner delays in completing orders within the specified time, the local health department can take enforcement actions.

Addressing Lead Poisoning Requires Collaboration

Addressing lead poisoning at the state and local level requires a multifaceted and sustained approach to protect children and families. Successful primary and secondary prevention requires collaboration between multiple federal agencies, state and local governments, and private

partners such as medical providers, homeowners and landlords, and contractors. This work cannot be done by one entity alone and relies upon a system-based integrated approach to addressing this issue. Below please find additional information about the role of specific governmental agencies in supporting this work.

Local Health Departments. In Wisconsin, there is shared responsibility between state and local public health. Local health departments conduct the following activities related to lead:

- Establish and maintain a local surveillance system to track blood lead levels, incidence and prevalence of lead poisoning, and trends in testing; and to identify high-risk populations.
- Conduct timely investigations and interventions for children with lead exposure.
- Maintain a tracking system for children at risk for or diagnosed with lead poisoning that allows for timely follow-up of interventions and referrals.
- Coordinate program efforts with local laboratories and health care providers to ensure timely and accurate reporting of blood lead tests and to ensure that appropriate medical follow-up is provided.
- Analyze data in conjunction with the state health department to determine local trends and effectiveness in lead poisoning prevention and control efforts.

The Wisconsin Department of Health Services (DHS). The Division of Public Health within DHS administers two lead programs, Lead Certification and Accreditation, and the Wisconsin Childhood Lead Poisoning Prevention program. The certification and accreditation program, under EPA authorization and state statute authority, has statewide responsibility for administering and overseeing lead-safe work in the state by certifying companies and individuals, approving and overseeing accredited training courses, inspecting work sites and monitoring hazard investigation work and investigating tips and complaints relating to lead hazards in housing and child-occupied facilities.

The Wisconsin Childhood Lead Poisoning Prevention Program establishes and maintains a statewide surveillance system to track blood lead levels, incidence and prevalence of lead poisoning, and trends in testing; and to identify high-risk populations. The state program maintains a tracking system of children diagnosed with lead poisoning that allows for timely follow-up of interventions and referrals, and oversees and monitors the activities of local health departments to ensure they are conducting timely investigations and interventions for children with lead exposure. The state childhood lead program also coordinates program efforts with local laboratories and health care providers to ensure timely and accurate reporting of blood lead tests and to ensure that appropriate medical follow-up is provided. The state program also analyzes statewide data to determine trends and effectiveness in lead poisoning prevention and control efforts, and provides data on targeted local areas to assist local health departments to analyze conditions in their jurisdictions.

Centers for Disease Control and Prevention (CDC). Funding from CDC supports childhood lead poisoning prevention activities, including surveillance and targeted population-based interventions. States receiving this funding are expected to have processes to identify lead-exposed children and link them to recommended services. Funded states must work closely with a variety of partners to ensure that a comprehensive system of referral, follow-up and evaluation is in place for lead-exposed children.

Prior to 2011, Wisconsin received $1.2-1.3 million annually to support this work. In 2011, funding was decreased to $600,000, and from 2012 to 2014, CDC did not award any funding for

this work. Since September 2014, CDC funding to support this work in Wisconsin has been approximately $400,000 annually. During the period from 2012 to 2014, the Department of Health Services was able to allocate state funds to keep some program activities going, but other activities had to be scaled back or eliminated.

It is important to note that while funding is down, our goals and expectations related to identifying and treating lead exposure in children have risen. Since 2012, CDC has recommended follow-up for children with blood lead levels of 5 μg/dL (previously the level had been 10 μg/dL). Recognizing that there is no safe level of lead in a child's blood stream, we welcome the opportunity to address children with the lower blood lead levels. At the same time, the change created a significant increase in children requiring follow-up compared to the previous five years (see Figure 2 on page 8). In short, our work load is up because our standards are higher, and we will continue to work aggressively to protect the health and safety of all Wisconsin children.

Environmental Protection Agency (EPA). EPA addresses lead contamination and resulting hazards by issuing and enforcing regulations to address lead in paint, dust and soil; lead in the air; lead in the water; and disposal of lead waste. EPA also supports state lead certification and accreditation programs through grants.

Wisconsin is an EPA authorized state. This means that under EPA authorization, Wisconsin regulates lead abatement, lead hazard investigation, and lead-safe renovation by certifying companies and individuals working in these areas, accrediting the training courses these workers are required to take, and enforcing the certification and lead-safe work practices requirements in our state. EPA sets rules that govern lead renovation and abatement work, and our rules must be at least as stringent as theirs.

U.S. Department of Housing and Urban Development (HUD). HUD funding has historically been the primary federal funding source for lead abatement work The Office of Lead Hazard Control and Healthy Homes provides funds to state and local governments to develop cost-effective ways to reduce lead-based paint hazards. In addition, the office enforces HUD's lead-based paint regulations, provides public outreach and technical assistance, and conducts technical studies to help protect children and their families from health and safety hazards in the home. These resources have been important because although the responsibility for addressing lead hazards generally starts with homeowners and landlords, the greatest remaining lead hazards are in older housing areas where owners have limited resources and rental properties in low rent areas.

Wisconsin communities and state agencies have used these HUD grants to reduce lead hazards. The Wisconsin Department of Health Services has at times applied directly for these grants. More often, though, we have supported local communities in their applications by providing data specific to the area to be covered by the grant; writing letters of support; and providing consultation on and reviews of their applications, especially their grant work plans and background information.

Importantly, most of these grants have gone to communities with the greatest need and with racial and ethnic populations who are disproportionately affected by lead poisoning. Kenosha was awarded a 3-year, $3.3 million HUD grant in 2017, which is implemented in the cities of Racine and Kenosha (Kenosha has had multiple grants over the years). Milwaukee was awarded

a 3-year, $3.4 million HUD grant in 2016 (Milwaukee has had multiple grants over the years). Previous recipients include the State of Wisconsin (Department of Administration, Department of Commerce and Department of Health Services), City of Sheboygan, Rock County, City of Waukesha, and Social Development Commission (Milwaukee).

HUD's Lead Safe Housing Rule applies to all target housing that is federally owned or receiving federal assistance. This rule covers public housing authorities managing the public housing, housing choice voucher, project-based voucher, and project-based rental assistance programs. In 2017, HUD published a new rule lowering the Department's threshold of lead in the child's blood to match the more protective guidance of CDC, lowering the level from 20 µg/dL of blood to 5 µg/dL. This important change to HUD's Lead Safe Housing Rule will allow for a faster response when a young child (specifically, under six years old) is exposed to lead-based paint hazards in their HUD-assisted homes, a key component of a secondary prevention strategy.[vi]

The June 14, 2018 HUD Inspector General report entitled "HUD's Oversight of Lead-Based Paint in Public and Housing Choice Voucher Programs," highlighted key findings around lack of lead monitoring and compliance by public housing agencies, and found that HUD failed to determine the risk of lead exposure for households with children under 6 years of age in public housing or assisted housing built after 1977. Implementation of the General Deputy Assistant Secretary for Public and Indian Housing recommendations will be a positive step to reducing lead exposure and poisoning. The recommendations are to update HUD's regulations to expand the inspection and abatement requirements of 24 CFR (Code of Federal Regulations) Part 35 to housing built after 1977 in cases in which a child with an elevated blood lead level is reported and to implement adequate procedures and controls to ensure that public housing agencies comply with the lead-safe requirements.

Centers for Medicare and Medicaid Services (CMS). Medicaid can provide resources for early identification, treatment, and case management of children with elevated blood lead levels. In Wisconsin, health care providers and public health agencies can bill for blood lead testing, laboratory analysis, educational home visits, initial and follow-up environmental investigations, and targeted case management.

In the 2017-2019 Biennial Budget, Governor Walker increased the Medicaid rates for these activities so that local health departments can now access more than $1200 per child to manage elevated lead cases; this represents more than a six-fold increase from the amount previously available. In addition to funding direct services, the Division of Medicaid Services (DMS) in Wisconsin has worked closely with the Division of Public Health (DPH) (both within the Wisconsin Department of Health Services) to find ways to address lead poisoning. The two divisions have a data sharing agreement which allows for the linkage of data to evaluate and improve program effectiveness, such as determining the extent to which Medicaid children are tested for lead and the extent to which they are affected by lead poisoning.

Conclusion

Lead poisoning is a serious issue with potentially profound consequences for affected children. It disproportionately affects communities that also struggle with other challenges, such as poverty, unemployment, and housing needs. Indeed, therein lies the heart of the tragedy. Education is often the best route for a child to make his or her way to a brighter future. As a result of lead poisoning, as many as 10% of children in communities like Milwaukee may find it much more

difficult to achieve that dream. Eliminating childhood lead exposure from homes will pay social and educational dividends in the future.

Preventing and addressing lead poisoning will continue to require all levels of government working together with partners in the private sector. Improved systems for collaboration are needed to ensure children do not fall through the cracks. And more resources for renovation and abatement are necessary so we can begin to definitively remedy the problem. Our children should not continue to suffer from this preventable condition.

In closing, I want to thank the members of this Committee once again for your commitment to improving the health, safety, and well-being of our nation. We know that much more can and must be done to protect our nation's health as we continually anticipate and prepare for myriad public health threats. We welcome the opportunity to continue to work with you in pursuit of that goal. Thank you for your attention. I will be pleased to answer any questions you may have.

Figure 1: Children Under Age 6, Number Lead Poisoned, Wisconsin, 1996 - 2016.

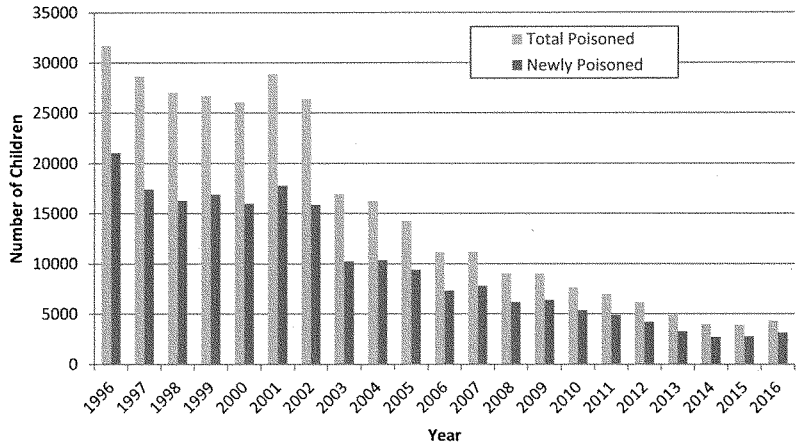
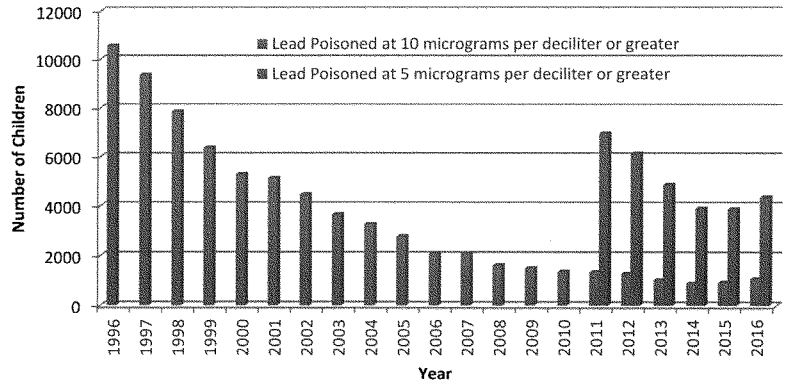


Figure 2: Children Under Age 6, Number Lead Poisoned, Wisconsin, 1996 - 2016, by Blood Lead Level Definition.



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TESTIMONY OF

JEFFERY K. PATTERSON

Chief Executive Officer
Cuyahoga Metropolitan Housing Authority
Cleveland, Ohio

ON BEHALF OF THE

COUNCIL OF LARGE PUBLIC HOUSING AUTHORITIES

BEFORE THE

UNITED STATES HOUSE OF REPRESENTATIVES

SUBCOMMITTEE ON HOUSING AND INSURANCE

COMMITTEE ON FINANCIAL SERVICES

JUNE 26, 2018

Chairman Duffy, Ranking Member Cleaver and Members of the Subcommittee, my name is Jeffery Patterson and I am Vice President and Board Member of the Council of Large Public Housing Authorities (CLPHA), and Chief Executive Officer of the Cuyahoga Metropolitan Housing Authority in Cleveland, Ohio. I am here today representing CLPHA, which is a national, non-profit membership organization that works to strengthen neighborhoods and improve lives through advocacy, research, policy analysis, and public education.

CLPHA's members comprise over 70 of the largest housing authorities (HAs), located in most major metropolitan areas in the United States. The agencies act as both housing providers and community developers while effectively serving over one million households, managing almost half of the nation's multi-billion dollar public housing stock, and administering about one quarter of the Section 8 Housing Choice Voucher program.

CLPHA appreciates the subcommittee holding this hearing today, looking at one of the most sensitive issues many housing authorities face on an ongoing basis. That is, how do we provide the best housing environment for our residents while combatting health risk hazards in a very challenging time with regards to adequate resources to address overwhelming needs.

We know the nation's investment of more than $100 billion in the public housing portfolio is at risk due to a lack of sufficient funding for capital improvement and replacement needs, as well as the burdensome cost and effect of excessive federal regulation. Consequently, transformation of the public housing portfolio to a more stable ongoing funding platform, such as the Rental Assistance Demonstration with Section 8, coupled with infrastructure spending, such as tax credits, capital funds, etc., is necessary to preserve public housing as a viable resource.

Providing a safe, secure, suitable, accessible and healthy housing environment is critical to helping our families, seniors, disabled persons and other vulnerable populations live with dignity and respect. Environmental and health hazards posed by mold, lead-based paint, allergens, carbon monoxide, pesticides, radon and similar dangers threaten the ability of housing providers to create safe spaces for our tenants and others, in order to enhance and improve the quality of life for the people we serve.

My testimony will focus on several program areas that Congress should focus on to help correct the conditions and risks posed by these environmental health hazards.

Public Housing Capital Fund

The Public Housing Capital Fund is the dedicated source of annual federal funding available to housing authorities to make rehabilitation and modernization improvements to public housing. However, for over a decade, capital fund appropriations have steeply declined, while ongoing annual accrual needs continue to be unmet. Since 2010 ongoing accrual needs are estimated at a minimum of $4 billion annually, and the capital needs backlog—estimated eight years ago by HUD at $26 billion—and estimated more recently by industry stakeholders at over $50 billion, continues to grow.

This chronic underfunding of the Capital Fund contributes to a deteriorating housing stock, greatly diminished health and other life outcomes for public housing residents, *especially children and seniors*, and the loss of approximately 10,000 public housing units per year. Chronic underfunding has long-term

consequences for the housing stock, as it means repairs, maintenance, rehabilitation and renovation of public housing units is delayed, deferred or simply cancelled.

It is the Capital Fund that most housing authorities rely on to address the conditions of health hazard abatement, whether we are talking about treating mold, removing asbestos, or eradicating lead-based paint hazards. The Capital Fund is our primary source of funding to mitigate these hazards and continual underfunding year-after-year may be considered short-sighted and counter-productive—especially since it is preventable.

At our PHA, despite a robust Modernization and Development strategy, some of our properties date to the 1930s with approximately 3000 units that contain Lead-based Paint. While we maintain the paint conditions in these units through a process of inspection and repair, these measures are temporary and deteriorate with normal activities of life – leading to an endless cycle of inspection/repair. The costs to completely remove the Lead-based Paint from housing– thereby eradicating the exposure of infants and children to these toxins -- exceed the annual Capital Fund allocation for our PHA many times over.

Last year Congress provided the Capital Fund with its largest boost in funding in any one fiscal year, $800 million. While a significant amount by most accounts, and gratefully received by housing authorities, it is still wholly inadequate when compared against the need.

HUD OIG Report

In your invitation letter to testify, you asked me to comment on the June 14, 2018 HUD Inspector General (IG) report entitled "HUD's Oversight of Lead-Based Paint in Public and Housing Choice Voucher Programs". According to the IG audit report, it found that HUD lacked adequate oversight of lead-based paint reporting and remediation in its public housing and Housing Choice Voucher programs. The audit identified several weaknesses in HUD's reporting requirements, establishment of policies and procedures, and inspection protocols.

While I cannot speak to what HUD did or did not do in regards to their oversight and reporting requirements, I can say that housing authorities are endeavoring, under oftentimes difficult circumstances and very limited resources, to meet the many obligations, responsibilities, and conditions required of them when it comes to mitigating lead-based paint hazards in their developments.

Rental Assistance Demonstration and Low Income Housing Tax Credit

The Rental Assistance Demonstration or "RAD" program is a preservation program Congress created in 2012 focused on protecting and improving the nation's at-risk public housing stock. RAD allows housing authorities to leverage private capital through a variety of proven financing tools as a key solution in tackling the multi-billion capital needs backlog in public housing. CLPHA is aware that in the current environment Congress is unlikely to appropriate sufficient funds to tackle the entire public housing backlog, and public-private partnerships are necessary to begin whittling down the existing capital needs.

It is not widely known that for over 20 years, as federal appropriations for public housing continually diminished, and long before RAD, housing authorities began to use private equity through the Low Income Housing Tax Credit (LIHTC) more and more often to fill the gap. Housing authorities serve many of the poorest families in their communities with deep rental subsidies through either public housing or vouchers.

Thus, by combining LIHTCs with rental subsidies, housing authorities are able to target LIHTCs to families with the most severe affordable housing needs through housing authority preservation projects.

Coupled with LIHTC—now the nation's primary affordable housing production and rehabilitation program—RAD has caused a fundamental shift in the ability of housing authorities to finance the rehabilitation, renovation or new construction of affordable housing. Currently, over 96,000 public housing RAD units have closed, leveraging over $4.4 billion in LIHTC funding, with HUD receiving another 100,000 units in application.

As housing authorities reposition and recapitalize their housing stock in an effort to acquire the capital dollars to rehabilitate housing units, the needs of the tenants are foremost in mind and chief among them are the resources and steps necessary to tackle the problems caused by health hazards such as mold, lead-based paint and asbestos and others.

Deteriorating and unsafe units due to health hazards are a major contributing factor for some housing authorities considering the move to RAD. Oftentimes, the project-wide renovations made possible by RAD, not only correct health hazard deficiencies and obsolescence—such as upgrading systems, providing for energy efficiency, and adding or improving community spaces—but result in a greater sense of community, well-being, and health outcomes among residents.

Moving to Work

The Moving to Work or "MTW" program, authorized by Congress over twenty years ago, has served as a public housing laboratory for innovation and flexibility in program administration and utilization of program funding to meet local needs. Many of the innovations developed through MTW have been adopted into legislative and regulatory reforms for all public housing. MTW can be instrumental in helping housing authorities deal with the difficulties posed by health hazards because of the funding and program flexibilities it allows housing authorities to utilize. Given the local decision-making aspect of MTW, housing authorities are able to redirect some of their operating funds and housing vouchers to strategies intended to ameliorate the risks posed by health hazards in their housing developments.

A recent empirical study on *Testing Performance Measures for the MTW Program* was conducted by Abt Associates, a global leader in research, and is the first aggregate data analysis of the performance of the MTW demonstration since the program began. In regards to the capital needs of MTW agencies, some of its findings include:

- **MTW's have higher average inspection scores than non-MTW comparison agencies.** Over 40 percent of MTW agencies have inspection scores of 90 or higher, compared to 21 percent of comparison agencies. The average PHA inspection score for MTW agencies of 83.9, compared to 82.0 for comparison agencies, is a statistically significant difference.
- **MTW agencies have less unmet capital needs.** 76.6 percent of MTW agencies units have unmet capital needs, versus 90.3 percent for units at non-MTW comparison agencies.
- **MTW agencies reported a smaller increase in unmet capital needs.** Over a 5 year period, non-MTW comparison agencies were significantly more likely to report that their unmet capital needs had increased (73 percent), versus only 26% of MTW agencies who reported that their unmet capital needs increased.

- **MTW agencies have higher average preservation rates.** Over a 10 year period, MTW agencies reported preserving an average of 200 units, compared to 126 units preserved for non-MTW comparison agencies.

Healthy Homes

The hearing today is timely because June is Healthy Homes Month. The HUD Healthy Homes Initiative was created in 1999 to address concerns regarding child environmental health. In the almost two decades of this program, housing authorities and others in the industry have worked diligently together to address health and safety concerns such as mold, lead, allergens, asthma, carbon monoxide, pesticides, and radon in cost-effective ways. Housing authorities have remediated environmental exposures across their housing portfolio, as well as engaged residents in the process by partnering with community-based organizations to provide health education resources. Healthy Homes is a widely popular initiative in that housing authorities are encouraged to work with a diverse array of community health stakeholders and residents to reduce environmental hazards and improve community health.

These initiatives have benefited from robust resident and family engagement, both to identify issues but also to ensure successful implementation. Integrated Pest Control (IPC), for instance, might not seem like a "people" project so much as a property management issue, but housing authorities have been able to successfully curb pest issues by working with their residents.

In launching IPC efforts, housing authorities engage residents about their families' exposure to pests in an effort to address the issue of pests head on – exposure to which can lead to issues such as asthma – and ensure that remediation efforts are effective. Having a trusted relationship and feedback loop between the housing authority and residents is critical to its success since residents follow up throughout the implementation as they observe changes. Initial and ongoing education efforts emphasize ways households can effectively limit their exposure to pests such as trash removal, and proper food containment help bolster other efforts such as plumbing repair and sealing of entry points.

Health, Housing and Systems Alignment

Public housing authorities are engaged in a wide array of local partnerships across sectors aimed at improving residents' health, wellbeing, and self-sufficiency. CLPHA has made significant investments in cultivating and encouraging cross-sector partnerships between housing authorities and trusted partners in health, education, and other sectors to improve life outcomes. We recognize that housing authorities can be powerful conveners of these various systems that serve the most vulnerable among us, especially when given adequate resources to do so. In addition to Healthy Homes, housing authorities work with essential health and social service providers who serve residents' primary and specialty health needs, in essence an extension of the continuum of preventive and environmental health.

Simply put, these systems – housing, public health, healthcare, schools – work together because they serve similar if not the same constituencies, and they should. We think this type of collaboration is not only promising but essential. We urge the Committee to encourage greater interagency collaboration between HUD, HHS, EPA, and others that could better leverage their respective resources and expertise. Breaking down funding silos in addition to service silos could provide useful incentives for different agencies to work together on complex – and therefore costly – matters that concern them all. These systems are seeking ways to work together as they see the intersections between health and housing, housing and education,

and education and health. More concrete pathways for partnership at the federal level could spur significant cross-sector innovation at the local level, with housing authorities as leaders.

Recent Congressional Appropriation Actions

Congress has shown great interest in the impact that lead exposure in housing, in particular, has had on children and their development. The recent fiscal year 2019 committee report by the House appropriators calls for stringent inspections and inspection standards within federally assisted housing, including public housing and the housing choice voucher program. According to the report, *"Visual lead inspections have proven at times insufficient and more rigorous standards such as requiring risk assessments prior to a family moving into a home should be considered where appropriate to ensure that children living in federally-assisted homes are protected from lead poisoning."*

While we do not disagree that strict standards should be adhered to when conducting inspections—after all lives are at stake—we do not shy away from transparency, accountability and real oversight (not just more rules). However, we would urge that adequate resources must be equally provided to conduct lead inspections and/or risk assessments.

For example, prorating the amount the Public Housing Operating Fund receives, underfunding the Public Housing Capital Fund, and prorating administrative fees for the Housing Choice Voucher program is counter-productive and ill-advised. These are the very programs and resources housing authorities depend upon to inspect, assess, and correct the problems associated with mold, lead-based paint, and other health hazards.

CLPHA is pleased the fiscal year 2019 committee report by the Senate appropriations committee is recommending HUD award $95 million in grants to remediate lead-based paint hazards in low-income housing and neighborhoods with older housing stock. They are paying particular attention to low-income families with young children, and incidences of elevated blood lead levels in children under the age of 6 years old. However, the $95 million is another set-aside under the Housing Choice Voucher program. We strongly urge the funding be authorized and allocated as new monies, rather than placing an additional strain on the housing voucher program already beset with competing demands.

Closing

In closing, with progress there are always new and improved ways of doing things: new programs, improved methods, recent data, better materials, etc.; but, in addition, a fundamental and inescapable truth is that adequate resources are always needed. As my testimony shows, the programs exist, the technical expertise is available, we know what needs to be done and how to do it. What housing authorities and other housing providers lack but desperately need is adequate funding to do what is universally recognized as imperative (regardless of party or political association) providing healthy homes to the families we serve.

Mr. Chairman and members of the committee, we appreciate the increased attention that you and others in Congress are giving to this issue of health hazards in housing. We appreciate your willingness to look for solutions and new ways to address this problem. We ask your help in providing the means. While we recognize you do not control the funding process, yours is an important voice in these matters and your support for adequate resources to eliminate these preventable health hazards is urgently required.

Thank you for the opportunity to testify today.

United States Government Accountability Office

Statement for the Record to the Subcommittee on Housing and Insurance, Committee on Financial Services, House of Representatives

For Release on Delivery
Expected at 10:00 a.m. ET
Tuesday, June 26, 2018

LEAD PAINT IN HOUSING

HUD Should Strengthen Compliance Monitoring and Performance Assessment in its Rental Assistance Programs

Statement for the Record by Daniel Garcia-Diaz, Director, Financial Markets and Community Investment

GAO-18-650T

Chairman Duffy, Ranking Member Cleaver, and Members of the Subcommittee:

I am pleased to submit this statement on lead paint hazards in housing. The Department of Housing and Urban Development (HUD) has an important role in helping prevent childhood lead poisoning because lead paint in housing is the most common source of lead exposure for U.S. children.[1] As you know, lead exposure can cause serious, irreversible cognitive damage that can impair a child for life. When absorbed into the body, especially in young children, lead can damage the brain and nervous system, slow development and growth, and cause learning or behavioral problems. HUD has certain statutory responsibilities related to reducing lead exposure in housing, which include promulgating lead paint regulations for HUD's rental assistance programs.

This statement is based on our June 2018 report.[2] For this work, we focused on HUD's two largest rental assistance programs that serve families with children: the Housing Choice Voucher (voucher) and public housing programs.[3] HUD has taken steps to better address lead paint hazards in housing. However, this statement and our report issued last week identified specific areas where HUD could improve the effectiveness of its efforts to identify and address lead paint hazards and protect children in low-income housing from lifelong health problems.

This statement discusses HUD's efforts to (1) monitor and enforce compliance with lead paint regulations in its rental assistance programs, (2) adopt federal health guidelines and environmental standards for its rental assistance programs, and (3) measure and report on the performance of its lead efforts. For this work, we reviewed HUD documents and data related to its compliance efforts for its rental

[1]Lead paint hazards include any condition that can cause harmful exposure to lead from dust, soil, or paint that is deteriorated or present in accessible, friction, or impact surfaces (e.g., walls, windows, door frames).

[2]GAO, *Lead Paint in Housing: HUD Should Strengthen Grant Processes, Compliance Monitoring, and Performance Assessment,* GAO-18-394 (Washington, D.C.: June 19, 2018).

[3]GAO-18-394. Our June 2018 report on lead paint in housing also includes findings related to our review of HUD's lead grant programs. HUD has had two grant programs that competitively award lead hazard control grants to state and local jurisdictions. The grant programs are intended to help jurisdictions identify and control lead hazards in low-income, private housing where children under age 6 reside or are likely to reside.

assistance programs, performance measures, and reporting. We also interviewed HUD staff. We conducted the work on which this statement is based in accordance with generally accepted government auditing standards. More details on our methodology can be found in our June 2018 report.

HUD Could Take Additional Steps to Monitor Compliance with Lead Paint Regulations

In 2016, HUD began using new tools to monitor how public housing agencies comply with lead paint regulations. For example, in June 2016, HUD began using the Lead-Based Paint Response Tracker database to store information on public housing units and to help HUD field office staff to follow up with public housing agencies (PHA) that have properties missing required lead documentation. However, we found that HUD could further improve its oversight and monitoring efforts.

Our report found that HUD does not have a plan to mitigate and address risks related to noncompliance with lead paint regulations by public housing agencies. We identified several limitations with HUD's monitoring efforts, including reliance on public housing agencies' self-certifying compliance with lead paint regulations and challenges identifying children with elevated blood lead levels. False self-certifications of compliance by some public housing agencies make it essential for HUD to improve its current monitoring approach. In addition, we found that the voucher program does not have readily available data on housing units' physical condition and compliance with lead paint regulations because data on the roughly 2.5 million units in the program are kept at the PHA level.[4] Additionally, our report found that HUD does not have detailed procedures to address public housing agency noncompliance with lead paint regulations or to determine when enforcement decisions may be needed.

We recommended that HUD establish a plan to mitigate and address risks within HUD's lead paint compliance monitoring processes. Additionally, in the report we recommended HUD develop and document procedures to ensure that HUD staff take consistent and timely steps to address issues of public housing agency noncompliance with lead paint

[4]According to Office of Public and Indian Housing (PIH) staff, HUD plans to adopt a new system for the voucher program that will include standardized, electronic data for voucher units. PIH staff said the new system (Uniform Physical Condition Standards for Vouchers Protocol) will allow greater oversight and provide HUD the ability to conduct data analysis for voucher units.

regulations. HUD agreed with these recommendations. By developing such a plan and detailed procedures to address noncompliance with lead paint regulations, we believe HUD could strengthen oversight of public housing agencies and better keep public housing agencies accountable in a consistent and timely manner.

HUD's Lead Inspection Standard is Less Stringent for the Voucher Program

HUD's Lead Safe Housing Rule requires a stricter lead inspection standard for public housing than for voucher units.[5] As a result, children living in voucher units may receive less protection from lead paint hazards than children living in public housing units. According to HUD staff, HUD does not have the authority to require the more stringent inspection in the voucher program. While HUD has acknowledged that moving to a stricter inspection standard for voucher units would provide greater assurance that these units are lead-safe and expressed its plan to support legislative change to authorize it to impose a more stringent inspection standard, HUD has not requested authority from Congress to amend its inspection standard for the voucher program.

In our June 2018 report, we originally recommended that HUD should request authority from Congress to use the stricter lead inspection standard in the voucher program. HUD disagreed that it should request authority to use a specific, stricter standard, noting that it would need to conduct and evaluate the results of a statistically rigorous study on the impacts of requiring a lead risk assessment versus a visual assessment, such as the impact on leasing times and the availability of housing for low-income families. We acknowledged that the results of such a study might support a range of options. Therefore, we revised this recommendation to provide greater flexibility to HUD to amend its current inspection standard for the voucher program as indicated by analysis of health effects for children, the impact on landlord participation in the program, and other relevant factors. We continue to believe that by asking for this authority, HUD would be positioned to take steps to ensure that children in the voucher program are provided better protection from lead, as indicated by such an analysis.

[5]*See* 24 C.F.R. § 35.1115; 24 C.F.R. § 35.1215.

HUD Could Better Measure and Report on Performance of Lead Efforts

Our June 2018 report found that HUD has taken limited steps to measure, evaluate, and report on the performance of its programmatic efforts to ensure that housing is lead-safe. For example, HUD lacks comprehensive goals and performance measures for its lead reduction efforts. In addition, it has not complied with annual statutory reporting requirements, last reporting as required on its lead efforts in 1997. We recommended that HUD develop performance goals and measures, including its efforts to ensure that housing units in its rental assistance programs are lead-safe. Additionally, we recommended that HUD finalize plans for evaluating the effectiveness of its lead paint regulations, and complete statutory reporting requirements. HUD generally agreed with these recommendations

Chairman Duffy, Ranking Member Cleaver, and Members of the Subcommittee, this concludes my statement for the record.

GAO Contact and Staff Acknowledgment

If you or your staff have any questions about this statement, please contact Daniel Garcia-Diaz, Director, Financial Markets and Community Investment at (202) 512-8678 or garciadiazd@gao.gov. Contact points for our Offices of Congressional Relations and Public Affairs may be found on the last page of this statement. GAO staff who made key contributions to this statement are John Fisher (Assistant Director), Beth Faraguna (Analyst in Charge), Farah Angersola, William R. Chatlos, Anna Chung, Melinda Cordero, Christopher Lee, Marc Molino, Tovah Rom, and Tyler Spunaugle.

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United States Government Accountability Office

Report to Congressional Committees

June 2018

LEAD PAINT IN HOUSING

HUD Should Strengthen Grant Processes, Compliance Monitoring, and Performance Assessment

GAO-18-394

GAO Highlights

Highlights of GAO-18-394, a report to congressional committees

June 2018

LEAD PAINT IN HOUSING

HUD Should Strengthen Grant Processes, Compliance Monitoring, and Performance Assessment

Why GAO Did This Study

Lead paint in housing is the most common source of lead exposure for U.S. children. HUD awards grants to state and local governments to reduce lead paint hazards in housing and oversees compliance with lead paint regulations in its rental assistance programs. The 2017 Consolidated Appropriations Act, Joint Explanatory Statement, includes a provision that GAO review HUD's efforts to address lead paint hazards. This report examines HUD's efforts to (1) incorporate statutory requirements and other relevant federal standards in its lead grant programs, (2) monitor and enforce compliance with lead paint regulations in its rental assistance programs, (3) adopt federal health guidelines and environmental standards for its lead grant and rental assistance programs, and (4) measure and report on the performance of its lead efforts. GAO reviewed HUD documents and data related to its grant programs, compliance efforts, performance measures, and reporting. GAO also interviewed HUD staff and some grantees.

What GAO Recommends

GAO makes nine recommendations to HUD including to improve lead grant program and compliance monitoring processes, request authority to amend its lead inspection standard in the voucher program, and take additional steps to report on progress. HUD generally agreed with eight of the recommendations. HUD disagreed that it should request authority to use a specific, stricter inspection standard. GAO revised this recommendation to allow HUD greater flexibility to amend its current inspection standard as indicated by analysis of the benefits and costs.

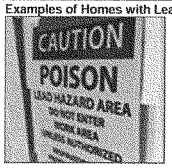
View GAO-18-394. For more information, contact Daniel Garcia-Diaz at (202) 512-8678 or garciadiazd@gao.gov.

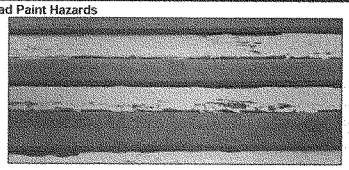
What GAO Found

The Department of Housing and Urban Development's (HUD) lead grant and rental assistance programs have taken steps to address lead paint hazards, but opportunities exist for improvement. For example, in 2016, HUD began using new tools to monitor how public housing agencies comply with lead paint regulations. However, HUD could further improve efforts in the following areas:

- **Lead grant programs.** While its recent grant award processes incorporate statutory requirements on applicant eligibility and selection criteria, HUD has not fully documented or evaluated these processes. For example, HUD's guidance is not sufficiently detailed to ensure consistent and appropriate grant award decisions. Better documentation and evaluation of HUD's grant program processes could help ensure that lead grants reach areas at risk of lead paint hazards. Further, HUD has not developed specific time frames for using available local-level data to better identify areas of the country at risk for lead paint hazards, which could help HUD target its limited resources.
- **Oversight.** HUD does not have a plan to mitigate and address risks related to noncompliance with lead paint regulations by public housing agencies. We identified several limitations with HUD's monitoring efforts, including reliance on public housing agencies' self-certifying compliance with lead paint regulations and challenges identifying children with elevated blood lead levels. Additionally, HUD lacks detailed procedures for addressing noncompliance consistently and in a timely manner. Developing a plan and detailed procedures to address noncompliance with lead paint regulations could strengthen HUD's oversight of public housing agencies.
- **Inspections.** The lead inspection standard for the Housing Choice Voucher program is less strict than that of the public housing program. By requesting and obtaining statutory authority to amend the standard for the voucher program, HUD would be positioned to take steps to better protect children in voucher units from lead exposure as indicated by analysis of benefits and costs.
- **Performance assessment and reporting.** HUD lacks comprehensive goals and performance measures for its lead reduction efforts. In addition, it has not complied with annual statutory reporting requirements, last reporting as required on its lead efforts in 1997. Without better performance assessment and reporting, HUD cannot fully assess the effectiveness of its lead efforts.

Examples of Homes with Lead Paint Hazards





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Abbreviations

CDC	Centers for Disease Control and Prevention
CDBG	Community Development Block Grant
EPA	Environmental Protection Agency
funding notice	Notice of Funding Availability
HHS	Department of Health and Human Services
HUD	Department of Housing and Urban Development
Lead Office	Office of Lead Hazard Control and Healthy Homes
OFO	Office of Field Operations
OMB	Office of Management and Budget
PD&R	Office of Policy Development and Research
PHA	public housing agency
PIH	Office of Public and Indian Housing
Title X	Residential Lead-Based Paint Hazard Reduction Act (Title X of the Housing and Community Development Act of 1992)
voucher program	Housing Choice Voucher program

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GAO U.S. GOVERNMENT ACCOUNTABILITY OFFICE
441 G St. N.W.
Washington, DC 20548

June 19, 2018

The Honorable Susan Collins
Chairman
The Honorable Jack Reed
Ranking Member
Subcommittee on Transportation, Housing and Urban Development, and Related Agencies
Committee on Appropriations
United States Senate

The Honorable Mario Diaz-Balart
Chairman
The Honorable David Price
Ranking Member
Subcommittee on Transportation, Housing and Urban Development, and Related Agencies
Committee on Appropriations
House of Representatives

The Centers for Disease Control and Prevention (CDC) have estimated that approximately half a million U.S. children (ages 1 to 5) have blood lead levels higher than most children's levels.[1] According to CDC, no safe level of lead in the blood has been identified. When absorbed into the body, especially in young children, lead can damage the brain and nervous system, slow development and growth, and cause learning or behavioral problems. According to CDC, lead-based paint hazards, such as dust containing lead and chips from deteriorated lead-based paint, are the most common source of lead exposure for U.S. children.[2] Young children are at greater risk of being exposed to lead because they often crawl on the floor, have frequent hand-to-mouth activity, and intentionally

[1]CDC is an agency within the Department of Health and Human Services. CDC reviewed National Health and Nutrition Examination Survey data from 2007–2010 to develop this estimate of the number of children with blood lead levels high enough for targeting prevention-related actions. For more information, see the Background section of this report.

[2]Throughout the report, we refer to lead-based paint hazards as "lead paint hazards" and lead-contaminated dust as "lead dust." Lead paint hazards include any condition that can cause harmful exposure to lead from lead dust, soil, or paint that is deteriorated or present in accessible, friction, or impact surfaces (e.g., walls, windows, door frames).

ingest nonfood items. Also, exposure to lead impacts young children more because of their small body size and weight compared to adults.

The Department of Housing and Urban Development's (HUD) most recent survey of housing conditions estimated that roughly 35 percent of U.S. homes (37 million) contained some lead-based paint.[3] Additionally, the survey estimated that 93 percent of the homes with lead paint were built before 1978—the year the United States banned lead-containing paint used in housing.[4] HUD has certain statutory responsibilities related to reducing lead exposure in housing, which include, awarding grants to states and local governments to help address lead paint hazards in private, low-income housing and promulgating lead paint regulations for HUD's rental assistance programs.

The 2017 Consolidated Appropriations Act, Joint Explanatory Statement, Division K, includes a provision for GAO to report on HUD's policies, procedures, and processes for addressing lead paint hazards in housing.[5] This report examines HUD's efforts to (1) incorporate statutory requirements and other relevant federal standards in its lead grant programs; (2) monitor and enforce compliance with lead paint regulations for its rental assistance programs; (3) adopt federal health guidelines and environmental standards for lead paint hazards in its lead grant and rental assistance programs; and (4) measure and report on its performance related to making housing lead-safe. The provision also directs GAO to review opportunities to improve coordination and leveraging of public and private (i.e., nonfederal) sources of funds to reduce federal costs associated with identifying and remediating lead paint hazards. Information about nonfederal sources of funds used by grantees as part of HUD's lead grant programs is included in appendix I of this report.

In this report, we examine lead paint hazards in housing and we focus on HUD's lead hazard control grant programs and its two largest rental

[3]Department of Housing and Urban Development, *American Healthy Homes Survey: Lead and Arsenic Findings,* April 2011. HUD conducted the survey from June 2005 through March 2006. The survey measured levels of lead, lead hazards, allergens, arsenic, pesticides, and mold in homes nationwide.

[4]For the Consumer Product Safety Commission's ban on lead-containing paint, see Lead-Containing Paint and Certain Consumer Products Bearing Lead-Containing Paint: Establishment as Banned Hazardous Products, 42 Fed. Reg. 44193 (Sept. 1, 1977).

[5]*See* 163 Cong. Rec. H4088 (daily ed. May 3, 2017).

assistance programs that serve the most families with children: the Housing Choice Voucher (voucher) and public housing programs.[6]

To address the first objective, we compared HUD's lead grant programs' processes with statutory requirements and federal internal control standards.[7] For example, we reviewed HUD's annual notices of funding availability to identify the criteria HUD has used to evaluate grant applications and determine the extent to which the 2017 notices incorporated statutory requirements. We also compared HUD's lead grant program processes to the Office of Management and Budget (OMB) requirements for competitively awarded grants.[8] To review the extent to which grant awards have gone to counties with indicators of lead paint hazard risk, we analyzed HUD's grant data from 2013 through 2017 and county-level U.S. Census Bureau data on the age of housing and poverty level of individuals in the United States. HUD's grant data were not available electronically before 2013, when the agency started using grants management software. We determined the HUD and Census data were sufficiently reliable for our purposes—to identify the locations and grant award amounts for HUD grantees and to identify counties with older housing and individuals living in poverty. Additionally, we interviewed HUD staff about the agency's grant application and award processes. To obtain information and perspectives from HUD grantees, we also reviewed a nongeneralizable sample of 20 grant applications and interviewed 10 of the 20 grantees. We conducted site visits to 5 of the 10 grantees we interviewed. We selected these grantees to achieve variation in geographic locations and the type of HUD grants they had previously received, among other things.

[6]For a description of the Housing Choice Voucher and public housing programs, see the Background section of this report. We did not examine lead hazards in schools, daycare centers, commercial buildings, water, food, or products such as toys, ceramics, or jewelry. For additional work on lead in water, see GAO, *Drinking Water: Additional Data and Statistical Analysis May Enhance EPA's Oversight of the Lead and Copper Rule*, GAO-17-424 (Washington, D.C.: Sept. 1, 2017). Additionally, we have ongoing work reviewing lead service lines and lead in school drinking water.

[7]GAO, *Standards for Internal Control in the Federal Government*, GAO-14-704G (Washington, D.C.: September 2014).

[8]Office of Management and Budget, *Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards* (codified at 2 C.F.R. pt. 200), effective for grants awarded starting in December 2014.

To address the second objective, we reviewed relevant laws and HUD's lead paint regulations and guidance and internal memorandums related to its efforts to monitor and enforce compliance with these regulations. We reviewed HUD databases used to monitor compliance and observed HUD staff demonstrating these databases. We reviewed HUD documentation of instances of potential noncompliance by public housing agencies (PHA) with lead paint regulations and enforcement actions HUD has taken.[9] We compared HUD's regulatory compliance monitoring and enforcement approach to federal internal control standards.[10] We interviewed HUD staff about internal procedures for monitoring and enforcing compliance of lead paint regulations. To address the third objective, we compared HUD's programs and regulations with relevant CDC health guidelines and Environmental Protection Agency (EPA) standards. We also interviewed staff from CDC and EPA to obtain information about their health guidelines and environmental standards related to lead.

To address the fourth objective, we reviewed HUD documentation related to performance goals, measures, program evaluations, and reporting requirements, including HUD's recent annual performance reports. We compared HUD's practices against leading practices for assessing program performance and federal internal control standards.[11] Finally, we interviewed HUD staff to understand performance goals, measures, and reporting HUD has used to assess its lead efforts. Appendix II contains a more detailed description of our objectives, scope, and methodology.

We conducted this performance audit from March 2017 to June 2018 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

[9]PHAs are state and local agencies that administer HUD's Housing Choice Voucher and public housing programs.

[10]GAO-14-704G.

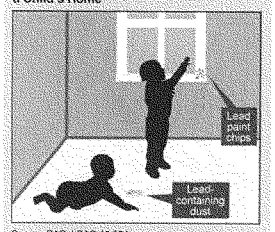
[11]We have previously stated that performance goals and measures are important management tools that can serve as leading practices for planning at lower levels within federal agencies, such as individual programs or initiatives. For example, see GAO, *Veterans Justice Outreach Program: VA Could Improve Management by Establishing Performance Measures and More Fully Assessing Risks*, GAO-16-393 (Washington, D.C.: Apr. 28, 2016); *Performance Measurement and Evaluation: Definitions and Relationships*, GAO-11-646SP (Washington, D.C.: May 2, 2011); and GAO-14-704G.

the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

Background

Federal Agencies and Key Regulations Related to Lead Paint Hazards

Common Sources of Lead Paint Hazards in a Child's Home



Source: GAO. | GAO-18-394

Lead-based paint hazards, such as dust containing lead and chips from deteriorated lead-based paint, are the most common source of lead exposure for U.S. children. Young children are at greater risk of being exposed to lead because they often crawl on the floor, have frequent hand-to-mouth activity, and intentionally ingest nonfood items. Also, exposure to lead impacts young children more because of their small body size and weight compared to adults.

While HUD has primary responsibility for addressing lead paint hazards in federally-assisted housing, EPA also has responsibilities related to setting federal lead standards for housing. EPA sets federal standards for lead hazards in paint, soil, and dust.[12] Additionally, EPA regulates the training and certification of workers who remediate lead paint hazards.[13] CDC sets a health guideline known as the "blood lead reference value" to identify children exposed to more lead than most other children.[14] As of 2012, CDC began using a blood lead reference value of 5 micrograms of lead per deciliter of blood. For children whose blood lead level is at or above CDC's blood lead reference value, health care providers and public health agencies can identify those children who may benefit the most from early intervention. CDC's blood lead reference value is based on the 97.5th percentile of the blood lead distribution in U.S. children (ages 1 to 5), using data from the National Health and Nutrition Examination

[12] *See e.g.* Lead; Identification of Dangerous Levels of Lead, 66 Fed. Reg. 1206 (Jan. 5, 2001). EPA also sets federal standards to reduce lead in drinking water under a treatment technique rule, known as the Lead and Copper Rule. *See* 40 C.F.R. § 141.80 et seq. As previously noted, lead in drinking water is outside the scope of this report.

[13] 40 C.F.R. pt. 745; *See* ex. Lead; Notification Requirements for Lead-Based Paint Abatement Activities and Training, 69 Fed. Reg. 18489 (Apr. 8, 2004); Lead; Renovation, Repair, and Painting Program, 73 Fed. Reg. 21692 (Apr. 22, 2008).

[14] Previously, children under age 6 years were identified by CDC as having a blood lead "level of concern" if the test result was greater than or equal to 10 micrograms of lead per deciliter of blood. CDC no longer uses the term "level of concern."

Survey.[15] Children with blood lead levels above CDC's blood lead reference value have blood lead levels in the highest 2.5 percent of all U.S. children (ages 1 to 5). HUD, EPA, and the Department of Health and Human Services (HHS) are members of the President's Task Force on Environmental Health Risks and Safety Risks to Children.[16] HUD co-chairs the lead subcommittee of this task force with EPA and HHS. The task force published the last national lead strategy in 2000.[17]

The primary federal legislation to address lead paint hazards and the related requirements for HUD is the Residential Lead-Based Paint Hazard Reduction Act (Title X of the Housing and Community Development Act of 1992).[18] We refer to this law as Title X throughout this report. Title X required HUD to, among other things, promulgate lead paint regulations, implement the lead hazard control grant programs, and conduct research and reporting, as discussed throughout this report.

The two key regulations that HUD has issued under Title X are the Lead Disclosure Rule and the Lead Safe Housing Rule:

[15]The survey is a population-based survey to assess the health and nutritional status of adults and children in the United States and to determine the prevalence of major diseases and associated risk factors. Blood lead levels are one of several laboratory tests conducted as part of the survey. CDC reviews National Health and Nutrition Examination Survey data as they are updated and reviews the blood lead reference value every 4 years based on the two most recent cycles of data. The current blood lead reference value is based on National Health and Nutrition Examination Survey data from 2007–2008 and 2009–2010. According to CDC staff, as of February 2018, the agency was considering updating its blood lead reference value based on National Health and Nutrition Examination Survey data from 2011–2014.

[16]Exec. Order No. 13045, 3 C.F.R. § 13045 (1998). The President's Task Force on Environmental Health Risks and Safety Risks to Children was created, among other duties, to identify children's environmental health and safety issues (including lead), develop federal interagency strategies, and communicate information to federal, state, and local decision makers. It has 17 members.

[17]President's Task Force on Environmental Health Risks and Safety Risks to Children, *Eliminating Childhood Lead Poisoning: A Federal Strategy Targeting Lead Paint Hazards*, February 2000.

[18]Housing and Community Development Act of 1992, Pub. L. No. 102-550, title X, § 1001 et seq. (1992) (codified generally at 42 U.S.C. § 4851-56. and 15 U.S.C. 2681-92) (hereinafter Title X). Prior to this, in 1971, Congress had passed the Lead-Based Paint Poisoning Prevention Act, Pub. L. No. 91-695, 84 Stat. 2078 (1971) (codified at 42 U.S.C. § 4801-46). This law required that the government establish procedures aimed at eliminating lead paint hazards in federally assisted housing.

- **Lead Disclosure Rule.** In 1996, HUD and EPA jointly issued the Lead Disclosure Rule.[19] The rule applies to most housing built before 1978 and requires sellers and lessors to disclose any known information, available records, and reports on the presence of lead paint and lead paint hazards and provide an EPA-approved information pamphlet prior to sale or lease.
- **Lead Safe Housing Rule.** In 1999, HUD first issued the Lead Safe Housing Rule, which applies only to housing receiving federal assistance or federally-owned housing being sold.[20] The rule established procedures for evaluating whether a lead paint hazard exists, controlling or eliminating the hazard, and notifying occupants of any lead paint hazards identified and related remediation efforts. The rule established an "elevated blood lead level" as a threshold that requires landlords and PHAs to take certain actions if a child's blood test shows lead levels meeting or exceeding this threshold. In 2017, HUD amended the rule to align its definition of an "elevated blood lead level" with CDC's blood lead reference value.[21] This change lowered the threshold that generally required landlords and PHAs to act from 20 micrograms to 5 micrograms of lead per deciliter of blood. According to the rule, when a child under age 6 living in HUD-assisted housing has an elevated blood lead level, the housing provider must take several steps. These generally include testing the home and other potential sources of the child's lead exposure within 15 days, ensuring that identified lead paint hazards are addressed within 30 days of receiving a report detailing the results of that testing, and reporting the case to HUD.

[19]Requirements for Disclosure of Known Lead-Based Paint and/or Lead-Based Paint Hazards in Housing, 61 Fed. Reg. 9064 (Mar. 6, 1996).

[20]Requirements for Notification, Evaluation and Reduction of Lead-Based Paint Hazards in Federally Owned Residential Property and Housing Receiving Federal Assistance, 64 Fed. Reg. 50140 (Sept. 15, 1999). Throughout the report, the term "lead paint regulations" means the parts of the Lead Disclosure Rule and the Lead Safe Housing Rule applicable to HUD's public housing and Housing Choice Voucher programs, unless otherwise specified. *See ex.* 24 C.F.R. part 35, sbpts. A, L, and M. The Lead Safe Housing Rule includes other requirements, such as those for residential housing owned by federal agencies other than HUD or HUD-owned single family properties, but as previously noted these programs or requirements were not the focus of this review.

[21]Requirements for Notification, Evaluation and Reduction of Lead-Based Paint Hazards in Generally Owned Residential Property and Housing Receiving Federal Assistance, 82 Fed. Reg. 4151 (Jan. 13, 2017).

HUD Offices Involved in Lead Efforts and HUD's Rental Assistance Programs

Office of Lead Hazard Control and Healthy Homes (Lead Office). HUD's Lead Office is primarily responsible for administering HUD's two lead hazard control grant programs, providing guidance on HUD's lead paint regulations, and tracking HUD's efforts to make housing lead-safe. The Lead Office collaborates with HUD program offices on its oversight and enforcement of lead paint regulations.[22] For instance, the Lead Office issues guidance, responds to questions about requirements of lead paint regulations, and provides training and technical assistance to HUD program staff, PHA staff, and property owners. The Lead Office's oversight efforts also include maintaining email and telephone hotlines to receive complaints and tips from tenants or homeowners, among others, as they pertain to lead paint regulations.[23] Additionally, the Lead Office, in collaboration with EPA, contributes to the operation of the National Lead Information Center—a resource that provides the general public and professionals with information about lead, lead hazards, and their prevention.[24]

Office of Public and Indian Housing (PIH). HUD's PIH oversees and enforces HUD's lead paint regulations for the rental assistance programs.[25] As discussed earlier, this report focuses on the two largest rental assistance programs serving the most families with children—the Housing Choice Voucher and public housing programs.

- **Housing Choice Voucher program.** In the voucher program, eligible families and individuals are given vouchers as rental assistance to

[22]HUD's Office of the Secretary has delegated oversight and enforcement authority for lead paint laws and regulations to HUD's Lead Office. *See* Delegation of Authority for the Office of Lead Hazzard Control and Healthy Homes, 81 Fed. Reg. 89496 (Dec. 12, 2016). According to the Lead Office's interpretive guidance for the Lead Safe Housing Rule, monitoring and enforcement of compliance with the Lead Safe Housing Rule will be integrated into the administrative procedures for each affected HUD program, such as the voucher and public housing programs.

[23]Property owners or tenants of HUD-assisted housing can email Lead_Regulations@HUD.gov or call (202) 402-7690. Additionally, PHAs and property owners can call or email to request technical assistance.

[24]The general public can call 1 (800) 424-LEAD or see https://www.epa.gov/lead/forms/lead-hotline-national-lead-information-center for more information.

[25]Other HUD offices, including the Office of Housing and Office of Community Planning and Development, oversee other forms of rental assistance covered by the Lead Safe Housing Rule; however, as previously noted these programs were not the focus of this review.

use in the private housing market. Generally, eligible families with vouchers live in the housing of their choice in the private market. The voucher generally pays the difference between the family's contribution toward rent and the actual rent for the unit.[26] Vouchers are portable; once a family receives one, it can take the voucher and move to other areas where the voucher program is administered.[27] In 2017, there were roughly 2.5 million vouchers available.[28]

- **Public housing program.** Public housing is reduced-rent developments owned and operated by the local PHA and subsidized by the federal government.[29] PHAs receive several streams of funding from HUD to help make up the difference between what tenants pay in rent and what it costs to maintain public housing. For example, PHAs receive operating and capital funds through a formula allocation process. PHAs use operating funds to pay for management, administration, and day-to-day costs of running a housing development. Capital funds are used for modernization needs, such as replacing roofs or remediating lead paint hazards. According to HUD rules, generally families that are income-eligible to live in public housing pay 30 percent of their adjusted income toward rent. In 2017, there were roughly 1 million public housing units available.

For both of these rental assistance programs, the Office of Field Operations (OFO) within PIH oversees PHAs' compliance with lead paint regulations, in conjunction with HUD field office staff. The office has a risk-based approach to overseeing PHAs and performs quarterly risk assessments. Also within PIH, staff from the Real Estate Assessment

[26]Specifically, a family generally pays 30 percent of its monthly adjusted income toward rent, and the PHA pays to the landlord the remainder of the rent through a HUD-subsidized "voucher." The voucher generally is equal to the difference between (1) the lesser of the unit's gross rent (generally, rent plus utilities) or a local "payment standard" and (2) the household's payment. The payment standard is based on the local fair market rent established by HUD. HUD defines "adjusted income" as a family's annual income minus a number of mandatory deductions, such as an amount for unreimbursed reasonable child care expenses necessary to enable a family member to work or further their education.

[27]The portability of vouchers may be subject to some restrictions, such as a 12 month waiting period before a tenant can move to a location outside of the PHA's jurisdiction.

[28]Congress usually provides funding for vouchers annually in the appropriations for HUD.

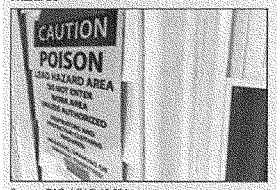
[29]Some states, such as Massachusetts, fund public housing properties that do not receive assistance from HUD and are separate from HUD's public housing program. These are not included in the scope of our work.

Center are responsible for inspecting the physical condition of public housing properties.

Office of Policy Development and Research (PD&R). HUD's PD&R is the primary office responsible for data analysis, research, and program evaluations to inform the development and implementation of programs and policies across HUD offices.

HUD's Lead Hazard Control Grant Programs

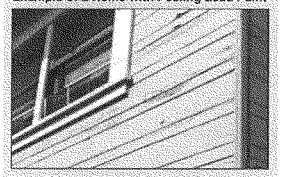
Example of a Home with Lead Paint Hazards



Source: GAO. | GAO-18-394

The sign provided a warning about lead paint hazard and was posted at a home in Baltimore, Maryland, which was undergoing lead paint hazard remediation work funded by the Department of Housing and Urban Development's lead hazard control grant program.

Example of a Home with Peeling Lead Paint



Source: GAO. | GAO-18-394

The exterior siding of this home in Alameda County, California, showed peeling paint identified as a lead paint hazard. Alameda County used grant funds from the Department of Housing and Urban Development's lead hazard control grant program for the remediation work.

HUD has had two grant programs that competitively award lead hazard control grants to state and local jurisdictions: the Lead-Based Paint Hazard Control grant program and the Lead Hazard Reduction Demonstration grant program.[30] For both grant programs, HUD has issued annual Notices of Funding Availability (funding notices) to solicit applications from these jurisdictions.[31] Both grant programs have had a 3-year term and are intended to help jurisdictions identify and control lead hazards in low-income, private housing where children under age 6 reside or are likely to reside.[32] However, the Lead Hazard Reduction Demonstration grant program has been focused on urban jurisdictions with rental housing built before 1940 and higher rates of childhood lead poisoning. Both grant programs have required grantees to meet certain matching requirements, but the percentage of matching contribution differed for each program. Specifically, the Lead-Based Paint Hazard Control grant program has required grantees to match at least 10 percent

[30]The grant programs are authorized by Title X § 1011(codified as amended at 42 U.S.C. § 4852). The Consolidated Appropriations Act 2018, Pub. L. No. 115-141, Div. L, Title II (2018), provides funds for a single grant program referred to as the Lead Hazard Reduction Program. According to HUD, the single grant program would cover the breadth of the two previous lead grant programs.

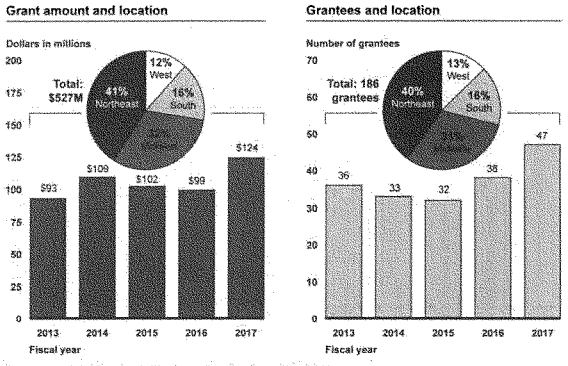
[31]Other federal agencies sometimes refer to these announcements as Notices of Funding Opportunity. Federal agencies publish these notices to announce opportunities for applicants to apply for competitively awarded grants.

[32]HUD is authorized to provide grants to eligible applicants to evaluate and reduce lead paint hazards in housing that is not federally assisted, owned, or public housing. Specifically, HUD noted in its 2017 funding notice that the lead grant programs assist jurisdictions in undertaking programs to control lead paint hazards in eligible privately owned rental or owner-occupied housing.

of the total grant amount, while the Lead Hazard Reduction Demonstration grant program has required at least a 25 percent match.[33]

For fiscal years 2013–2017, HUD awarded $527 million for its lead hazard control grants, which included 186 grants to state and local jurisdictions (see fig. 1). In these 5 years, about 40 percent of grants awarded went to jurisdictions in the Northeast and 31 percent to jurisdictions in the Midwest—regions of the country known to have a high prevalence of lead paint hazards.[34]

Figure 1: The Department of Housing and Urban Development's Lead Hazard Control Grant Programs, Fiscal Years 2013–2017



Source: GAO analysis of Department of Housing and Urban Development data | GAO-18-394

Note: The percentages do not always add to 100 percent due to rounding.

[33]For instance, if HUD's grant award is $3 million, the grantee is required to contribute at least $300,000 (10 percent) for the Lead-Based Paint Hazard Control grant program or at least $750,000 (25 percent) for the demonstration grant program. The Consolidated Appropriations Act 2018, Pub. L. No. 115-141, Div. L, Title II (2018), does not specify a match requirement for the single grant program referred to as the Lead Hazard Reduction Program.

[34]Department of Housing and Urban Development, *American Healthy Homes Survey: Lead and Arsenic Findings,* April 2011.

Additionally, in these 5 years, 90 percent of grant awards went to grantees at the local jurisdiction level (cities, counties, and the District of Columbia). The other 10 percent of grant awards went to state governments. During this time period, HUD awarded the most grants to jurisdictions in Ohio (17 grants), Massachusetts and New York (15 grants each), and Connecticut (14 grants).

HUD Has Incorporated Relevant Requirements for Awarding Recent Lead Grants, but Could Better Document and Evaluate Grant Processes

Lead Grant Programs Have Incorporated Statutory Requirements for Eligibility and Selection

HUD's Lead-Based Paint Hazard Control grant and the Lead Hazard Reduction Demonstration grant programs have incorporated Title X statutory requirements through recent annual funding notices and their grant processes. Title X contains applicant eligibility requirements and selection criteria HUD should use to award lead grants.

To be eligible to receive a grant, applicants need to

- be a state or local jurisdiction,
- contribute matching funds to supplement the grant award,
- have an approved comprehensive affordable housing strategy, and
- have a certified lead abatement program (if the applicant is a state government).[35]

HUD has incorporated these eligibility requirements in its grant programs' 2017 funding notices, which require applicants to demonstrate that they meet these requirements when they apply for a lead grant. According to the 2017 funding notices, applicants must detail the sources and amounts of their matching contributions in their applications. Similarly, applicants must submit a form certifying that the proposed grant activities are consistent with their local affordable housing strategy. HUD's 2017

[35]A certified lead abatement program is a state-administered program that trains and certifies lead abatement professionals and has been authorized by EPA.

funding notices state that if applicants did not meet these eligibility requirements, HUD would not consider their applications.

Additionally, Title X requires HUD to award lead grants according to the following applicant selection criteria:

- the extent to which an applicant's proposed activities will reduce the risk of lead poisoning for children under the age of 6;
- the degree of severity and extent of lead paint hazards in the applicant's jurisdiction;
- the applicant's ability to supplement the grant award with state, local, or private funds;
- the applicant's ability to carry out the proposed grant activities; and
- other factors determined by the HUD Secretary to ensure that the grants are used effectively.

In its 2017 funding notices, HUD incorporated the Title X applicant selection criteria through five scoring factors that it used to assess lead grant applications. HUD allocated a certain number of points to each scoring factor. Applicants are required to develop their grant proposals in response to the scoring factors. When reviewing applications, HUD staff evaluated an applicant's response to the factors and assigned points for each factor. See table 1 for a description of the 2017 lead grant programs' scoring factors and points.

Table 1: HUD's Lead-Based Paint Hazard Control Grant and Lead Hazard Reduction Demonstration Grant Programs' Scoring Factors and Point Distribution, 2017

HUD's scoring factors	Description	Maximum available points
1. Capacity of the applicant and relevant organizational experience	Applicants must demonstrate that they and their partners have sufficient qualified personnel and are prepared to perform lead hazard control work, among other things.	20
2. Need/extent of the problem	Applicants must demonstrate need for a lead grant in the applicant's jurisdiction through publicly available data, including elevated blood lead level data, income data, housing data, and other factors contributing to need.	20
3. Soundness of approach	Applicants must demonstrate their ability to carry out lead hazard control work and prepare a quality workplan to implement the proposed lead grant activities.	46
4. Budget proposal	Applicants must thoroughly estimate all applicable costs for lead grant activities and present them in a clear and coherent format.	10
5. Achieving results and program evaluation	Applicants must identify procedures for monitoring grant performance and measuring outcomes, among other things.	4
		Total 100 points

Source: Department of Housing and Urban Development's (HUD) 2017 Notices of Funding Availability for the lead grant programs. | GAO-18-394

As shown in table 1, HUD awarded the most points (46 out of 100) to the "soundness of approach" scoring factor, according to HUD's 2017 funding notices. Through this factor, HUD incorporated Title X selection criteria on an applicant's ability to carry out the proposed grant activities and supplement a grant award with state, local, or private funds. For example, HUD's 2017 funding notices required applicants to describe their detailed plans to implement grant activities, including how the applicants will establish partnerships to make housing lead-safe. Specifically, HUD began awarding 2 of the 100 points to applicants who demonstrated partnerships with local public health agencies to identify families with children for enrollment in the lead grant programs. Additionally, HUD asked applicants to identify partners that can help provide assistance to complete the lead hazard control work for high-cost housing units. Furthermore, HUD required applicants to identify any nonfederal funding, including funding from the applicants' partners. Appendix I includes examples of state, local, and nongovernmental funds that selected grantees planned to use to supplement their lead grants.

HUD Has Taken Actions Consistent with OMB Requirements but Has Not Fully Documented or Evaluated Its Lead Grant Programs' Processes

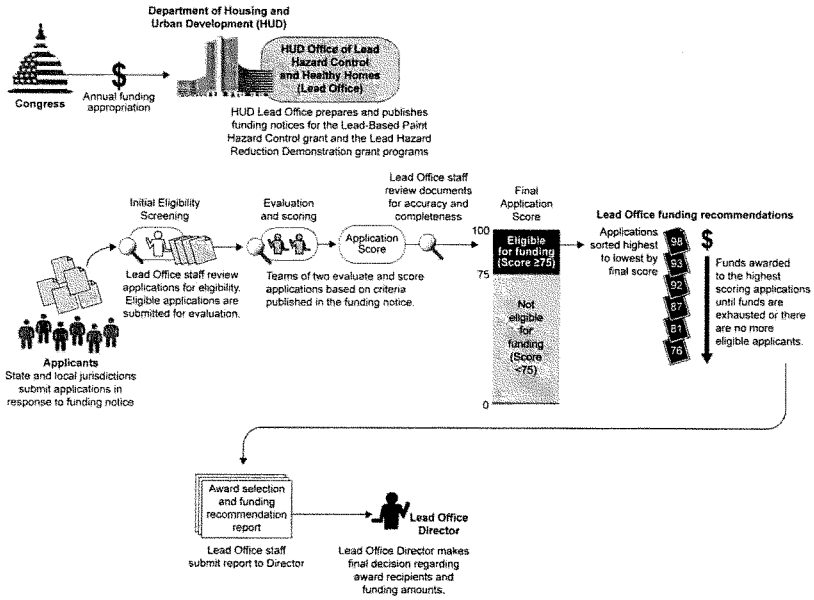
In its lead grant programs, HUD has taken actions that were consistent with OMB's requirements for competitively awarded grants.[36] OMB generally requires federal agencies to: (1) establish a merit-review process for competitive grants that includes the criteria and process to evaluate applications; and (2) develop a framework to assess the risks posed by applicants for competitive grants, among other things.[37] Through a merit-review process, an agency establishes and applies criteria to evaluate the merit of competitive grant applications. Such a process helps to ensure that the agency reviews grant applications in a fair, competitive, and transparent manner. Consistent with the OMB requirement to establish a merit review process, HUD has issued annual funding notices that communicate clear and explicit evaluative criteria. In addition, HUD has established processes for reviewing and scoring grant

[36]Competitively awarded federal grants generally follow stages of pre-award, award, implementation, and closeout. Our review focused on the pre-award stage. We define the term "pre-award" to mean those grant program activities that occur prior to the official award negotiations and agreement between the agency and grantee. The pre-award process varies from grant to grant, but it generally involves the preparation and publication of the funding notice by the agency, the development and submission of the application by applicants, the review of applications by the agency, and the agency award selection.

[37]Office of Management and Budget, Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards (codified at 2 C.F.R. pt. 200), effective for grants awarded starting in December 2014.

applications using these evaluative criteria, and selects grant recipients based on the review scores (see fig. 2). For example, applicants that score at or above 75 points are qualified to receive awards from HUD. Also, HUD awards funds beginning with the highest scoring applicant and proceeds by awarding funds to applicants in a descending order until funds are exhausted. Furthermore, consistent with the OMB requirement to develop a framework to assess applicant risks, HUD has developed a framework to assess the risk posed by lead grant applicants by, among other things, deeming ineligible those applicants with past performance deficiencies or those that do not have a financial management system that meets federal standards.

Figure 2: The Department of Housing and Urban Development's Lead Grant Programs' Processes for Reviewing and Selecting Applicants



Source: GAO analysis of HUD information. | GAO-18-394

However, HUD has not fully documented or evaluated its lead grant processes in reviewing and scoring the grants and making award decisions:

Documenting grant processes and award decisions. While HUD has established processes for its lead grant programs, it lacks documentation, including detailed guidance to help ensure that staff carry out processes consistently and appropriately. Federal internal control standards state

that agency management should develop and maintain documentation of its internal control system.[38] Such documentation assists agency management by establishing and communicating the processes to staff. Additionally, documentation of processes can provide a means to retain organizational knowledge and communicate that knowledge as needed to external parties.

The Lead Office's Application Review Guide describes its grant application review and award processes at a high level but does not provide detailed guidance for staff as to how tasks should be performed.[39] For example, the Guide notes that reviewers score eligible applications according to factors contained in the funding notices but does not describe how the reviewers should allocate points to the subfactors that make up each factor. Lead Office staff told us that creating detailed scoring guidance would be challenging because applicants' proposed grant activities differ widely, and they said that scoring grant applications is a subjective process. While scoring grant applications may involve subjective judgments, improved documentation of grant review and scoring processes, including additional direction to staff, can help staff apply their professional judgment more consistently in evaluating applications. By better documenting processes, HUD can better ensure that staff evaluate applications consistently.

Additionally, HUD has not fully documented its rationale for deciding which applicants receive lead grant awards and for deciding the dollar amounts of grant awards to successful applicants. In prior work examining federal grant programs, one recommended practice we identified is that agencies should document the rationale for award decisions, including the reasons individual applicants were selected or not and how award funding amounts were determined.[40] While HUD's internal memorandums listed the applicants selected and the award amounts, these memorandums did not document the rationale for these decisions or provide information sufficient to help applicants understand award

[38]GAO-14-704G.

[39]Department of Housing and Urban Development, Office of Lead Hazard Control and Healthy Homes, *Application Review Guide: Guidance for Notice of Funding Availability Review Teams*, 2017.

[40]GAO, *Intercity Passenger Rail: Recording Clearer Reasons for Awards Decisions Would Improve Otherwise Good Grantmaking Practices*, GAO-11-283 (Washington, D.C.: Mar. 10, 2011).

outcomes.[41] Lead Office staff told us that most grantees have received the amount of funding they requested in their applications, which was generally based on HUD's maximum grant award amount. Lead Office staff said they could use their professional judgment to adjust award amounts to extend funding to more applicants when applicants received similar scores.

However, the Lead Office's documentation we reviewed did not explain this type of decision making. For example, in 2017, when two applicants received identical scores on their applications, HUD awarded each applicant 50 percent of the remaining available funds rather than awarding either applicant the amount they requested. Representatives of one of the two grantees told us they did not know why the Lead Office had not provided them the full amount they had requested. Lead Office staff told us that, to date, HUD has not considered alternative ways to award grant funding amounts. By fully documenting grant award processes, including the rationale for award decisions and amounts, HUD could provide greater transparency to grant applicants about its grant award decisions.

Evaluating processes. HUD lacks a formal process for reviewing and updating its lead grant funding notices, including the factors and point allocations used to score applications. Federal internal control standards state that agencies should implement control activities through policies and that periodic review of policies and procedures can provide assurance of their effectiveness in achieving the agency's objectives.[42] Lead Office staff told us that previous changes to the factors and point allocation used to score applicants have been made based on informal discussions among staff. However, the Lead Office does not have a formal process to review and evaluate the relevance and appropriateness of the factors or points used to score applicants. Lead Office staff told us that they have never analyzed the scores applicants received for the factors to identify areas where applicants may be performing well or poorly or to help inform decisions about whether changes may be needed to the factors or points.

[41]According to the Lead Office's memorandums, the documents constitute the final report of the Application Review Panel.

[42]GAO-14-704G.

Additionally, HUD has not changed the threshold criteria used to make award decisions since the threshold was established in 2003. As previously shown in figure 2, applicants who received at least 75 points (out of 100) have been qualified to receive a grant award. However, HUD grant documentation, including the funding notices and the Application Review Guide, does not explain the significance of this 75-point threshold. Lead Office staff stated that this threshold was first established in 2003 by HUD based on OMB guidance. A formal review of this 75-point threshold can help HUD determine whether it remains appropriate for achieving the grant programs' objectives. Furthermore, by periodically evaluating processes for reviewing and scoring grant applications, HUD can better determine whether these processes continue to help ensure that lead grants reach areas of the country at greater risk for lead paint hazards.

HUD Has Begun to Develop Analyses to Help More Fully Identify Areas at Risk for Lead Paint Hazards but Has Not Set Time Frames for Using Local-Level Data

HUD has begun to develop analyses and tools to inform its efforts to target outreach and ensure that grant awards go to areas of the country that are at risk for lead paint hazards. However, HUD has not developed time frames for incorporating the results of the analyses into its lead grant programs' processes. HUD has required jurisdictions applying for lead grants to include data on the need or extent of the problem in their jurisdiction (i.e., scoring factor 2). Additionally, Lead Office staff told us that HUD uses information from the American Healthy Homes Survey to obtain information on lead paint hazards across the country.[43] However, the staff explained that the survey was designed to provide meaningful results at the regional level and did not include enough homes in its sample to provide information about housing conditions, such as lead paint hazards, at the state or local level. Because HUD awards lead grants to state and local jurisdictions, it cannot effectively use the survey results to help the agency make award decisions or inform decisions about areas for potential outreach.

In early 2017, the Lead Office began working with PD&R to develop a model to identify local jurisdictions (at the census-tract level) that may be at heightened risk for lead paint hazards. Lead Office staff said that they hope to use results of this model to develop geographic tools to help

[43]Department of Housing and Urban Development, *American Healthy Homes Survey: Lead and Arsenic Findings* (April 2011). HUD conducted the survey from June 2005 through March 2006. The survey measured levels of lead, lead hazards, allergens, arsenic, pesticides, and mold in homes nationwide.

target HUD funding to areas of the country at risk for lead paint hazards but not currently receiving a HUD lead grant. Lead Office staff said that they could reach out to these at-risk areas, help them build the capacity needed to administer a grant, and encourage them to apply. For example, HUD has identified that Mississippi and two major metropolitan areas in Florida (Miami and Tampa) had not applied for a lead grant. HUD has conducted outreach to these areas to encourage them to apply for a lead grant. In 2016, the City of Jackson, Mississippi, applied for and received a lead grant.

Though the Lead Office has collaborated with PD&R on the model, HUD has not developed specific time frames to operationalize the model and incorporate the results of the model for using local-level data to help better identify areas at risk for lead paint hazards. Federal internal control standards require agencies to define objectives clearly to enable the identification of risks.[44] This includes clearly defining time frames for achieving the objectives. Setting specific time frames could help to ensure that HUD operationalizes this model in a timely manner. By operationalizing a model that incorporates local data on lead paint hazard risk, HUD can better target its limited grant resources towards areas of the country with significant potential for lead hazard control needs.

We performed a county-level analysis using HUD and Census Bureau data and found that most lead grants from 2013 through 2017 have gone to counties with at least one indicator of lead paint hazard risk.[45] Information we reviewed, such as relevant literature, suggests that the two common indicators of lead paint hazard risk are the prevalence of housing built before the 1978 lead paint ban and the prevalence of

[44]GAO-14-704G.

[45]We used county-level estimate data on the age of housing and poverty level in the United States from the Census Bureau's 2011–2015 American Community Survey data. The specific variables used were year structure built and poverty status. The estimated county-level percentages of older housing and poverty rate are expressed as a range of values. For the lower and upper ends of the range, we generated a 95 percent confidence interval that was within plus or minus 20 percentage points. Our analysis did not account for population, but for the purposes of awarding grants, population density of a jurisdiction may be one of a number of relevant factors, according to HUD staff. For additional details on our analysis, see appendix II.

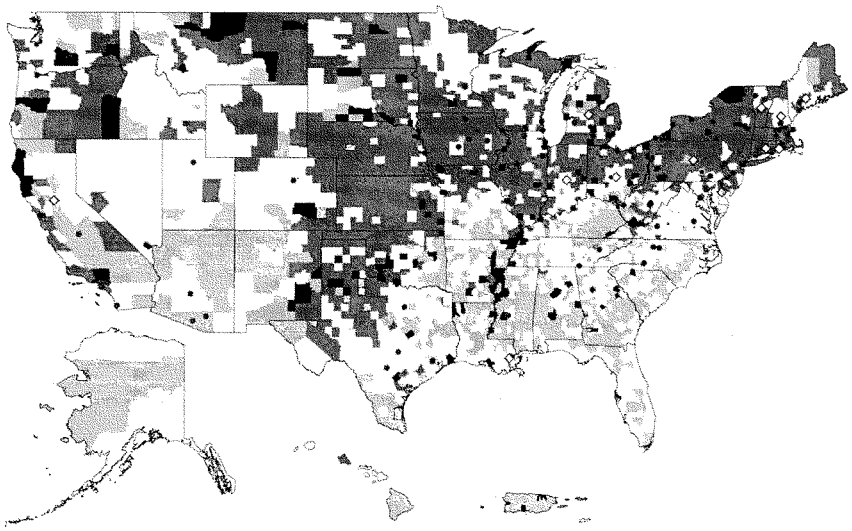
individuals living below the poverty line.[46] We defined areas with lead paint hazard risk as counties that had percentages higher than the corresponding national percentages for both of these indicators. The estimated average percentage nationwide of total U.S. housing stock constructed before 1980 was 56.9 percent and the estimated average percentage nationwide of individuals living below the poverty line was 17.5 percent.[47] As shown in figure 3, our analysis estimated that 18 percent of lead grants from 2013 through 2017 have gone to counties with both indicators above the estimated national percentages, 59 percent of grants have gone to counties with estimated percentages of old housing above the estimated national percentage, and 7 percent of grants have gone to counties that had estimated poverty rates above the estimated national percentage.[48] (For an interactive version of this map, click here.) When HUD finalizes its model and incorporates information into its lead grant processes, HUD will be able to better target its grant resources to areas that may be at heightened risk for lead paint hazards.

[46]For example, see Eric M. Roberts and Paul B. English, "Analysis of multiple-variable missing-not-at-random survey data for child lead surveillance using NHANES," *Statistics in Medicine* 35 (August 2016) and *A Targeted Approach to Blood Lead Screening in Children, Washington State: 2015 Expert Panel Recommendations*, prepared by the Washington State Department of Health (November 2015).

[47]We calculated the estimated percentages nationwide for the age of housing and poverty level in the United States using county-level data from the Census Bureau's 2011–2015 American Community Survey. The estimated average nationwide percentages of older housing and poverty rates are expressed as a range of values. For the lower and upper ends of the range, we generated a 95 percent confidence interval that was within plus or minus 20 percentage points. The Survey data on the age of housing is separated by the decade in which the structure was built. We selected 1980 as the threshold for older housing because it was the demarcation point closest in time to the 1978 lead paint ban.

[48]For state government grantees (12 of them), we used address data provided by HUD and assigned a corresponding county. However, state government grantees can specify other counties within their state where lead hazard control activities may occur. In our analysis, we were not able to account for the actual counties where state grantee lead hazard control activities took place.

Figure 3: Department of Housing and Urban Development (HUD) Lead Grant Awards (2013–2017) and Indicators of Lead Paint Hazard Risk by County



County higher than the estimated average national percentage

	Grantees
Both old houses and poverty	34 (18%)
Old houses only	109 (59%)
Poverty only	13 (7%)
Neither old houses nor poverty	30 (16%)

Data unavailable/not reliable

Type of grantee

State government[a]

Local government (i.e., city or county)

Sources: GAO analysis of Department of Housing and Urban Development and U.S. Census Bureau data; MapInfo (map). | GAO-18-394

Note: This map shows the locations of HUD lead grant awards from 2013 through 2017. Also, this map compares counties in the United States with the estimated average percentages nationwide of two commonly known indicators of lead paint hazard risk. The two indicators and their estimated national percentages are: older housing as measured by pre-1980 housing (56.9 percent of the total U.S. housing stock) and poverty rate (17.5 percent of the total U.S. population). We calculated the estimated average percentages nationwide of the two indicators using county-level data from the

2011–2015 American Community Survey. The estimated national and county-level percentages of the two indicators are expressed as a range of values. For the lower and upper ends of the range, we generated a 95 percent confidence interval that was within plus or minus 20 percentage points. We omitted the data for 12 counties that we determined were unreliable for our purposes. We categorized a given county based on whether the county had estimated percentages of pre-1980 housing and poverty statistically higher than one, both, or neither of the corresponding national percentages of both indicators. These two indicators do not reflect any differences in population density across counties, which may affect the quantity of housing stock at-risk for lead paint hazards. According to HUD staff, for the purposes of awarding lead grants, population density of a jurisdiction may be one of a number of possible relevant factors.

[a]The location markers for the state grantees in this map represent the address of the grantees but may not necessarily reflect the areas where lead hazard control activities occurred.

HUD Could Take Additional Steps to Monitor Compliance with Lead Paint Regulations

HUD Has Taken Steps to Strengthen Compliance Monitoring for Lead Paint Regulations

In 2016, HUD began to incorporate new steps to monitor PHAs' compliance with lead paint regulations for nearly 4,000 PHAs.[49] Previously, according to PIH staff, HUD required only that PHAs annually self-certify their compliance with lead paint laws and regulations, and HUD's Real Estate Assessment Center inspectors check for lead paint inspection reports and disclosure forms at public housing properties during physical inspections.[50] Starting in June 2016, PIH began using new tools for HUD field staff to track PHAs' compliance with lead paint requirements in the voucher and public housing programs.

[49]As previously noted, PHAs are state and local agencies that administer HUD's Housing Choice Voucher and public housing programs. Within PIH, OFO is responsible for the general oversight of PHAs, including compliance with lead paint regulations. OFO works in conjunction with staff from HUD's field offices to help monitor PHAs' compliance with laws and regulations.

[50]HUD Form 50077, PHA Certifications of Compliance with the PHA Plans and Related Regulations. A lead paint inspection report explains the result of a surface-by-surface investigation to determine the presence of lead paint hazards, if any, in a property's housing units. The Real Estate Assessment Center does not inspect all units in a property but rather determines a statistically valid sample of units based on the number of units within a property.

As shown in figure 4, PIH's compliance oversight processes for the voucher and public housing programs include various monitoring tools for overseeing PHAs. Key components of PIH's lead paint oversight processes include the following:

- **Tools for tracking lead hazards and cases of elevated blood levels in children.** HUD uses two databases to monitor PHAs' compliance with lead paint regulations: (1) the Lead-Based Paint Response Tracker, which PIH uses to collect and monitor information on the status of lead paint-related documents, including lead inspection reports and disclosure forms, in public housing properties but not in units with voucher assisted households; and (2) the Elevated Blood Lead Level Tracker, which PIH uses to collect and monitor information reported by PHAs on cases of elevated blood levels in children living in voucher and public housing units. In June 2016, OFO began using the Lead-Based Paint Response Tracker database to store information on public housing units and to help HUD field office staff to follow up with PHAs that have properties missing required lead documentation. In July 2017, OFO began using information recorded in the Elevated Blood Lead Level Tracker to track whether PHAs started lead remediation activities in HUD-assisted housing within the time frames required by the Lead Safe Housing Rule.[51]
- **Lead paint hazards included in PHAs' risk assessment scores.** OFO assigns scores to PHAs based on their relative risk in four categories: physical condition, financial condition, management capacity, and governance.[52] OFO uses these scores to identify high-

[51]According to OFO staff, this tracker was created to help HUD monitor PHAs' compliance with some of the new requirements noted in the January 2017 amendment to the Lead Safe Housing Rule. *See* Requirements for Notification, Evaluation, and Reduction of Lead-Based Paint Hazards in Federally Owned Residential Property and Housing Receiving Federal Assistance, 82 Fed. Reg. 4151 (Jan. 13, 2017).

[52]HUD's risk-based approach seeks to target oversight and monitoring efforts to those PHAs that are most at risk. OFO's Risk Assessment Protocol includes qualitative and quantitative analysis of PHAs' physical and financial condition, management capacity, and governance. For example, risks to physical assets are considered under the "physical condition" category, while risks related to PHAs' occupancy levels and voucher utilization rates would be considered under the "management" category. According to the protocol, OFO generates a score for each PHA estimating its relative risk. Each quarter, OFO issues a new risk assessment report designating PHAs as very high risk; high risk; moderate risk; or low risk. According to the protocol, there are nearly 4,000 PHAs, and because HUD has diminishing resources for oversight, OFO must direct its resources toward the riskiest PHAs. See Department of Housing and Urban Development, Office of Field Operations, *Risk Assessment Protocol*, July 2017.

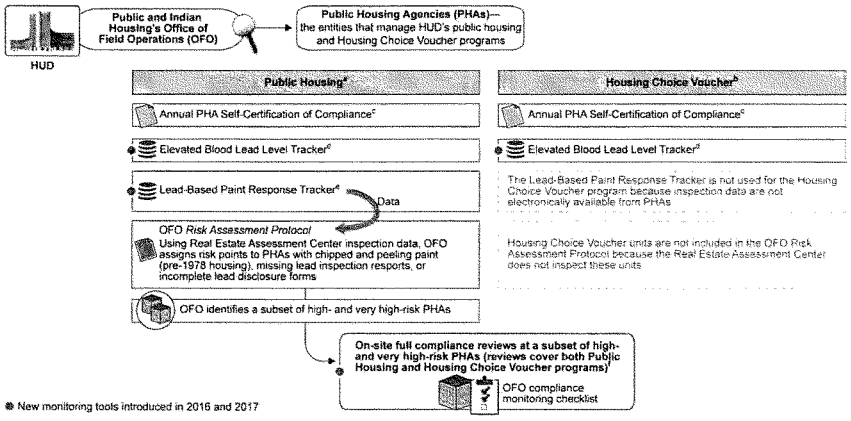
and very high-risk PHAs that will receive on-site full compliance reviews. In July 2017, OFO incorporated data from the Real Estate Assessment Center into the physical condition category of its Risk Assessment Protocol to help account for potential lead paint hazards at public housing properties.[53]

- **Questions about lead paint included as part of on-site full compliance reviews.** In fiscal year 2016, HUD field offices began conducting on-site full compliance reviews at high- and very high-risk PHAs as part of HUD's compliance monitoring program to enhance oversight and accountability of PHAs. In fiscal year 2017, as part of the reviews, HUD field office staff started using a compliance monitoring checklist to determine if PHAs comply with major HUD rules and to gather additional information on the PHAs. This checklist included lead-related questions that PIH field office staff use to determine whether PHAs meet the requirements in lead paint regulations for both the voucher and public housing programs.[54]

[53]According to the protocol, OFO assigns points (i.e., indicating increased risk) if there is evidence that the PHA has been identified to have properties that are pre-1978 with peeling paint, according to Real Estate Assessment Center physical inspection data. And, if Real Estate Assessment Center physical inspection data note either a missing lead inspection report or lead disclosure forms, OFO assigns additional points.

[54]For the voucher program, the checklist requires a review of a PHA's lead-based paint policies, procedures, and practices. For the public housing program, the checklist asks for documentation that PHAs have met lead paint requirements, such as evidence that properties have been tested for the presence of lead paint and that lead abatement was carried out when required.

Figure 4: Department of Housing and Urban Development's (HUD) Process for Monitoring Public Housing Agencies' Compliance with Lead Paint Regulations



Source: GAO analysis. | GAO-18-394

[a]HUD's Public Housing program (public housing) is one of HUD's two largest rental assistance programs (the other is the Housing Choice Voucher program) serving the most low-income families with children. Public housing is reduced-rent developments owned and operated by state or local entities and subsidized by the federal government.

[b]In HUD's Housing Choice Voucher program (voucher program), eligible families and individuals receive vouchers as rental assistance to use in the private housing market.

[c]HUD requires PHAs to self-certify compliance with lead paint laws and regulations through HUD Form 50077, PHA Certifications of Compliance with the PHA Plans and Related Regulations.

[d]As of July 2017, HUD began using information recorded in the Elevated Blood Lead Level Tracker in the public housing and voucher programs to record information the agency requires PHAs to report on cases of children with elevated blood lead levels in public housing and voucher units.

[e]As of June 2016, HUD started using the Lead-Based Paint Response Tracker, a database designed to help monitor PHAs' compliance with lead paint regulations with information collected by Real Estate Assessment Center inspectors in public housing units. Real Estate Assessment Center inspectors check for the presence of lead inspection reports and lead disclosure forms at public housing units, and recorded instances of chipped and peeling paint in pre-1978 housing.

[f]In Fiscal Year 2017, HUD included questions on lead paint regulations within the monitoring checklist for the full compliance reviews.

In 2016, OFO and HUD field offices began using information from the new monitoring efforts to identify potential noncompliance by PHAs with lead paint regulations and help the PHAs resolve the identified issues.[55] According to HUD data, as of November 2017, the Lead-Based Paint Response Tracker indicated that 9 percent (357) of PHAs were missing both lead inspection reports and lead disclosure forms for one or more properties. There were 973 PHAs missing one of the two required documents. OFO staff told us that they prioritized following up with PHAs that were missing both documents. According to OFO staff, PHAs can resolve potential noncompliance by submitting adequate lead documentation to HUD. OFO staff told us the agency considers missing lead documentation as "potential" noncompliance because PHAs may provide the required documentation or they may be exempt from certain requirements (e.g., HUD-designated elderly housing).

HUD Does Not Have a Plan to Mitigate Risks Associated with Its Compliance Monitoring Approach

While HUD has taken steps to strengthen compliance monitoring processes, it does not have a plan to identify and address the risks of noncompliance by PHAs with lead paint regulations. Federal internal control standards state that agencies should identify, analyze, and respond to risks related to achieving the defined objectives.[56] Furthermore, when an agency has made significant changes to its processes—as HUD has done with its compliance monitoring processes—management review of changes to these processes can help the agency determine that its control activities are designed appropriately.

Our review found that HUD does not have a plan to help mitigate and address risks related to noncompliance with lead paint regulations by PHAs (i.e., ensuring lead safety in assisted housing). Additionally, our review found several limitations with HUD's new compliance monitoring approach, which include the following:

- **Reliance on PHA self-certifications.** HUD's compliance monitoring processes rely in part on PHAs self-certifying that they are in compliance with lead paint regulations, but recent investigations have

[55]OFO works in conjunction with staff from HUD's field offices to help monitor PHAs' compliance with lead paint regulations. As previously noted, HUD's Office of the Secretary has delegated oversight and enforcement authority for lead paint laws and regulations to HUD's Lead Office, which collaborates with HUD program offices, such as PIH (OFO is within PIH), see 81 Fed. Reg. 89496 (Dec. 12, 2016).

[56]GAO-14-704G.

found that some PHAs may have falsely certified that they were in compliance. In November 2017, HUD filed a fraud complaint against two former officials of the Alexander County (Illinois) Housing Authority, alleging that the former official, among other things, falsely certified to HUD that the Housing Authority was in compliance with lead paint regulations.[57] Further, PIH staff told us there are ongoing investigations related to potential noncompliance with lead paint regulations and false certifications at two other housing authorities.

- **Lack of comprehensive data for the public housing program.** OFO started to collect data for the public housing program in the Lead-Based Paint Response Tracker in June 2016 and the inventory of all public housing properties includes units inspected since 2012. In addition, HUD primarily relies on the presence of lead inspection reports but does not record in the database when inspections and remediation activities occurred and does not determine whether they are still effective. Because of this, the information contained in the lead inspection reports may no longer be up-to-date. For example, a lead inspection report from the 1990s may provide evidence that abatement work was conducted at that time, but according to PIH staff, the housing may no longer be lead-safe.[58]
- **Lack of readily available data for the voucher program.** The voucher program does not have readily available data on housing units' physical condition and compliance with lead paint regulations because data on the roughly 2.5 million units in the program are kept at the PHA level. According to PIH staff, HUD plans to adopt a new system for the voucher program that will include standardized, electronic data for voucher units. PIH staff said the new system (Uniform Physical Condition Standards for Vouchers Protocol) will allow greater oversight and provide HUD the ability to conduct data analysis for voucher units.
- **Challenges identifying children with elevated blood lead levels.** For several reasons, PHAs face ongoing challenges receiving information from state and local public health departments on the

[57]According to the complaint, the former Executive Director of the Alexander County Housing Authority had indicated that the Housing Authority had completed required lead inspections, but a review of the PHA's records revealed that the submitted certifications were false.

[58]In January 2018, HUD announced $25 million in grant funding to help identify and remediate lead paint hazards in public housing. According to the announcement, the funding is needed for housing that was tested and abated over 20 years ago and those past control methods may no longer be effective.

number of children identified with elevated blood lead levels. First, children across the U.S. are not consistently screened and tested for exposure to lead.[59] Second, according to CDC data, many states use a less stringent health guideline to identify children compared to the health standard that HUD uses (i.e., CDC's current blood lead reference value).[60] PIH staff told us that some public health departments may not report children with elevated blood levels to PHAs because they do not know that a child is living in a HUD-assisted unit and needs to be identified using the more stringent HUD standard. Lastly, Lead Office staff told us that privacy laws in some states may impose restrictions on public health departments' ability to share information with PHAs.

- **Limited coverage of on-site compliance reviews.** While full on-site compliance reviews can be used to determine if PHAs are in compliance with lead paint regulations, OFO conducts a limited number of these reviews annually. For example, in Fiscal Year 2017, OFO conducted 72 reviews of the roughly 4,000 total PHAs. Based on OFO information, there are 973 PHAs that are missing either lead

[59]Blood lead testing is a covered service for children enrolled in the Medicaid program through the Early and Periodic, Screening, Diagnostic and Treatment benefit. All children enrolled in Medicaid are required to receive blood lead screening tests at ages 12 months and 24 months. States are allowed to request approval from the Centers for Medicaid & Medicare to implement targeted lead screening programs (i.e., not test all children enrolled in Medicaid) and one state has an approval (Arizona). According to a November 2016 Centers for Medicaid & Medicare Services bulletin, data suggest that only about 38 percent of children enrolled in Medicaid ages 1–2 are reported to have been screened for lead in 2015. However, the Centers for Medicaid & Medicare believe that this under-represents the actual number of children who received blood lead screening tests because the claims and encounter data this finding was based on do not capture screenings that are not paid for by Medicaid, such as screenings performed by clinics using CDC funding or funded by state health departments. Nevertheless, the Centers for Medicaid & Medicare states the data indicate that there are many children at risk of lead exposure that are not being tested. Further, for children not enrolled in Medicaid, according to the American Academy of Pediatrics and CDC, universal screens or blood lead level tests are recommended for children living in high prevalence areas with increased risk factors as identified by CDC, such as older housing.

[60]According to CDC's data, as of February 2018, 18 states and the District of Columbia were aligned with the federal health guideline of 5 micrograms per deciliter of blood, and the remaining 32 states used a less stringent standard (i.e., a guideline greater than 5 micrograms per deciliter of blood), which may result in fewer children with elevated blood lead levels being identified and reported. Additionally, CDC staff noted that the specific actions required to be taken when a child tests above the blood lead reference value vary.

inspection reports or lead disclosure forms indicating some level of potential noncompliance.[61]

HUD's steps since June 2016 to enhance monitoring of PHAs' compliance with lead paint regulations have some limitations that create risks in its new compliance monitoring approach. By developing a plan to help mitigate and address the various limitations associated with the new compliance monitoring approach, HUD could further strengthen its oversight and help ensure that PHAs maintain lead-safe housing units.

HUD Lacks Detailed Procedures to Address Noncompliance and Make Enforcement Decisions

HUD does not have detailed procedures to address PHA noncompliance with lead paint regulations or to determine when enforcement decisions may be needed. Lead Office staff told us that their enforcement program aims to ensure that PHAs have the information necessary to remain in compliance with lead paint regulations. According to federal internal control standards, agencies should implement control activities through policies and procedures.[62] Effective design of procedures to address noncompliance would include documenting specific actions to be performed by agency staff when deficiencies are identified and related time frames for these actions.

While HUD staff stated that they address PHA noncompliance through ongoing communication and technical assistance to PHAs, HUD has not documented specific actions to be performed by staff when deficiencies are identified. OFO staff told us that in general, PIH has not needed to take many enforcement actions because field offices are able to resolve most lead paint regulation compliance concerns with PHAs through ongoing communication and technical assistance.[63] For example, HUD

[61]Additionally, PHAs that OFO identifies for suspected or potential lead paint hazards but determines to not pose sufficiently high risks in other categories—financial condition, management, and governance—may not be ultimately identified as one of the high- or very high-risk PHAs to receive a full on-site compliance review.

[62]GAO-14-704G.

[63]PIH staff told us the violation would have to be egregious for HUD to take an enforcement action such as evidence that the PHA's actions contributed to injury or harm of residents living in HUD-assisted housing units (i.e., evidence that the noncompliance contributed to elevated blood lead levels). In response to our requests for enforcement actions taken, HUD provided evidence of one. For example, in 2013 Springfield (Massachusetts) Housing Authority entered into consent agreements with HUD and EPA to pay civil monetary penalties as a result of a joint enforcement effort between HUD and EPA to resolve alleged violations of certain requirements of lead paint regulations.

field offices sent letters to PHAs when Real Estate Assessment Center inspectors could not locate required lead inspection reports and lead disclosure forms, and requested that the PHA send the missing documentation within 30 days. However, OFO's fiscal years 2015–2017 internal memorandums on monitoring and oversight guidance for HUD field offices did not contain detailed procedures, including time frames or criteria HUD staff would use to determine when to consider whether a more formal enforcement action might be warranted.

Additionally, Lead Office staff said if efforts to bring a PHA into compliance are unsuccessful, the Lead Office would work in conjunction with PIH and HUD's Office of General Counsel's Departmental Enforcement Center to determine if an enforcement action is needed, such as withholding or delaying funds from a PHA or imposing civil money penalties on a PHA. Lead Office staff also told us that instead of imposing a fine on a PHA, HUD would rather work with the PHA to resolve the lead paint hazard. However, the Lead Office provided no documentation detailing the specific steps or time frames HUD staff would follow to determine when a noncompliance case is escalated to the Office of General Counsel. In a March 2018 report to Congress, HUD noted that children continued to test positive for lead in HUD-assisted housing in 2017.[64] In the same report, HUD notes PIH and the Lead Office will continue to work with PHAs to ensure compliance with lead paint regulations. By adopting procedures that clearly describe when lead paint hazard compliance efforts are no longer sufficient and enforcement decisions are needed, HUD can better keep PHAs accountable in a consistent and timely manner.

[64]From April to December 2017, 33 and 4 children, respectively, in the voucher and public housing programs, tested positive for lead in their blood and the source of the lead was identified as lead paint hazards in their housing units. See Department of Housing and Urban Development, Office of Public and Indian Housing and Office of Lead Hazard Control and Healthy Homes, *Report to Congress: HUD Oversight of the Lead Safe Housing Rule for the Public Housing and Housing Choice Voucher Programs* (March 2018).

HUD's Blood Lead Level Standard Aligns with CDC Guidelines and Lead Inspection Standards Are Less Stringent in the Voucher Program

HUD's Blood Lead Level Standard Aligns with the Current CDC Health Guideline

The standard HUD uses to identify children with elevated blood lead levels and initiate lead hazard control activities in its rental assistance aligns with the health guideline set by CDC in 2012.[65] HUD also uses CDC's health guideline in its lead grant programs.[66] In HUD's January 2017 amendment to the Lead Safe Housing Rule, HUD made its standard for lead in a child's blood more stringent by lowering it from 20 micrograms to 5 micrograms of lead per deciliter of blood, matching CDC's health guideline (i.e., blood lead reference value).[67] Specifically, HUD's stronger standard allows the agency to respond more quickly when children under 6 years old are exposed to lead paint hazards in voucher and public housing units.[68] The January 2017 rule also established more comprehensive testing for children and evaluation

[65]CDC has identified no safe level of exposure to lead, measured in blood. Since 2012, CDC has used a health guideline (i.e., blood lead reference value) of 5 micrograms of lead per deciliter of blood to identify children whose blood lead levels are much higher than most children's levels and for whom it recommends initiation of public health actions.

[66]According to HUD's 2017 Notices of Funding Availability for the lead grant programs, it is a program requirement that children living in housing units that will undergo lead hazard control work have their blood tested for lead levels unless the child's parent or guardian chooses not to have the child tested. Additionally, HUD requires applicants to report the number of children under age 6 with an elevated blood lead level above CDC's current reference level of 5 micrograms of lead per deciliter of blood. HUD uses this information to score applicants and award grants.

[67]HUD issued a final rule that amends HUD's lead paint regulations, *see* 82 Fed. Reg. 4151 (Jan. 13, 2017) (codified at 24 C.F.R. pt. 35). The 2017 Elevated Blood Lead Level Amendment to HUD's Lead Safe Housing Rule became effective on February 13, 2017 and required PHAs and landlords to comply with the rule starting July 13, 2017.

[68]As previously stated, according to the January 2017 rule, if a child under age 6 living in a HUD-assisted housing unit has an elevated blood lead level, then the housing provider must test the home and building common areas for sources of the child's lead exposure within 15 days, remediate lead paint hazards within 30 days of receiving the results of that test, and must report the case to HUD.

procedures for HUD assisted housing. According to HUD's press release that accompanied the rule, by aligning HUD's standard with CDC's guidance, HUD can respond more quickly in cases when a child who lives in HUD assisted housing shows early signs of lead in their blood.[69] The 2017 rule notes HUD will revise the agency's elevated blood lead level to align with future changes HHS may make to its recommended environmental intervention level.[70]

HUD's Lead Dust Standards Align with EPA's for Rental Assistance Programs and Exceed Them for Lead Grant Programs

HUD's standards for lead dust levels align with EPA standards for its rental assistance programs and exceed EPA standards for the lead grant programs. In 2001, EPA published a final rule on lead paint hazard standards, including lead dust clearance standards.[71] The rule established standards to help property owners, contractors, and government agencies identify lead hazards in residential paint, dust, and soil and address these hazards in and around homes. Under these standards, lead is considered a hazard when equal to or exceeding 40 micrograms of lead in dust per square foot sampled on floors and 250 micrograms of lead in dust per square foot sampled on interior window sills. In 2004, HUD amended the Lead Safe Housing Rule to incorporate the 2001 EPA lead dust standards as HUD's standards. Since this time, HUD has used EPA's 2001 lead hazard standards in its rental assistance programs.

In February 2017, HUD released policy guidance for its lead grantees requiring them to meet new and more protective requirements for identifying and addressing lead paint hazards in the lead grant programs than those imposed by EPA's 2001 standards that HUD uses in the rental assistance programs.[72] For example, the policy guidance requires

[69]Department of Housing and Urban Development, *HUD Issues Final Rule To Help Children Exposed to Lead Paint Hazards* (Jan. 13, 2017).

[70]The final rule notes that the current recommended environmental intervention level is tied to the CDC's blood lead reference value. As previously noted, CDC reviews the blood lead reference value every 4 years based on National Health and Nutrition Examination Survey data as the data are updated.

[71]Identification of Dangerous Levels of Lead, 66 Fed. Reg. 1206 (Jan. 5, 2001). The rule establishes standards for lead-based paint hazards (including hazards from lead in dust and soil) in most pre-1978 housing and child-occupied facilities.

[72]Department of Housing and Urban Development, Office of Lead Hazard Control and Healthy Homes Policy Guidance 2017-01 Rev. 1, *Revised Dust-Lead Action Levels for Risk Assessment and Clearance; Clearance of Porch Floors* (Washington, D.C.: Feb. 16, 2017).

grantees to consider lead dust a hazard on floors at 10 micrograms per square foot sampled (down from 40) and on window sills at 100 micrograms per square foot sampled (down from 250). The policy guidance noted that the new requirements are supported by scientific evidence on the adverse effects of lead exposure at low blood lead levels in children. Further, the policy guidance established a standard for porch floors—an area that EPA has not covered—because porch floors can be both a direct exposure source for children and a source of lead dust that can be tracked into the home.

On December 27, 2017, the United States Court of Appeals for the Ninth Circuit ordered EPA to issue a proposed rule updating its lead dust hazard standard and the definition of lead-based paint within 90 days of the decision becoming final and a final rule within 1 year of the proposed rule.[73] Because HUD's Lead Safe Housing Rule generally defines lead paint hazards and lead dust hazards to mean the levels promulgated by EPA, if EPA changes its 2001 standards those new standards would be used in HUD's rental assistance programs. On March 16, 2018, EPA filed a request to the court asking for clarification for when EPA is required to issue the proposed rule and followed up with a motion seeking clarification or an extension. In response to EPA's motion, on March 26, 2018, the court issued an order clarifying time frames and ordered that the proposed rule be issued within 90 days from March 26, 2018.

HUD Uses a Less Stringent Lead Inspection Standard for the Voucher Program

HUD's Lead Safe Housing Rule requires a stricter lead inspection standard for public housing than for voucher units. According to HUD staff, HUD does not have the authority to require the more stringent inspection in the voucher program. While HUD has acknowledged that moving to a stricter inspection standard for voucher units would provide greater assurance that these units are lead-safe and expressed its plan to support legislative change to authorize it to impose a more stringent inspection standard, HUD has not requested authority from Congress to amend its inspection standard for the voucher program.

For voucher units, HUD requires PHAs to ensure that trained inspectors conduct visual assessments to identify deteriorated paint for housing units

[73]The United States Court of Appeals for the Ninth Circuit also noted that the deadlines would only be modified if EPA presented new information showing modification was required. *See In Re A Cmty Voice v. U.S. Environmental Protection Agency*, 878 F.3d 779 (2017).

inhabited by a child under 6 years old.[74] In a visual assessment, an inspector looks for deteriorated paint and visible surface dust but does not conduct any testing of paint chips or dust samples from surfaces to determine the presence of lead in the home's paint.[75] By contrast, for public housing units, HUD requires a stronger inspection process. Lead-based paint inspections are required for pre-1978 public housing units. If that inspection identifies lead-based paint, PHAs must then perform a risk assessment. In a risk assessment, in addition to conducting a visual inspection, an inspector tests for the presence of lead paint by collecting and testing samples of paint chips and surface dust, and typically using a specialized device (an X-ray fluorescence analyzer) to measure the amount of lead in the paint on a surface, such as a wall, door, or window sill.

Staff from HUD's Lead Office and the Office of General Counsel told us that Title X did not include specific risk assessment requirements for voucher units, and HUD does not believe, therefore, that it has the statutory authority to require an assessment more thorough than a visual assessment of voucher units.[76] As of May 2018, HUD had not requested statutory authority to change the visual assessment standard used in the voucher program. However, HUD previously acknowledged the limitation of the weaker inspection standard in a June 2016 publication titled Lead-Safe Homes, Lead-Free Kids Toolkit.[77] In this publication, HUD noted its plans to support legislative change to strengthen lead safety in voucher units by eliminating reliance on visual-only inspections. Staff from HUD's Lead Office and Office of General Counsel told us the agency recognizes that risk assessments are more comprehensive than visual assessments. The staff noted that, by definition, a risk assessment is a stronger inspection standard than a visual-only assessment because it includes additional identification and testing.

[74]24 C.F.R. § 35.1215. This subpart of the Lead Safe Housing Rule applies only to HUD-assisted housing units occupied or to be occupied by families or households that have one or more children of less than 6 years of age, common areas servicing such housing units, and exterior painted surfaces associated with such housing units or common areas.

[75]According to HUD staff, pre-1978 housing units are generally presumed to have lead-based paint, unless paint testing or an inspection has proven otherwise.

[76]According to HUD, the legislative history shows that Congress directed HUD not to require risk assessments for the voucher program, see e.g., S. Rep. No. 102-332 (1992).

[77]Department of Housing and Urban Development, Office of the Secretary, *Lead-Safe Homes, Lead-Free Kids Toolkit* (Washington, D.C.: June 13, 2016).

In responding to a draft of this report, HUD cited the need to conduct and evaluate the results of a statistically rigorous study on the impacts of requiring a lead risk assessment versus a visual assessment, such as the impact on leasing times and the availability of housing for low-income families. HUD further noted that such a study could explore whether alternative options to the full risk assessment standard (such as targeted dust sampling) could achieve similar levels of protection for children in the voucher program. Requesting and obtaining authority to amend the standard for the voucher program would not preclude HUD from doing such a study. Such analysis might support a range of options based on consideration of health effects for children, housing availability, and other relevant factors.

Because HUD's Lead Safe Housing Rule contains a weaker lead inspection standard for the voucher program children living in voucher units may be less protected from lead paint hazards than children living in public housing. By requesting and obtaining statutory authority to amend the voucher program inspection standard, HUD would be positioned to take steps to ensure that children in the voucher program are provided better protection as indicated by analysis of the benefits and costs from amending the standard.

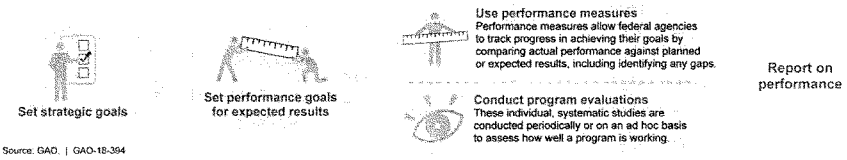
HUD Could Better Measure and Report on Performance of Lead Efforts

HUD has taken limited steps to measure, evaluate, and report on the performance of its programmatic efforts to ensure that housing is lead-safe. First, HUD has tracked one performance measure for its lead grant programs but lacks comprehensive performance goals and measures. Second, while HUD has evaluated the effectiveness of its Lead-Based Paint Hazard Control grant program, it has not formalized plans and does not have a time frame for evaluating its lead paint regulations. Third, HUD has not issued an annual report on the results of its lead efforts since 1997.

A key aspect to promoting improved federal management and greater efficiency and effectiveness is that agencies set goals and report on performance. We have previously reported that a program performance assessment contains three key elements—program goals, performance

measures, and program evaluations (see fig. 5).[78] In our prior work, we have noted that both the executive branch and congressional committees need evaluative information to help them make decisions about the programs they oversee—information that tells them whether, and why, a program is working well or not.[79]

Figure 5: Key Elements of Program Performance Assessment for Federal Agencies



Source: GAO. | GAO-18-394

Program goals and performance measures. HUD has tracked one performance measure for making private housing units lead-safe as part of its lead grant programs but lacks goals and performance measures that more fully cover the range of its lead efforts. In addition to our prior work on program goals and performance measures, federal internal control standards state that management should define objectives clearly and that defining objectives in measurable terms allows agency management to assess performance toward achieving objectives.[80] According to Lead Office staff, HUD provides information on its goals and performance measures related to its lead efforts in the agency's annual performance

[78]For example, see GAO-16-393. Program goals communicate what the agency proposes to accomplish and allow agencies to assess or demonstrate the degree to which those desired results were achieved. Performance measures are concrete, objective, observable conditions that permit the assessment of progress made towards the goals. We have previously defined performance measurement as the ongoing monitoring and reporting of program accomplishments, particularly progress toward pre-established goals. Most federal agencies now use performance measures to track progress towards goals. Program evaluations are individual systematic studies conducted periodically or on an ad hoc basis to assess how well a program is working, typically relative to its objectives. Some federal agencies conduct in-depth program evaluations to assess their programs' impact or learn how to improve results.

[79]GAO-16-393 and GAO-11-646SP.

[80]GAO-14-704G.

reports.[81] For example, the fiscal year 2016 report contains information about the number of private housing units made lead-safe as part of HUD's lead grant programs but does not include any performance measures on HUD's lead efforts for the voucher and public housing programs.[82] Lead Office staff told us HUD does not have systems to count the number of housing units made lead-safe in these two housing programs. The staff said the Lead Office and PIH recently began discussing whether data from an existing HUD database could be used to count units made lead-safe within these programs. However, they could not provide additional details on the status of all these efforts. Without comprehensive goals and performance measures, HUD does not know the results it is achieving with all its lead paint hazard reduction efforts. Moreover, HUD may be missing opportunities to use performance information to improve the results of its lead efforts.

Program evaluations. HUD has evaluated the effectiveness of its Lead-Based Paint Hazard Control grant program but has not taken similar steps to evaluate the Lead Safe Housing Rule or Lead Disclosure Rule. As previously stated, our prior work on program performance assessment has noted the importance of program evaluations to know how well a program is working relative to its objectives. Additionally, Title X required HUD to conduct research to evaluate the long-term cost-effectiveness of interim lead hazard control and abatement strategies. For its Lead-Based Paint Hazard Control Grant program, HUD has contracted with outside experts to conduct evaluations. For example, the National Center for Healthy Housing and the University of Cincinnati's Department of Environmental Health evaluated whether the lead hazard control methods used by grantees continued to be effective 1, 3, 6, and 12 years later.[83]

[81]HUD has reported the information on lead-safe housing units for the grant programs as part of an overall agency goal and performance measure related to the number of green and healthy housing units completed (some of which may not be related to lead-safe housing efforts). Lead Office staff told us they track the average dollar amount grantees have spent to make a housing unit lead-safe (i.e., a cost per unit metric) but the agency does not formally track or report this metric.

[82]Additionally, the report contained information on the number of housing units made lead-safe for other HUD programs, such as HUD's Office of Community Planning and Development's implementation of the Community Development Block Grant and HOME Investment Partnerships programs. As noted previously, this office and these programs were not the focus of this review.

[83]The purpose of the evaluations was to compare the effectiveness of the different lead hazard control methods used by grantees, using lead dust levels and blood lead levels as the primary measures of effectiveness. Results of the lead grant program evaluations have been published between 2004 and 2012; for a full list of publications see appendix II.

The evaluations concluded that the lead hazard control activities used by grantees substantially reduced lead dust levels and the original evaluation and those completed 1 and 3 years later were also associated with substantial declines in the blood lead levels of children living in the housing remediated using lead grant program funds.

HUD has general plans to conduct evaluations of the Lead Safe Housing Rule and the Lead Disclosure Rule, but Lead Office and PD&R staff said they did not know when or if the studies will begin. In a 2016 publication, HUD noted its plans to evaluate the Lead Safe Housing Rule requirements and noted that such an evaluation would contribute toward policy recommendations and program improvements.[84] Additionally, in its 2017 Research Roadmap, PD&R outlined HUD's plans for two studies to evaluate the effectiveness of requirements within the Lead Safe Housing and Lead Disclosure Rules.[85] However, PD&R and Lead Office staff were not able to provide a time frame for when the studies would begin. PD&R staff told us that the plans noted within the Research Roadmap were HUD's first step in research planning and prioritization but that appropriations for research have been prescriptive in recent years (i.e., tied to specific research topics) and fell short of the agency's research needs. By studying the effectiveness of requirements included within the Lead Safe Housing and Lead Disclosure Rules, including the cost-effectiveness of the various lead hazard control methods, HUD could have more complete information to assess how effectively it uses federal dollars to make housing units lead-safe.

Reporting. HUD has not reported on its lead efforts as required since 1997.[86] Title X includes annual and biennial reporting requirements for

[84]Department of Housing and Urban Development, Office of the Secretary, *Lead-Safe Homes, Lead-Free Kids Toolkit* (Washington, D.C.: June 13, 2016).

[85]Department of Housing and Urban Development, Office of Policy Development and Research, *HUD Research Roadmap: 2017 Update*, January 2017.

[86]Department of Housing and Urban Development, Office of Lead Hazard Control, *Moving Toward A Lead-Safe America: A Report to the Congress of the United States,* February 1997. In March 2018 HUD issued a report in response to a request from Congress to report on the steps HUD has taken to improve its data collection and analysis processes for Housing Choice Voucher units with respect to lead paint regulations, see Department of Housing and Urban Development, Office of Public and Indian Housing and Office of Lead Hazard Control and Healthy Homes, *Report to Congress: HUD Oversight of the Lead Safe Housing Rule for the Public Housing and Housing Choice Voucher Programs,* March 2018.

HUD.[87] Staff from HUD's Lead Office and General Counsel told us that in 1998 the agency agreed with the congressional committees of jurisdiction that HUD could satisfy this reporting requirement by including the required information in its annual performance reports. Lead Office staff told us HUD's recent annual performance reports do not contain specific information required by law and that HUD has not issued other publicly available reports that contain the Title X reporting requirements. Title X requires HUD to annually provide Congress information on its progress in implementing the lead grant programs; a summary of studies looking at the incidence of lead poisoning in children living in HUD-assisted housing; the results of any required lead technical studies; and estimates of federal funds spent on lead hazard evaluation and reduction in HUD-assisted housing.[88] As previously stated, the annual performance reports have provided information on the number of housing units made lead-safe through the agency's lead grant programs, but not through the voucher or public housing programs. In March 2018, Lead Office staff told us HUD plans to submit separate reports on the agency's lead effort, covering the Title X reporting requirements, starting in fiscal year 2019. By HUD complying with Title X statutory reporting requirements, Congress and the public will be in a position to better know the progress HUD is making toward ensuring that housing is lead-safe.

Conclusions

Lead exposure can cause serious, irreversible cognitive damage that can impair a child for life. Through its lead grant programs and oversight of lead paint regulations, HUD is helping to address lead paint hazards in housing. However, our review identified specific areas where HUD could improve the effectiveness of its efforts to identify and address lead paint hazards and protect children in low-income housing from lifelong health problems:

- **Documenting and evaluating grant processes.** HUD could improve documentation for its lead grant programs' processes by providing more specific direction to staff and documenting grant award rationale. In doing so, HUD could better ensure that grant program staff score grant applications consistently and appropriately and

[87]Title X § 1061, 106 Stat. 3926 (codified at 42 U.S.C. § 4856).

[88]Biennial reporting requirements include reporting on HUD's progress in implementing expanded lead paint hazard evaluation and reduction activities, as well as providing information on the effectiveness of the Lead Disclosure Rule in making the public aware of lead paint hazards, among other things.

provide greater transparency about its award decisions. Additionally, periodically evaluating its grant processes and procedures could help HUD better ensure that its lead grants reach areas most at risk for lead paint hazards.

- **Identifying areas at risk for lead hazards.** By developing specific time frames to finalize and incorporate the results of its model to more fully identify areas at risk for lead paint hazards, HUD can better identify and conduct outreach to at-risk localities that its lead grant programs have not yet reached.
- **Overseeing compliance with lead paint regulations.** False self-certifications of compliance by some PHAs and other limitations in HUD's compliance monitoring approach make it essential for HUD to develop a plan to mitigate and address limitations, as well as establish procedures to determine when enforcement decisions are needed. These actions could further strengthen HUD's oversight and keep PHAs accountable for ensuring that housing units are lead-safe.
- **Amending inspection standard in the voucher program.** Children living in voucher units may receive less protection from lead paint hazards than children living in public housing units because HUD applies different lead inspection standards to the two programs. HUD could ensure that children in the voucher program are provided better protection from lead by requesting and obtaining statutory authority to amend the voucher program inspection standard as indicated by analysis of the benefits and costs of amending the standard.
- **Assessing and reporting on performance.** Fully incorporating key elements of performance assessment—by developing comprehensive goals, improving performance measures, and adhering to reporting requirements—could better enable HUD to assess its own progress and target its resources toward lead efforts that maximize impact. Additionally, HUD may be missing opportunities to inform the Congress and the public about how HUD's lead efforts have helped reduce lead poisoning in children.

Recommendations for Executive Action

We are making the following nine recommendations to HUD:

- The Director of HUD's Lead Office should ensure that the office more fully documents its processes for scoring and awarding lead grants and its rationale for award decisions. (Recommendation 1)
- The Director of HUD's Lead Office should ensure that the office periodically evaluates its processes for scoring and awarding lead grants. (Recommendation 2)

- The Director of HUD's Lead Office, in collaboration with PD&R, should set time frames for incorporating relevant data on lead paint hazard risks into the lead grant programs' processes. (Recommendation 3)
- The Director of HUD's Lead Office and the Assistant Secretary for PIH should collaborate to establish a plan to mitigate and address risks within HUD's lead paint compliance monitoring processes. (Recommendation 4)
- The Director of HUD's Lead Office and the Assistant Secretary for PIH should collaborate to develop and document procedures to ensure that HUD staff take consistent and timely steps to address issues of PHA noncompliance with lead paint regulations. (Recommendation 5)
- The Secretary of HUD should request authority from Congress to amend the inspection standard to identify lead paint hazards in the Housing Choice Voucher program as indicated by analysis of health effects for children, the impact on landlord participation in the program, and other relevant factors. (Recommendation 6)
- The Director of the Lead Office should develop performance goals and measures to cover the full range of HUD's lead efforts, including its efforts to ensure that housing units in its rental assistance programs are lead-safe. (Recommendation 7)
- The Director of the Lead Office, in conjunction with PD&R, should finalize plans and develop a time frame for evaluating the effectiveness of the Lead Safe Housing and Lead Disclosure Rules, including an evaluation of the long-term cost effectiveness of the lead remediation methods required by the Lead Safe Housing Rule. (Recommendation 8)
- The Director of the Lead Office should complete statutory reporting requirements, including but not limited to its efforts to make housing lead-safe through its lead grant programs and rental-assistance programs, and make the report publicly available. (Recommendation 9)

Agency Comments and Our Evaluation

We provided a draft of this report to HUD for review and comment. We also provided the relevant excerpts of the draft report to CDC and EPA for their review and technical comments. In written comments, reproduced in appendix III, HUD disagreed with one of our recommendations and generally agreed with the remaining eight. HUD and CDC also provided technical comments, which we incorporated as appropriate. EPA did not have any comments on the relevant excerpts of the draft report provided to them.

In its general comments, HUD noted that the lead grant programs and HUD's compliance assistance and enforcement of lead paint regulations have contributed significantly to, among other things, the low prevalence of lead-based paint hazards in HUD-assisted housing. Further, HUD said the lead grant programs and compliance assistance and enforcement of lead paint regulations have played a critical part in developing and maintaining the national lead-based paint safety infrastructure. HUD asked that this contextual information be included in the background of the report. The draft report included detailed information on the purpose and scope of HUD's lead grant programs, two key regulations related to lead paint hazards, and efforts to make housing lead-safe. Furthermore, the draft report provided context on other federal agencies' role in establishing relevant standards and guidelines for lead paint hazards. We made no changes in response to this comment because we did not think it was necessary for background purposes.

HUD disagreed with the draft report's sixth recommendation to request authority from Congress to use the risk assessment inspection standard to identify lead paint hazards in the Housing Choice Voucher program. As discussed in the report, HUD's Lead Safe Housing Rule requires a more stringent lead inspection standard (risk assessments) for public housing than for Housing Choice Voucher units, for which a weaker inspection standard is used (visual assessments). In its written comments, HUD said that before deciding whether to request the statutory authority to implement risk assessments for voucher units, it would need to conduct and evaluate the results of a statistically rigorous study on the impacts of requiring a lead risk assessment versus a visual assessment, such as the impact on leasing times and the availability of housing for low-income families. HUD further noted that such a study could explore whether alternative options to the full risk assessment standard (such as targeted dust sampling) could achieve similar levels of protection for children in the voucher program. We note that requesting and obtaining authority to amend the standard for the Housing Choice Voucher program would not preclude HUD from doing such a study. We acknowledge that the results of such a study might support a range of options. Therefore, we revised our recommendation to provide HUD with greater flexibility in how it might amend the lead inspection standard for the voucher program based on consideration of not only leasing time and availability of housing, as HUD emphasized in its written comments, but also based on the health effects on children. The need for HUD to review the lead inspection standard for the voucher program is underscored by the greater number of households with children served by the voucher program compared to public housing,

as well as recent information indicating that more children with elevated blood lead levels are living in voucher units than in public housing.

HUD generally agreed with our remaining eight recommendations and provided specific information about planned steps and other considerations related to implementing them. For example, in response to our first three recommendations on the lead grant programs, HUD outlined specific steps it plans to take, such as updating its guidance for scoring grant applications and reviewing its grant application scoring methods to identify potential improvements. In response to our fourth and fifth recommendations to the Director of HUD's Lead Office on compliance monitoring and enforcement of lead paint regulations, HUD noted that PIH should be the primary office for these recommendations with the Lead Office providing support. While these recommendations had already recognized the need for the Lead Office to collaborate with PIH, we reworded them to clarify that it is not necessary for the Lead Office to have primary responsibility for their implementation.

HUD generally agreed with our seventh and eighth recommendations, but noted some considerations for implementing them. For our seventh recommendation about performance goals and measures, HUD noted that it will re-examine the availability of information from the current housing databases to determine whether data on housing unit production can be added to the existing data collected. HUD noted if that information is not sufficient, it would need to obtain Office of Management and Budget approval and have sufficient funds for such an information technology project. For our eighth recommendation about evaluating the Lead Safe Housing and Lead Disclosure Rules, HUD noted if its own resources are insufficient, the time frame for implementing this recommendation may depend on the availability of funding for contracted resources. Finally, in response to our ninth recommendation, HUD said that it will draft and submit annual and biennial reports to the congressional authorizing and appropriations committees and then post the reports on the Lead Office's public website.

We are sending copies of this report to the appropriate congressional committees, the Secretary of the Department of Housing and Urban Development, the Administrator of the Environmental Protection Agency, and the Secretary of Health and Human Services, and other interested parties. In addition, the report is available at no charge on the GAO website at http://www.gao.gov.

If you or your staff have any questions about this report, please contact me at (202) 512-8678 or garciadiazd@gao.gov. Contact points for our Offices of Congressional Relations and Public Affairs may be found on the last page of this report. GAO staff who made key contributions to this report are listed in appendix IV.

Daniel Garcia-Diaz
Director, Financial Markets and Community Investment

Appendix I: Nonfederal Funding Sources Used by Selected Grantees of HUD Lead Hazard Control Grants

Under the Department of Housing and Urban Development's (HUD) Lead-Based Paint Hazard Control and the Lead Hazard Reduction Demonstration grant programs, HUD competitively awards grants to state and local jurisdictions, as authorized by the Residential Lead-Based Paint Hazard Reduction Act (Title X of the Housing and Community Development Act of 1992).[1] Title X requires each grant recipient to make matching contributions with state, local, and private funds (i.e., nonfederal) toward the total cost of activities. For the Lead-Based Paint Hazard Control grant and the Lead Hazard Reduction Demonstration grant programs, the matching contribution has been set at no less than 10 percent and 25 percent, respectively, of the total grant amount.[2] For example, if the total grant amount is $3 million, then state or local jurisdictions must provide at least $300,000 and $750,000, respectively, for each grant program, in additional funding toward the cost of activities.[3] HUD requires lead grant applicants to include information on the sources and amounts of grantees' matching contributions as part of their grant applications.[4] Additionally, Title X requires HUD to award grants in part based on an applicant's ability to leverage state, local, and private funds to supplement the federal grant funds.[5]

To identify the nonfederal funding sources grantees used in the lead hazard control grants, we selected and reviewed the lead grant applications of 20 HUD grantees and interviewed representatives from 10

[1]*See* Title X § 1011 (codified as amended at 42 U.S.C. § 4852).

[2]Title X, the original authorizing statute for both grant programs, requires that applicants provide a matching contribution "in an amount not less than 10 percent of the total grant amount." 42 U.S.C. § 4852(h). The Lead Hazard Reduction Demonstration has been reauthorized annually through appropriations legislation. The Fiscal Year 2017 Consolidated Appropriations Act requires applicants to this grant program to provide a matching contribution in "an amount not less than 25 percent of the total." Consolidated Appropriations Act, 2017, Pub. L. No. 115-31, 131 Stat. 777-78 (2017). The Consolidated Appropriations Act 2018, Pub. L. No. 115-141, Div. L, Title II (2018), provides funds for a single grant program referred to as the Lead Hazard Reduction Program and does not specify a match requirement for the single grant program.

[3]Grantees must use their matching contributions to pay for grant activities that are specified in HUD's annual notices of funding for the agency's lead grant programs.

[4]HUD staff told us that the agency had previously awarded additional points to applicants who contributed more than the required matching contributions in 2000 through 2011 and also noted that the agency is considering doing so again in future years.

[5]Grantees can use nonfederal funds to satisfy the grant programs' matching contribution requirements and pay for eligible grant activities that are allowable under HUD's annual notices of funding availability for the its lead grant programs.

of these.[6] We selected these grantees based on their geographic locations; the number of HUD lead grants they had previously received; experience with HUD's lead hazard control grants; and whether they have received both grants from 2013 through 2017. Grantees we selected included entities at the state, municipality, and county levels. Information from our grant application reviews and interviews of grantees cannot be generalized to all HUD grantees.

Based on our review of the selected grant applications and interviews of selected grantees, we found that grantees planned to use the following types of nonfederal funding sources as their matching contributions to support their lead grants activities:

- **State and local funds.** Eighteen of the 20 grantees we selected noted that they planned to use state or local funding sources to supplement HUD's grant funds. The state and local funding sources included state or local general funds and local property taxes or fees.[7] For example, grantees in Connecticut, Baltimore, and Philadelphia used state or local general funds to cover personnel and operating costs. Additionally, grantees in Alameda County (California), Hennepin County (Minnesota), Malden, St. Louis, and Winnebago County (Illinois) planned to use local taxes, including property taxes or fees, such as real estate recording and building permit fees, to cover some costs associated with their lead hazard control grants activities.
- **Community Development Block Grant funds.** Ten of the 20 grantees we selected indicated that they planned to use Community Development Block Grant (CDBG) program funds to cover part of the costs of their lead hazard control grants.[8] CDBG program funds can be used by states and local communities for housing; economic

[6]We selected 20 grantees in Alameda County, California; Atlanta, Georgia; Baltimore, Maryland; State of Connecticut; Cuyahoga County, Ohio; District of Columbia; Denver, Colorado; Hennepin County, Minnesota; Lewiston, Maine; Malden, Massachusetts; Memphis, Tennessee; Monroe County, New York; Philadelphia, Pennsylvania; Providence, Rhode Island; San Antonio, Texas; San Francisco, California; St. Louis, Missouri; Tucson, Arizona; State of Vermont; and Winnebago County, Illinois.

[7]A general fund is the primary fund a state or a local government uses to collect revenues and pay expenses that are not designated to a specific fund.

[8]CDBG program funds are annually appropriated by Congress. After funds are set aside for special statutory purposes—the Indian Community Development Block Grant program and allocated insular areas—70 percent of the remaining CDBG appropriation is allocated to entitlement communities (generally metropolitan cities and counties) and 30 percent to states.

development; neighborhood revitalization; and other community development activities.[9] For example, grantees in Baltimore and Memphis noted in their grant applications that they planned to use the funds to cover costs related to personnel, operations, and training.

- **Nongovernmental contributions or discounts.** Eight of 20 grantees we selected stated that they anticipated some forms of nongovernmental contributions from nonprofit organizations or discounts from contractors to supplement the lead grants. For example, all eight grantees stated that they expected to receive matching contributions from nonprofit organizations.

Table 2 summarizes the nonfederal funds by source that the 20 selected grantees planned to use, based on our review of these grantees' applications.

Table 2: Department of Housing and Urban Development (HUD) Lead Grant Programs: Selected Grantees' Sources of Nonfederal Funds as Matching Contributions, 2013–2017

Fiscal year of grant application	State or local funds (in dollars)[a]	Community Development Block Grant funds (in dollars)	Nongovernmental contributions (in dollars)[b]	Total matching contribution (in dollars)	Number of applications selected[c]
2013	493,248	1,576,304	0	2,069,552	3
2014	4,193,929	0	227,161	4,421,090	4
2015	3,299,807	1,601,355	9,489	4,910,651	3
2016	783,369	982,282	100,000	1,865,651	4
2017	1,586,513	1,267,321	1,902,594	4,756,428	6
2013–2017 (in dollars)	10,356,866	5,427,262	2,239,244	18,023,373	20
2013–2017 (as a percentage of total dollars)	57	30	12	100	

Source: GAO analysis of selected grant applications of HUD's lead grant programs. | GAO-18-394

Note: We selected a nonprobability sample of 20 lead grant applications from 2013 through 2017. We reviewed these applications and identified the sources and amounts of nonfederal funds that grantees had planned to use as matching contributions. The information we identified may or may not be representative of the actual matching contributions that grantees used for grants awarded from 2013 through 2017. Percentages do not sum to 100 percent due to rounding.

[a]The state and local funds included state or local general funds, and local property taxes or fees.

[b]The nongovernmental funds included contributions from nonprofit organizations and discounts from contractors.

[9]According to federal law, although CDBG is funded by federal funds, CDBG funds may be treated as nonfederal funds that may be used, as allowed, for another federal grant program. *See* 42 U.S.C. § 5305(a)(9); 24 C.F.R. § 570.201(g). HUD's lead hazard control grant programs allow CDBG funds to be counted toward the matching contribution requirements.

[2]We selected and reviewed one lead grant application each from 20 grantees in Alameda County, California; Atlanta, Georgia; Baltimore, Maryland; State of Connecticut; Cuyahoga County, Ohio; District of Columbia; Denver, Colorado; Hennepin County, Minnesota; Lewiston, Maine; Malden, Massachusetts; Memphis, Tennessee; Monroe County, New York; Philadelphia, Pennsylvania; Providence, Rhode Island; San Antonio, Texas; San Francisco, California; St. Louis, Missouri; Tucson, Arizona; State of Vermont; and Winnebago County, Illinois.

Furthermore, almost all of the selected grantees stated in their grant applications or told us that they expected to receive or have received other nonfederal funds in excess of their matching contributions. For example, 15 grantees stated that they generally required or encouraged property owners or landlords to contribute toward the lead hazard remediation costs. Also, grantees in Baltimore, District of Columbia, Lewiston, and Providence indicated that they expected to receive monetary or in-kind donations from organizations to help carry out lead hazard remediation, blood lead-level testing, or training. Additionally, the grantee in Alameda County (California) told us that they have received nonfederal funds from a litigation settlement with a private paint manufacturer.

Appendix II: Objectives, Scope, and Methodology

This report examines the Department of Housing and Urban Development's (HUD) efforts to (1) incorporate statutory requirements and other relevant federal standards in its lead grant programs; (2) monitor and enforce compliance with lead paint regulations for its rental assistance programs; (3) adopt federal health guidelines and environmental standards for lead hazards in its lead grant and rental assistance programs; and (4) measure and report on its performance related to making housing lead-safe.

In this report, we examine lead paint hazards in housing, and we focus on HUD's lead hazard control grant programs and its two largest rental assistance programs that serve the most families with children: the Housing Choice Voucher (voucher) and public housing programs.[1]

To address all four objectives, we reviewed relevant laws, such as the Residential Lead-Based Paint Hazard Reduction Act (Title X of the Housing and Community Development Act of 1992, referred to as Title X throughout this appendix) and relevant HUD regulations, such as the Lead Safe Housing Rule and a January 2017 amendment to this rule.[2] To examine trends in funding for HUD's lead grant programs for the past 10 years, we also reviewed HUD's budget information for fiscal years 2008 through 2017. We interviewed HUD staff from the Office of Lead Hazard Control and Healthy Homes (Lead Office), Office of Public and Indian Housing (PIH), Office of Policy Development and Research (PD&R), and other relevant HUD program and field offices. Finally, we reviewed our prior work and those of HUD's Office of Inspector General.[3]

[1]We did not examine lead hazards in schools, daycare centers, commercial buildings, water, food, or products such as toys, ceramics, or jewelry. For additional work on lead in water and schools, see GAO, *Drinking Water: Additional Data and Statistical Analysis May Enhance EPA's Oversight of the Lead and Copper Rule*, GAO-17-424 (Washington, D.C.: Sept. 1, 2017). Additionally, we have ongoing work reviewing lead service lines and lead in school drinking water.

[2]*See e.g.* Title X; 24 C.F.R. pt. 35; Requirements for Notification, Evaluation and Reduction of Lead-Based Paint Hazards in Federally Owned Residential Property and Housing Receiving Federal Assistance, 82 Fed. Reg. 4151 (Jan. 13, 2017). We also reviewed relevant congressional committee reports that originally accompanied Title X, *see ex.* S. Rep. No. 102-332 (1992).

[3]GAO, *Department of Housing and Urban Development: Actions Needed to Incorporate Key Practices into Management Functions and Program Oversight*, GAO-16-497 (Washington, D.C.: July 20, 2016); and Department of Housing and Urban Development, Office of Inspector General, *Risk Based Enforcement Could Improve Program Effectiveness*, 2014-OE-0002 (Washington, D.C.: Feb. 12, 2016).

To address the first objective, we reviewed HUD's Notices of Funding Availability (funding notices), policies, and procedures to identify HUD's grant award processes for the Lead-Based Paint Hazard Control grant and Lead Hazard Reduction Demonstration grant programs. For example, we reviewed HUD's annual notices of funding availability from 2013 through 2017 to identify HUD's scoring factors for evaluating grant applications. We compared HUD's grant award processes in 2017 with Title X statutory requirements, the Office of Management and Budget (OMB) requirements for awarding federal grants, and relevant federal internal control standards.[4] We also interviewed HUD staff about the agency's grant application review and award processes.

To determine the extent to which HUD's grants have gone to counties in the United States potentially at high risk for lead paint hazards, we compared grantee locations from HUD's lead grant data for grants awarded from 2013 through 2017 with county-level data on two indicators of lead paint hazard risk from the 2011–2015 American Community Survey—a continuous survey of households conducted by the U.S. Census Bureau. We analyzed HUD's grant data to determine the number and dollar amount of grants received by each grantee, and the grantees' addresses. We then conducted a geographic analysis to determine whether each HUD lead grant went to a county that met at least one, both, or neither of the two commonly known indicators of lead paint hazard risk—the age of housing and poverty level. We identified these two indicators through a review of relevant academic literature, agency research, and state lead modelling methodologies.[5]

We used data from the 2011–2015 American Community Survey because the data covered a time frame that best aligned with the 5 years of lead grant data (2013 through 2017). Using its county-level data, we calculated an estimated average percentage nationwide of housing units built before

[4]Title X; Office of Management and Budget, *Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards* (codified at 2 C.F.R. pt. 200), effective for grants awarded starting in December 2014; and GAO, *Standards for Internal Control in the Federal Government*, GAO-14-704G (Washington, D.C.: September 2014).

[5]For example, see Eric M. Roberts and Paul B. English, "Analysis of multiple-variable missing-not-at-random survey data for child lead surveillance using NHANES," *Statistics in Medicine* 35 (November 2016); Department of Housing and Urban Development, *American Healthy Homes Survey: Lead and Arsenic Findings,* April 2011; and Washington State Department of Health, Division of Environmental Public Health, *A Targeted Approach to Blood Lead Screening in Children, Washington State: 2015 Expert Panel Recommendations* (November 2015).

1980 (56.9 percent) and an estimated average percentage nationwide of individuals living below the poverty level (17.5 percent). We used 1980 as a benchmark for age of housing because the American Community Survey data for age of housing is separated by the decade of construction and 1980 was closest in time to the 1978 federal lead paint ban. We categorized counties based on whether their levels of pre-1980 housing and poverty were above one, both, or neither of the respective national average percentage for each indicator.[6] The estimated average nationwide and county-level percentages of the two indicators (e.g., older housing and poverty rate) are expressed as a range of values.[7] For the lower and upper ends of the range, we generated a 95 percent confidence interval that was within plus or minus 20 percentage points.

We classified a county as above the estimated average percentages nationwide if the county's confidence interval was higher and did not overlap with the nationwide estimate's confidence interval. We omitted the data for 12 counties that we determined were unreliable for our purposes.[8] We analyzed data starting in 2013 because that was the first year for which these grant data were available electronically. We also interviewed HUD staff to understand their efforts and plans to perform similar analyses using indicators of lead paint hazard risk. To assess the reliability of HUD's grant data, we reviewed documentation of HUD's grant database, interviewed Lead Office staff on the processes HUD used to collect and ensure the reliability of the data, and tested the data for missing values, outliers, and obvious errors. To assess the reliability of the American Community Survey data, we reviewed statistical information from the Census Bureau and other publicly available documentation on the survey and conducted electronic testing of the data. We determined

[6]Our analysis did not account for population, but for the purposes of awarding grants, population density of a jurisdiction may be one of a number of relevant factors, according to HUD staff. Additionally, for state government grantees (12 of them), we used address data provided by HUD and assigned a corresponding county. However, state government grantees can specify other counties within their state where lead hazard control activities may occur. In our analysis, we were not able to account for the actual counties of where state grantee lead hazard control activities took place.

[7]The American Community Survey is a probability survey and only one of a large number of samples that might have been drawn. Because each sample could have provided different estimates, we express our confidence in the precision of the particular sample's results as a range (i.e., the confidence interval). This range would contain the actual population value for 95 percent of the samples we could have drawn.

[8]Specifically, the estimates for these 12 counties had margins of error greater than 20 percent.

that the HUD grant data and American Community Survey county-level data on age of housing and poverty were sufficiently reliable for identifying areas at risk of lead paint hazards and determining the extent to which lead grants from 2013 through 2017 have gone to at-risk areas.

Furthermore, to obtain information about how HUD works with grantees to achieve program objectives, we conducted in-person site visits to five grantees located in five localities (Alameda County, California; Atlanta, Georgia; Baltimore, Maryland; District of Columbia; and San Francisco, California); and interviewed an additional five grantees on the telephone (Hennepin County, Minnesota; Lewiston, Maine; Malden, Massachusetts; Providence, Rhode Island; and Winnebago County, Illinois). In addition, we reviewed the grant applications of the 10 grantees we spoke to and an additional 10 grantees from 10 additional jurisdictions (State of Connecticut; Cuyahoga County, Ohio; Denver, Colorado; Monroe County, New York; Philadelphia, Pennsylvania; Memphis, Tennessee; San Antonio, Texas; St. Louis, Missouri; Tucson, Arizona; and State of Vermont).

We selected the 10 grantees for site visits or interviews based on the following criteria: geographic variation, number of years the grantees had HUD's lead grants, and grantees that have received both types of lead grants from 2013 through 2017. We selected the 10 additional grantees' applications for review based on geographic diversity and to achieve a total of two applications for each year during our 5-year time frame, with at least one application from each of the two HUD lead grant programs. As part of our review of selected grant applications, we identified nonfederal funding sources used by grantees, such as local tax revenues, contractor discounts, and property owner contributions. Information from the selected grantees and grant applications review cannot be generalized to those grantees we did not include in our review. Additionally, we interviewed representatives from housing organizations to obtain additional examples of any nonfederal funding sources, such as state or local bond measures, or low-interest loans to homeowners.[9]

To address the second objective, we also reviewed HUD guidance and internal memorandums related to its efforts to monitor and enforce compliance with lead paint regulations for public housing agencies (PHA),

[9]For example, we interviewed representatives from the National Center for Healthy Housing and the Green and Healthy Homes Initiative.

the entities that manage HUD's voucher and public housing rental assistance programs.[10] In addition, we reviewed HUD's documentation of databases it uses to monitor compliance, including the Lead-Based Paint Response Tracker and the Elevated Blood Lead Level Tracker, and observed HUD staff's demonstrations of these databases. HUD staff also provided a demonstration of the Record and Process Inspection Data database (known as "RAPID") used by HUD's Real Estate Assessment Center to collect physical inspection data for public housing units. We obtained and reviewed information from HUD about instances of potential noncompliance with lead paint regulations by PHAs as of November 2017 and enforcement actions HUD has taken. We compared HUD's regulatory compliance monitoring and enforcement approach to federal internal control standards.[11] We interviewed staff from HUD's Lead Office, Office of General Counsel, Office of Field Operations, and field staff, including four HUD regional directors in areas of the country known to have a high prevalence of lead paint hazards, about internal procedures for monitoring and enforcing compliance with lead paint regulations by the PHAs within their respective regions.

To address the third objective on HUD's adoption of federal health guidelines and environmental standards for lead paint hazards in its lead grant and rental assistance programs, we reviewed relevant rules and HUD documentation. To identify relevant federal health guidelines and environmental standards, we reviewed guidelines and regulations from the Centers for Disease Control and Prevention (CDC) and the Environmental Protection Agency (EPA) and interviewed staff from each agency. To identify state and local laws with different requirements than these federal guidelines and standards, we obtained information from and interviewed staff from CDC's Public Health Law Program and the National Conference of State Legislatures. We compared HUD's requirements to CDC's health guideline known as the "blood lead reference value" and EPA's standards for lead-based paint hazards and lead-dust clearance

[10]For example, see Department of Housing and Urban Development, *Guidance on EPA's Lead-Based Paint Renovation, Repair and Painting (RRP) Rule, HUD's Lead Safe Housing Rule, and the EPA-HUD Lead Disclosure Rule*, Notice PIH 2011-44 (HA), OHHLHC 2011-01 (Washington, D.C.: July 29, 2011) and *Interpretative Guidance on HUD's Lead Safe Housing Rule: The HUD Regulation on Controlling Lead-Based Paint Hazards in Housing Receiving Federal Assistance and Federally Owned Housing Being Sold (24 CFR Part 35)*, (Washington, D.C.: June 2004).

[11]GAO-14-704G.

standards.[12] Finally, we reviewed information in HUD's 2017 funding notices and lead grant programs' policy guidance about requirements for grantees as they pertain to health guidelines and environmental standards. We also interviewed HUD staff about how HUD has used the findings from lead technical study grants to consider changes to HUD's requirements and processes regarding identifying and addressing lead paint hazards for the grant programs.

To address the fourth objective, we reviewed HUD documentation related to performance goals and measures, program evaluations, and reporting. For example, we reviewed HUD's recent annual performance reports to identify goals and performance measures related to HUD's efforts to make housing lead-safe. Further, we reviewed Title X to identify requirements related to evaluating and reporting on HUD's lead efforts. We reviewed program evaluations and related studies completed by outside experts for the lead grant programs and interviewed staff from one of the organizations that conducted the evaluations.[13] In addition, we interviewed Lead Office and PD&R staff about the agency's plans to evaluate the requirements in the Lead Safe Housing Rule and reviewed

[12]Since 2012, CDC has used a health guideline (i.e., blood lead reference value) of 5 micrograms of lead per deciliter of blood to identify children whose blood lead levels are much higher than most children's levels and for whom it recommends initiation of public health actions.

[13]The National Center for Health Housing and The University of Cincinnati Department of Environmental Health, *Evaluation of the HUD Lead-Based Paint Hazard Control Grant Program*, a final report prepared for the Department of Housing and Urban Development, Office of Healthy Homes and Lead Hazard Control (May 1, 2004); *Sherry L. Dixon, Jonathan W. Wilson, Paul A. Succop, Mei Chen, Warren A. Galke, William Menrath, and C. Scott Clark,* "Residential Dust Lead Loading Immediately After Intervention in the HUD Lead Hazard Control Grant Program," *Journal of Occupational and Environmental Hygiene*, vol. 1, no. 11 (2004); *Sherry L. Dixon, Jonathan W. Wilson, C. Scott Clark, Warren A. Galke, Paul A. Succop, and Mei Chen, "Effectiveness of lead hazard control interventions on dust lead loadings: Findings from the evaluation of the HUD Lead-Based Paint Hazard Control Grant Program," Environmental Research, vol. 98 (2005); Jonathan W. Wilson, Tim Pivetz, Peter Ashley, David Jacobs, Warren Strauss, John Menkedick, Sherry Dixon, Hsing-Chaun Tsai, Vincent Brown, Warren Friedman, Warren Galke, and Scott Clark, "Evaluation of HUD-funded lead hazard control treatments at 6 years post-intervention," Environmental Research, vol. 102 (2006); and Sherry Dixon, David Jacobs, Jonathan Wilson, Judith Akoto, Rick Nevin, and C. Scott Clark, "Window replacement and residential lead paint hazard control 12 years later," Environmental Research, vol. 113 (2012).*

corresponding agency documentation about these plans.[14] Additionally, we reviewed the Lead Office's most recent strategic plan (2009) and annual report (1997) on the agency's lead efforts.[15] We compared HUD's use of performance goals and measures, program evaluations, and reporting against leading practices for assessing program performance and federal internal control standards.[16] Finally, we interviewed staff from HUD to understand goals and performance measures used by the agency to assess their lead efforts.

We conducted this performance audit from March 2017 to June 2018 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.

[14]For example see Department of Housing and Urban Development, Office of the Secretary, *Lead-Safe Homes, Lead-Free Kids Toolkit* (Washington, D.C.: June 13, 2016) and Office of Policy Development and Research, *HUD Research Roadmap: 2017 Update*, January 2017.

[15]Department of Housing and Urban Development, Office of Healthy Homes and Lead Hazard Control, *Leading Our Nation to Healthier Homes: The Healthy Homes Strategic Plan,* July 2009 and Office of Lead Hazard Control, *Moving Toward A Lead-Safe America: A Report to the Congress of the United States*, February 1997.

[16]For example, see GAO, *Veterans Justice Outreach Program: VA Could Improve Management by Establishing Performance Measures and More Fully Assessing Risks*, GAO-16-393 (Washington, D.C.: Apr. 28, 2016); *Performance Measurement and Evaluation: Definitions and Relationships,* GAO-11-646SP (Washington, D.C.: May 2, 2011); and GAO-14-704G.

Appendix III: Comments from the Department of Housing and Urban Development

U.S. DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
WASHINGTON, DC 20410-3000

OFFICE OF LEAD HAZARD CONTROL
AND HEALTHY HOMES

May 2, 2018

Mr. Daniel Garcia-Diaz
Director, Financial Markets and Community Investment
Government Accountability Office
441 G Street NW
Washington, DC 20548-0001

Dear Director Garcia-Diaz:

Thank you for the opportunity to comment on the Government Accountability Office's (GAO's) April 13, 2018, draft engagement report GAO-18-394, Lead Paint in Housing: HUD Should Strengthen Grant Processes, Compliance Monitoring, and Performance Assessment. We are conveying HUD's comments on the draft, including our responses to GAO's draft recommendations and, below them, our recommended edits to the draft report.

The design and implementation of HUD's lead safety programs, notably its Lead Hazard Control Grant Programs, and its compliance assistance and enforcement programs for its Lead Disclosure Rule and Lead Safe Housing Rule, have contributed significantly to the national reduction in children's blood lead levels and the low prevalence of lead-based paint hazards in HUD-assisted housing. They have also played a crucial part in developing and maintaining the national lead-based paint safety infrastructure by providing an ongoing demand for services from its contractors, so that it is available for housing that is unassisted as well as HUD-assisted. HUD recommends that this contextual information be added to the start of the Background segment.

We generally agree with most of the GAO draft recommendations, with limitations on proceeding with some of them. Most notably, before deciding whether we would request the significant statutory change in draft recommendation 6, to require lead risk assessments in certain housing choice voucher units, we would need to conduct and evaluate the results of a statistically rigorous study on their impact on leasing times and availability of housing for extremely low-income families. Similarly, on developing measures to cover the full range of our lead efforts, as described in draft recommendation 7, before proceeding, we would likely need Office of Management and Budget approval of the information collection and of the information technology project and have sufficient information technology funds appropriated and allocated for the project.

We appreciate GAO's efforts to review HUD's lead safety programs and recommend enhancements to the programs' effectiveness.

Sincerely,

Matthew Ammon
Director

www.hud.gov espanol.hud.gov

HUD's Comments on Draft Engagement Report GAO-18-394, Lead Paint in Housing: HUD Should Strengthen Grant Processes, Compliance Monitoring, and Performance Assessment

May 2, 2018

HUD's comments on the draft GAO recommendations:

1) The Director of HUD's Lead Office should ensure the office more fully documents its processes for scoring and awarding lead grants and its rationale for award decisions.

HUD agrees with this recommendation to enhance the documentation of its already rigorous grant selection process.

HUD's Office of Lead Hazard Control and Healthy Homes (OLHCHH; "Lead Office" in the draft GAO report) has existing documented processes for the scoring and awarding of Lead Hazard Control Grants ("lead grants" in the draft). Its lead grant programs have been one of the key reasons for the significant decline in childhood lead poisoning over the last two decades. The Department continues to be the leader in the effort to reduce lead poisoning in children from lead hazards in housing, having been instrumental in promulgating the federal lead-based paint strategy,[1] building capacity including a responsible network of grantees and other support, conducting research and outreach, and collaborating with stakeholders nationwide.

Its lead grant programs are carefully crafted to enlist and empower states and communities to compete for and efficiently utilize the resources and have always focused on those areas of greatest need. The grants are highly competitive and are awarded based on a rigorous application review and selection process which includes numerous considerations related to capability, previous experience, need, and grantee contributions, among others. The grant selection processes include implementation of a strong Quality Assurance Program. This aligns the work of grant Application Review Panel members, chairs and co-chairs, and the Office's management, which performs its own quality control checks as part of preparing to select applicants for award, with the Notice of Funding Availability (NOFA) and the Review Guide used by the Application Review Panels for the lead grants. The Office's management of the grants includes several layers of oversight (including on-site and remote monitoring) and tracking performance in the Healthy Homes Grants Management System, progress reviews, compliance assistance and, when needed, grant enforcement; grantees' experience, especially on their performance in producing lead-safe housing units and properly expending grant funds, is a consideration in their applications for future grants.

[1] President's Task Force on Environmental Health Risks and Safety Risks to Children. Eliminating Childhood Lead Poisoning: A Federal Strategy Targeting Lead Paint Hazards. February 2000. https://portal.hud.gov/hudportal/documents/huddoc?id=DOC_11883.pdf.

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The Office will update the processes, including updating the Review Guide to identify and explain even more clearly rating elements and criteria to be used by reviewers for scoring each rating factor and subfactor, and explain the rationale for use of the elements and criteria. The Office's grants award quality control program for the application rating process will be used to ensure that the rating elements and criteria are used as intended.

The Office's existing process for documenting Application Review Panel Reports used for selecting awardees for its Lead Hazard Control Grant Programs will be revised to include an expanded discussion of the rationale for awardee selection and grant funding based on the rating elements and criteria outlined in its Review Guide.[2] If applicable in a specific grant award cycle, the Office will identify any deviation from those rating elements and criteria and the reason for the Office's accepting the deviation in selecting the awardees.

2) The Director of HUD's Lead Office should ensure the office periodically evaluates its processes for scoring and awarding lead grants.

HUD agrees with this recommendation, noting that it already conducts such evaluations, but will enhance how it does so.

HUD notes that GAO's draft recommendation for HUD to "periodically evaluate[] its processes for scoring and awarding lead grants" is likely to be met through internal review and assessment procedures rather than a formal large-scale evaluation that would likely entail the use of limited research funding typically employed for large scale full program evaluations.

HUD also notes that it already systematically reviews the Lead Hazard Control Grant Programs and all other competitive program scoring award systems through the annual NOFA system that involves program staff expertise, departmental grants management expertise, feedback received from grantees and applicants, and a Department-wide clearance of all NOFAs. HUD agrees that the Lead Hazard Control Grant NOFA development process might benefit from using additional information, such as additional data, when available and reliable, to help ensure that all areas of the country with lead hazard reduction needs are aware of and can successfully apply for funding.

The OLHCHH will conduct a debriefing with the Chair, Co-Chair, and reviewers (members) of the Lead Hazard Control Grant Program Application Review Panel and the Office's leadership, to review the results of the scoring and application methods used that year, including the degree of adherence to the rating elements and criteria outlined in its Review Guide. Recommendations will be taken from all reviewers and a recommendation summary will be provided to the Chair of the Panel for the next fiscal year's Lead Hazard Control

[2] On page 21 of the draft report, GAO noted a 2017 case in which a grantee complained it had received only half its funding request. That grantee had tied with another for the lowest score for available funding; the remaining amount was enough for only one fully-funded grant or the two at half-funding. In fairness, HUD asked each if it would accept the reduced amount; after consultation, both agreed, and HUD gave each half of its request.

Grant Program NOFA(s) for use in developing that year's NOFA(s) and, as needed, revising the Rating Guide and grants award quality control program.

3) The Director of HUD's Lead Office, in collaboration with PD&R, should set time frames for incorporating relevant data on lead paint hazard risks into the lead grant programs' processes.

HUD agrees with this recommendation, noting that it is already enhancing its efforts seen in prior-year Lead Hazard Control Grant Program NOFAs, in its forthcoming FY 2018 NOFA,[3] but also noting that further work may be subject to limitations in available funding.

Regarding efforts within the OLHCHH, that Office will use the results of its evaluating its processes for scoring and awarding lead grants, as described in HUD's comment on GAO draft recommendation 2, above. The OLHCHH will also collaborate with HUD's Office of Policy Development and Research (PD&R), and consider, through formal semiannual meetings and ongoing project discussions in between, how relevant data could be used to affect the review and scoring process for grant awards, and to improve efficiency, outcomes, and awareness of lead grant dollars.

Currently, PD&R research staff have been conducting the research into identifying relevant data factors. If HUD determines that contracted research support is also needed based on the complexity of the analyses, such contracting may be subject to limitations in available funding.

The OLHCHH Director will continue to collaborate with the PD&R Leadership on lead safety issues, such as by encouraging research collaborations on communities' lead risks and applying that information to the OLHCHH's grant, outreach, and interagency programs and projects, and facilitate expansion of the interoffice collaboration.

4) The Director of HUD's Lead Office, in collaboration with PIH, should establish a plan to mitigate and address risks within HUD's lead paint compliance monitoring processes.

HUD agrees that a plan, as described, should be established, but recommends that its Office of Public and Indian Housing (PIH), which, as a program office, regularly establishes plans to mitigate and address risks in assisted housing under its purview, should be the primary office for this recommendation, with the OLHCHH providing collaborative support.

This assignment reversal will allow PIH to smoothly integrate its lead risk mitigation plan into its overall program risk mitigation plan and will allow the OLHCHH to provide lead paint compliance monitoring oversight of the implementation of the PIH plan.

The OLHCHH Director will continue to collaborate with the PIH Leadership on lead safety issues, including engaging in the implementation of PIH's lead risk mitigation plan for its assisted housing stock and resident families, and facilitating expansion of the interoffice

[3] Because these comments were developed during the selection process for the FY 2018 NOFA, and the GAO report may be issued before the NOFA is issued, details on its draft rating factors cannot be provided here (see, e.g., 42 U.S.C. §3537a(a), 24 CFR 4.24(a)).

collaboration.

5) The Director of HUD's Lead Office, in collaboration with PIH, should develop and document procedures to ensure that HUD staff take consistent and timely steps to address issues of PHA noncompliance with lead paint regulations.

HUD agrees that a plan, as described, should be established, but recommends that PIH, which, as a program office, regularly develops, establishes, and documents procedures to ensure that HUD staff take consistent and timely steps to address issues of PHA noncompliance with PIH regulations, should be the primary office for this recommendation, with the OLHCHH providing collaborative support.

This assignment reversal will allow PIH to smoothly integrate its lead regulatory noncompliance mitigation plan into its overall program risk mitigation plan and hold its staff responsible for taking consistent and timely steps to address issues of PHA noncompliance with lead paint regulations and will allow the OLHCHH to provide lead paint compliance monitoring oversight of the implementation of the PIH plan.

The OLHCHH Director will continue to collaborate with the PIH Leadership on lead safety issues, including engaging in the implementation of PIH's lead regulatory compliance assistance and enforcement program for its assisted housing stock and resident families, and facilitating expansion of the interoffice collaboration.

6) The Secretary of HUD should request authority from Congress to use the risk assessment inspection standard to identify lead paint hazards in the Housing Choice Voucher program.

HUD does not have enough information to decide whether to agree or disagree with the substance of this recommendation, as discussed below, so it must respectfully disagree with the recommendation as worded.

Before deciding whether HUD would request the significant statutory change to Congress identified in this draft recommendation, to obtain statutory authority to require lead risk assessments for pre-1978 housing in the Housing Choice Voucher (HCV) program in which a child under age 6 resides or is expected to reside,[4] the Department would need to conduct and evaluate the results of a statistically rigorous study on the impact of requiring a lead risk assessment vs. a visual assessment for deteriorated paint (i.e., the current requirement[5]), and as a consequence, requiring interim controls of any lead-based paint hazards identified by the risk assessment vs. stabilization of deteriorated paint identified by the visual assessment,[6] on HCV leasing times and availability of housing for extremely low-income families; such a study has been neither funded nor designed.

[4] I.e., the scope of housing for which visual assessments for deteriorated paint are currently required under the Lead Safe Housing Rule for the HCV program (24 CFR §§ 35.1200(b)(1), 35.1215(a)(1)).

[5] 24 CFR 35.1215(a)(1).

[6] I.e., the scope of lead hazard control work under the Lead Safe Housing Rule for risk assessments when lead-based paint hazards are identified (see, e.g., 24 CFR §§ 35.110, 35.715(b), 35.820).

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The current inspection process in the HCV program typically takes 15 days to complete and is already considered by landlords to be major disincentive to renting their units to HCV families. Every major study that has looked at how to improve access to opportunity for families has cited the time required to complete HUD required inspections as a major obstacle to landlord acceptance of the HCV program [7] The current inspection process includes a visual assessment for deteriorated paint. If a unit fails the HQS inspection prior to move in, the landlord can decline to make any repairs, and simply offer the unit to a new prospective tenant without penalty. Adding a lead risk assessment would add an estimated 5 to 15 days to the HCV approval process. Landlords have no reason to hold a unit for another week or two for an additional inspection, especially in tight rental markets when there is high demand for affordable rental housing.

Therefore, without a statistically rigorous study on the impact of risk assessments on leasing times and availability of housing for extremely low-income families that would demonstrate the feasibility of the recommended risk assessment for HCV housing, HUD is not comfortable advocating for a statute to require it. The study could also look at whether there are other options (such as targeted dust sampling) that would achieve similar levels of protection as a full risk assessment for the HCV program.

The OLHCHH, PIH and PD&R Leadership will continue to collaborate on lead safety issues, including exploring methods, and the economic feasibility, given limited departmental research funds, of conducting research into the impact of risk assessments on leasing times and availability of housing for extremely low-income families, and on ensuring lead safety for HCV families.

7) The Director of the Lead Office should develop performance goals and measures to cover the full range of HUD's lead efforts, including its efforts to ensure that housing units in its rental assistance programs are lead-safe.

HUD agrees with the recommendation in principle but notes that statutorily-based administrative and financial considerations may need to be addressed before it could be implemented.

The draft GAO report notes that, "HUD has tracked one performance measure for its lead grant programs (draft p. 35), and that GAO reviewed "HUD's recent annual performance reports to identify goals and performance measures related to HUD's efforts to make housing lead-safe," (draft pp. 50-51) but does not mention that HUD's tracking in those reports is based on not only its Lead Hazard Control Grant (lead grant) programs, but also production of lead-safe units by its Community Development Block Grant (CDBG), HOME Investment Partnerships (HOME), and Housing Opportunities for Persons with AIDS (HOPWA) programs within its Office of

[7] Graves E. "Rooms for Improvement: A Qualitative Metasynthesis of the Housing Choice Voucher Program," Housing Policy Debate 26(2):346–361, 2016. http://dx.doi.org/10.1080/10511482.2015.1072573

Community Planning and Development (CPD) [8]

HUD does agree, however, with the GAO draft report's statement that the Department "lacks comprehensive performance goals and measures" "to cover the full range of HUD's lead efforts, including its efforts to ensure that housing units in its rental assistance programs are lead-safe" (draft pp. 35, 40). Comprehensive measures, and comprehensive performance goals based on analysis of the measurements collected under those measures, would require adding housing unit production information from PIH and the Office of Multifamily Housing to that from CPD and the OLHCHH.

HUD will re-examine the availability of information from the current PIH and Multifamily Housing databases (e.g., PIH's Inventory Management System (IMS)/ PIH Information Center (PIC), and Multifamily Housing's Integrated Real Estate Management System (iREMS)) to determine what production information can be added to the existing information from CPD and the OLHCHH.

If that information is not sufficient to cover the full range of HUD's lead efforts, HUD would need to request and obtain Office of Management and Budget approval of the associated information collections, and OMB's approval of the information technology project (re OMB Exhibit 300 under Circular A-11), as well as have sufficient information technology funds appropriated and allocated for the project. HUD notes that, as with its research budget (see HUD's comments on draft GAO recommendation 3), HUD's information technology funds are chronically oversubscribed, so funding this project is not assured.

The OLHCHH Director will collaborate with the PIH, Housing, CPD, PD&R, and Chief Financial Officer (CFO) Leadership on lead safety issues regarding developing, implementing, and tracking performance goals and measures to cover the full range of HUD's lead efforts, and facilitating expansion of the multi-office collaboration.

8) The Director of the Lead Office, in conjunction with PD&R, should finalize plans and develop a time frame for evaluating the effectiveness of the Lead Safe Housing and Lead Disclosure Rules, including an evaluation of the long-term cost effectiveness of the lead remediation methods required by the Lead Safe Housing Rule.

HUD agrees with the recommendation, noting that the time frame to be selected may depend on external factors, most notably, availability of funding for contracted research, if staff resources are determined to be insufficient.

The draft GAO recommendation refers to two possible research projects in PD&R's Research Roadmap: 2017 Update:[9] a Lead Awareness Module for the Current Population Survey (related

[8] See, e.g., HUD. FY 2017 Annual Performance Report, p. 23, fn. 24. www.hud.gov/sites/dfiles/SPM/documents/FY17_APR.pdf.

[9] HUD Office of Policy Development and Research. Research Roadmap: 2017 Update. pp. 36-37. January 2017. www.huduser.gov/portal/pdf/ResearchRoadmap-2017Update.pdf.

to the Lead Disclosure Rule[10]), and an evaluation of the Effectiveness of Lead Safe Housing Rule.[11]

The Research Roadmap is a PD&R process to systematically gather potential research and evaluation topics, questions, and projects. The process was developed, in part, in response to recommendations from the National Academy of Sciences,[12] as well as from PD&R's own roadmap process previously used for building technology related research.

The 2017 update to the Research Roadmap was based on the review of over 500 suggested research topics to develop a list of potential projects to consider for future funding and implementation. As such, the presence of a project does not indicate that it will be undertaken.

> The Roadmap, however, is not the final word. In its entirety, the Roadmap is likely to be more ambitious than HUD's research budget will allow, and Congressional policymakers may endorse selected Roadmap priorities or different priorities. The budget process ultimately will determine what research HUD is able to undertake and when projects are initiated. (p. 6)

It is important, therefore, to recognize that the Research Roadmap is both a process and an important step from which final decisions for research and evaluation needs can be drawn utilizing a systematic and strategic approach. Final decision-making is highly dependent on limited availability of appropriations and priorities identified by Congressional Committees in the annual HUD appropriations process.

HUD agrees that review of the effectiveness of the Lead Safe Housing and Lead Disclosure Rules are important issues. Senior OLHCHH and PD&R staff have begun discussions to identify options to evaluate the effectiveness of the two rules, and to develop a timeline for complete the evaluations. An initial timeline has been drafted for activities that can be completed by HUD staff, and coordination on these activities will continue over the next calendar year. If staff resources are determined to be insufficient for doing the research in house, and a decision is made to conduct evaluation activities using the procurement of one or more contracts, these procurement actions will, subject to the availability of funds, be awarded during the FY 2019 procurement cycle.

The OLHCHH Director will collaborate with the PD&R Leadership on lead safety issues regarding developing, implementing, and evaluating the effectiveness of the Lead Safe Housing and Lead Disclosure Rules, and facilitating expansion of the interoffice collaboration.

[10] 24 CFR 35, subpart A.

[11] 24 CFR 35, subparts B – R.

[12] National Academy of Sciences, "Rebuilding the Research Capacity at HUD 2008, www.nap.edu/read/12468/chapter/1.

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9) The Director of the Lead Office should complete statutory reporting requirements, including but not limited to its efforts to make housing lead-safe through its lead grant programs and rental-assistance programs, and make the report publicly available.

HUD agrees with this recommendation.

The OLHCHH will, in collaboration with PD&R and HUD's Program Offices, draft and submit the annual and biennial reports to Congress under the Residential Lead-Based Paint Hazard Reduction Act of 1992.[13] The report will be routed for departmental and then OMB clearance, and made publicly available on the Office's website after it is delivered to HUD's Congressional authorizing and appropriations committees.

The OLHCHH Director will collaborate with the PIH, Housing, CPD, PD&R, and CFO Leadership on lead safety issues regarding preparation of the annual and biennial reports to Congress and facilitating expansion of the interoffice collaboration.

Appendix IV: GAO Contact and Staff Acknowledgments

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In addition to the contact named above, John Fisher (Assistant Director), Beth Faraguna (Analyst in Charge), Enyinnaya David Aja, Farah Angersola, Carol Bray, William R. Chatlos, Anna Chung, Melinda Cordero, Elizabeth Dretsch, Christopher Lee, Marc Molino, Rebecca Parkhurst, Tovah Rom, Tyler Spunaugle, and Sonya Vartivarian made key contributions to this report.

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