



Department of Veterans Affairs Office of Inspector General

Combined Assessment Program Summary Report

Evaluation of Infection Prevention Practices in Veterans Health Administration Facilities

To Report Suspected Wrongdoing in VA Programs and Operations:

Telephone: 1-800-488-8244

E-Mail: vaoighotline@va.gov

(Hotline Information: <http://www.va.gov/oig/contacts/hotline.asp>)

Executive Summary

The VA Office of Inspector General Office of Healthcare Inspections evaluated selected infection prevention (IP) practices in Veterans Health Administration facilities. The purposes of the evaluation were to determine whether facilities complied with required IP practices in patient care units/areas, trained employees on the Occupational Safety and Health Administration Bloodborne Pathogens Rule, and performed N95 respirator fit testing.

As part of the environment of care review, inspectors evaluated selected IP practices at 69 facilities during Combined Assessment Program reviews conducted from January 1, 2010, through March 31, 2011.

Veterans Health Administration facilities recognized the importance of maintaining consistent IP practices to ensure veterans' safety and reduce the incidence of health care-associated infections. We noted many consistent and effective IP practices during our inspections. We identified five areas where compliance with selected IP requirements needed to improve. We recommended that the Under Secretary for Health, in conjunction with Veterans Integrated Service Network and facility senior managers, ensures that:

- Corrective actions are initiated when hand hygiene performance falls below established thresholds.
- Ultraviolet germicidal irradiation fixtures are turned on and functional.
- Negative pressure is monitored and within acceptable levels in occupied airborne infection isolation rooms and that results are documented.
- Employees with occupational exposure risk complete annual Occupational Safety and Health Administration Bloodborne Pathogens Rule training and that compliance is monitored.
- Designated employees complete annual N95 respirator fit testing and that compliance is monitored.



DEPARTMENT OF VETERANS AFFAIRS
Office of Inspector General
Washington, DC 20420

TO: Under Secretary for Health (10)

SUBJECT: Combined Assessment Program Summary Report – Evaluation of Infection Prevention Practices in Veterans Health Administration Facilities

Purpose

The VA Office of Inspector General (OIG) Office of Healthcare Inspections evaluated selected infection prevention (IP) practices in Veterans Health Administration (VHA) facilities. The purposes of the evaluation were to determine whether facilities complied with required IP practices in patient care units/areas, trained employees on the Occupational Safety and Health Administration (OSHA) Bloodborne Pathogens Rule, and performed N95 respirator fit testing.

Background

Any health care facility, regardless of its size or location, faces vulnerabilities in the environment, such as infections, cleanliness, and safety hazards. The goal is to reduce and control environmental hazards and risks and maintain safe conditions for patients, visitors, and staff. The physical environment of a health care facility must not only be functional but should also promote healing. Although the majority of health care-associated infections involve clinical factors, a significant number of deaths have been linked to environmental failures. VHA requires managers to conduct environment of care (EOC) inspection rounds and resolve EOC issues in a timely manner. VHA facilities' EOC and IP programs must fully meet all VHA, OSHA, National Fire Protection Association, and Joint Commission standards. During VA OIG Combined Assessment Program EOC reviews, inspectors have assessed IP practices and determined facility compliance with applicable standards and regulations for many years. Inspectors have presented identified IP deficiencies to facility managers who then developed improvement strategies and tracked deficiencies through to resolution.

All 69 facilities in our review performed the required annual IP risk assessments, and most implemented actions to address high-risk areas and followed up on actions implemented. Nearly all facilities were fully compliant with IP expectations, including

securing and not overfilling sharps containers, separating clean and dirty supplies, and ensuring staff were knowledgeable regarding precautions for patients in isolation.

From October 2010–March 2011, we assessed selected IP practices in 62 Radiology Service areas at 24 facilities. Nearly all facilities were fully compliant with IP expectations, including having readily available hand hygiene products, using clean gloves, and effectively cleaning equipment between patients.

From January–September 2010, we assessed selected IP practices in hemodialysis units/functions at 30 facilities. Nearly all facilities were fully compliant with IP practices, including having and using personal protective equipment, consistently practicing good hand hygiene, and using single-dose and multi-dose medication vials for only one patient.

Scope and Methodology

We performed this review at 69 VA medical facilities during Combined Assessment Program reviews conducted from January 1, 2010, through March 31, 2011. The facilities reviewed represented a mix of size, affiliation, geographic location, and Veterans Integrated Service Networks (VISNs). We generated an individual Combined Assessment Program report for each facility. For this report, we analyzed and summarized the data from the individual facility Combined Assessment Program reviews.

We interviewed selected program managers and reviewed documents, including facility self-assessments and training records. Additionally, we conducted physical inspections of selected patient care units. Some of the areas reviewed did not apply to all VHA facilities because of differences in functions or frequencies of occurrences; therefore, denominators differ in our reported results. We used 90 percent as the general level of expectation for performance in the areas discussed below.

Inspectors conducted the reviews in accordance with *Quality Standards for Inspection and Evaluation* published by the Council of the Inspectors General on Integrity and Efficiency.

Inspection Results

Issue 1: IP Practices in Patient Care Units/Areas

From January–September 2010, we assessed selected IP practices during EOC inspections at 45 facilities and identified the following opportunities for improvement.

The Joint Commission requires facilities to set goals to improve hand hygiene compliance and to initiate corrective actions when established goals are not met.¹ Facilities may measure compliance by monitoring the use of hand hygiene products or by observing staff providing patient care. We reviewed facilities' hand hygiene data and determined that five facilities (11 percent) did not initiate corrective actions when warranted.

Facilities may use ultraviolet germicidal irradiation (UVGI) fixtures as an air cleaning method in high-risk areas such as patient rooms, emergency rooms, and public waiting areas. Of the 42 patient care areas inspected that used UVGI fixtures, 6 (14 percent) had fixtures that were not turned on and/or functional.

Patients with suspected or diagnosed infections such as pulmonary tuberculosis must be isolated in negative air pressure rooms to prevent the spread of the airborne pathogens. The negative air pressure ensures that the air is exhausted to the outside of the building from these types of rooms instead of being recirculated into other rooms or hallways. The Centers for Disease Control and Prevention recommends that staff monitor occupied airborne infection isolation (AII) rooms daily for proper negative air pressure and record the results. We inspected 116 patient care units that had at least one AII room. Eleven (9 percent) of the patient care units did not have negative pressure logs. Of the 105 units with logs, negative pressure was not documented on 13 (12 percent) of the units.

We recommended that:

- Corrective actions are initiated when hand hygiene performance falls below established thresholds.
- UVGI fixtures are turned on and functional.
- Negative pressure is monitored and within acceptable levels in occupied AII rooms and that results are documented.

Issue 2: OSHA Bloodborne Pathogens Rule Training

OSHA requires facilities to ensure that employees with occupational exposure risk complete annual Bloodborne Pathogens Rule training. Training topics include an explanation of the epidemiology and symptoms of bloodborne diseases, an explanation of the modes of transmission of infection, and information on the hepatitis B vaccine.² We reviewed clinical and housekeeping employees' training records for evidence of annual training. We found that 16 (23 percent) of the 69 facilities were not in compliance.

¹ The Joint Commission, "Hospital Accreditation Program, 2010 Chapter: National Patient Safety Goals," National Patient Safety Goal 07.01.01, performance elements 1–3.

² OSHA 29CFR1910.1030(g)(2)(i-ix).

We recommended that employees with occupational exposure risk complete annual OSHA Bloodborne Pathogens Rule training and that supervisors monitor compliance.

Issue 3: N95 Respirator Fit Testing

N95 respirators provide a higher level of respiratory protection than surgical grade masks for health care workers caring for patients with certain airborne infections. OSHA requires facilities to ensure that designated employees are tested for proper respirator fit prior to initial use and at least annually thereafter.³ Sixty-six of the 69 facilities in our review required N95 respirator use. We reviewed fit testing records of employees who worked in emergency rooms, medical units, radiology, bronchoscopy, and community living centers and were designated to use N95 respirators. Table 1 below shows non-compliance for employee fit testing by work area.

Table 1

Percentage of Designated Employees Who Were not Fit Tested Annually	
Emergency Rooms	48%
Medical Units	50%
Radiology	50%
Bronchoscopy	57%
Community Living Centers	63%

We recommended that designated employees complete annual N95 respirator fit testing and that compliance is monitored.

Conclusions

VHA facilities demonstrated many consistent and effective IP practices. However, compliance with applicable IP requirements needs to improve in the areas of hand hygiene corrective actions, UVGI fixture usage, AII room monitoring and documentation, OSHA Bloodborne Pathogens Rule training, and N95 respirator fit testing.

Recommendations

Recommendation 1. We recommended that the Under Secretary for Health, in conjunction with VISN and facility senior managers, ensures that corrective actions are initiated when hand hygiene performance falls below established thresholds.

³ OSHA 29CFR1910.134(f)(2).

Recommendation 2. We recommended that the Under Secretary for Health, in conjunction with VISN and facility senior managers, ensures that UVGI fixtures are turned on and functional.

Recommendation 3. We recommended that the Under Secretary for Health, in conjunction with VISN and facility senior managers, ensures that negative pressure is monitored and within acceptable levels in occupied AII rooms and that results are documented.

Recommendation 4. We recommended that the Under Secretary for Health, in conjunction with VISN and facility senior managers, ensures that employees with occupational exposure risk complete annual OSHA Bloodborne Pathogens Rule training and that compliance is monitored.

Recommendation 5. We recommended that the Under Secretary for Health, in conjunction with VISN and facility senior managers, ensures that designated employees complete annual N95 respirator fit testing and that compliance is monitored.

Comments

The Under Secretary for Health concurred with the findings and recommendations. The implementation plan is acceptable, and we will follow up until all actions are completed.



JOHN D. DAIGH, JR., M.D.
Assistant Inspector General for
Healthcare Inspections

Under Secretary for Health Comments

**Department of
Veterans Affairs**

Memorandum

Date: August 2, 2011

From: Under Secretary for Health (10)

Subject: **OIG Combined Assessment Program Summary Report – Evaluation of Infection Prevention Practices in Veterans Health Administration Facilities (VAIQ 7130599)**

To: Assistant Inspector General for Healthcare Inspections (54)

1. I have reviewed the draft report and concur with all five of the report's recommendations. Attached is the Veterans Health Administration's (VHA) corrective action plan for the report's recommendations.
2. Thank you for the opportunity to review the draft report. If you have any questions, please contact Linda H. Lutes, Director, Management Review Service (10A4A4) at (202) 461-7014.

(original signed by:)
Robert A. Petzel, M.D.

Attachment

VETERANS HEALTH ADMINISTRATION (VHA) Action Plan

OIG Combined Assessment Program Summary Report: Evaluation of Infection Prevention Practices in Veterans Health Administration Facilities (VAIQ 7130599)

Date of Draft Report: June 28, 2011

Recommendations/ Actions	Status	Completion Date
-----------------------------	--------	--------------------

Recommendation 1. We recommended that the Under Secretary for Health, in conjunction with VISN and facility senior managers, ensures that corrective actions are initiated when hand hygiene performance falls below established thresholds.

VHA Comments

Concur

VHA Office of the Deputy Under Secretary for Health for Operations and Management (DUSHOM) and the Office of the Deputy Under Secretary for Health for Policy and Services (DUSHPS), Office of Public Health, are conducting a survey to explore what hand hygiene tools are being used and how these tools are being used. Based on the results of the survey, the Infection Don't Pass It On (IDPIO) workgroup will create a toolkit and the DUSHOM will distribute the toolkit to facilities for implementation.

In process	Hand washing Tool Survey will be completed September 30, 2011 Toolkit to be assembled by January 31, 2012
------------	-----------------------------------------------------------------------------------------------------------------------------

The DUSHOM will schedule a data call to each facility. The Hospital Epidemiology/Infection Control staff will complete the data which will be used to assess how facilities are meeting the intent of the current hand

washing directive and how they modify practices when hand washing compliance is inadequate.

In process

Hand washing
Assessment Survey
to go out by
December 30, 2011

A meeting between field quality managers/infection control staff and VHA Central Office program office staff from DUSHOM Clinical Operations and staff from DUSHPS Infectious Disease Program Office, Patient Care Services and Occupational Health/Center for Occupational Health Infection Control, Office of Public Health, will be held to evaluate the effectiveness of:

- recent hand washing pilot programs,
- lessons from the National Center for Patient Safety's (NCPS) Six-Sigma hand-washing project,
- IDPIO toolkit, and
- potential innovative evaluation methods.

The DUSHOM and DUSHPS will use results from this meeting to develop pilot projects to compare and implement hand washing interventions and assessments. The group will also evaluate strategies on developing measurement techniques to support national reporting through the quality indicators Web site.

In process

Meeting to be
Scheduled by
October 31, 2011

Recommendation 2. We recommended that the Under Secretary for Health, in conjunction with VISN and facility senior managers, ensures that UVGI fixtures are turned on and functional.

VHA Comments

Concur

The DUSHOM and the DUSHPS, Office of Public Health, will collaborate to determine the reason for non use of ultraviolet germicidal irradiation (UVGI) fixtures and whether non-use of UVGI is a reasonable strategy at VHA facilities. A report including recommendations for appropriate

actions will be completed with an action plan and timeline to implement any recommendations by December 31, 2011.

In process

Report to be
completed by
December 31, 2011

Recommendation 3. We recommended that the Under Secretary for Health, in conjunction with VISN and facility senior managers, ensures that negative pressure is monitored and within acceptable levels in occupied AII rooms and that results are documented.

VHA Comments

Concur

The DUSHOM and DUSHPS, Office of Public Health, have designed a survey of Airborne Infection Isolation (AII) rooms to ensure that negative pressure is monitored. The survey will address design, construction, and maintenance practices of AII rooms in facilities. The DUSHOM and DUSHPS will analyze the information from the survey, consider current standards and needs, and take appropriate corrective actions. The DUSHOM will issue an Information Letter with the results and recommendations.

In process

Pilot of Survey by
September 30, 2011
Full Survey
completed by
November 30, 2011
Analysis and
identification of
issues with action
plan and timelines
developed NLT
December 30, 2011
Intervention,
April 30 2012

Recommendation 4. We recommended that the Under Secretary for Health, in conjunction with VISN and facility senior managers, ensures that

employees with occupational exposure risk complete annual OSHA Bloodborne Pathogens Rule training and that compliance is monitored.

VHA Comments

Concur

The DUSHPS and the DUSHOM will collaboratively review the Occupational Safety and Health Administration (OSHA) standard for completion of annual bloodborne pathogens Rule training as well as existing information provided to VHA field facilities about the requirement; update existing information to re-emphasize the need to comply with the OSHA standard; and develop requirements for monitoring and compliance in field facilities. To operationalize this in the field, appropriate information will be developed to outline requirements for facilities to have appropriate staff complete the testing and ensure facility leadership monitor that the testing is completed.

In process

December 31, 2011

Recommendation 5. We recommended that the Under Secretary for Health, in conjunction with VISN and facility senior managers, ensures that designated employees complete annual N95 respirator fit testing and that compliance is monitored.

VHA Comments

Concur

The DUSHOM will issue a memorandum to the field re-emphasizing the compliance with N95 fit testing for designated employees. This communication will address the need to ensure compliance is monitored.

In process

December 31, 2011

OIG Contact and Staff Acknowledgments

OIG Contact	For more information about this report, please contact the Office of Inspector General at (202) 461-4720
Contributors	Annette Acosta, RN Bruce Barnes Lisa Barnes, MSW Gail Bozzelli, RN Shirley Carlile, BA Paula Chapman, CTRS Audrey Collins-Mack, RN Melanie Cool, LD Kathy Gudgell, RN, JD Stephanie Hensel, RN, JD Deborah Howard, RN Gayle Karamanos, PA Frank Keslof, MHA Cathleen King, RN Jeanne Martin, PharmD Claire McDonald, MPA Judy Montano, MS Alice Morales-Rullan, RN Sami O'Neill, MA Jennifer Reed, RN Mary Rees, MPA Clarissa Reynolds, MBA James Seitz, RN Kathleen Shimoda, RN Karen Sutton, BS Ann Ver Linden, RN Marilyn Walls, RN

Report Distribution

VA Distribution

Office of the Secretary
Veterans Health Administration
Assistant Secretaries
National Center for Patient Safety
Office of General Counsel
Office of Medical Inspector
Veterans Integrated Service Network Directors (1–23)

Non-VA Distribution

House Committee on Veterans' Affairs
House Appropriations Subcommittee on Military Construction, Veterans Affairs, and
Related Agencies
House Committee on Oversight and Government Reform
Senate Committee on Veterans' Affairs
Senate Appropriations Subcommittee on Military Construction, Veterans Affairs, and
Related Agencies
Senate Committee on Homeland Security and Governmental Affairs
National Veterans Service Organizations
Government Accountability Office
Office of Management and Budget

This report is available at <http://www.va.gov/oig/publications/reports-list.asp>.