Department of Veterans Affairs **VHA DIRECTIVE 7702**
Veterans Health Administration **Transmittal Sheet**
Washington, DC 20420 **April 29, 2016**

INDUSTRIAL HYGIENE EXPOSURE ASSESSMENT PROGRAM

1. REASON FOR ISSUE: The Veterans Health Administration (VHA) has developed this program to meet Occupational Safety and Health (OSH) requirements established by VA Directive 7700, Occupational Safety and Health. This Directive specifies actions and expected performance criteria for Industrial Hygiene programs.

2. SUMMARY OF CONTENTS: Hazardous exposures adversely impact VHA staff, patients, and visitors. This Directive establishes VHA policy for implementing the Industrial Hygiene Exposure Assessment Program. The Program establishes the responsibilities and procedures for preventing adverse health effects from occupational exposures, ensures compliance with laws and regulations mandating a safe and healthful working environment, and provides a comprehensive approach for prioritizing and managing occupational exposure risks. The systemic approach described in this Directive will allow designated staff to anticipate, recognize, evaluate, and control occupational exposure hazards present in VHA facilities.

3. RELATED ISSUES: VA Directive 7700 and VHA Directive 7701.

4. RESPONSIBLE OFFICE: The Director, Office of Occupational Safety Health and Green Environmental Management (GEMS) Programs (10NA8) is responsible for the contents of this Directive. Questions may be referred to 202-632-7889.

5. RESCISSIONS: None.

6. RECERTIFICATION: This VHA Directive is due to be recertified on or before the last working day of April 2021.

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INDUSTRIAL HYGIENE EXPOSURE ASSESSMENT PROGRAM

1. PURPOSE

This Veterans Health Administration (VHA) Directive provides VHA policy for implementing the elements of the Industrial Hygiene (IH) program. **AUTHORITY:** 29 U.S.C. 651, 668; 29 CFR Part 1960.

2. BACKGROUND

Employee exposure to occupational and environmental stressors can cause sickness, impaired health and well-being, and adversely impact VHA operations. Left uncontrolled, such stressors could also pose a threat to patients and visitors. The IH program objectives will be accomplished by implementing a systemic approach designed to anticipate, recognize, evaluate, and control occupational exposure hazards present in VHA facilities, and will:

a. Minimize exposures to prevent adverse health effects or illnesses attributable to occupational exposures to chemical, biological, and physical agents,

b. Ensure compliance with applicable Occupational Safety and Health Administration (OSHA) laws and regulations by providing a safe and healthful working environment, and

c. Establish a comprehensive approach for prioritizing and managing occupational exposure risks VHA-wide.

3. POLICY

It is VHA policy that employees in owned and leased VHA facilities (trainees, volunteers and other workers directly supervised by VHA program offices), are to be protected from accidental death, injury, and illness caused by occupational exposures present in the work environment. It is VHA policy to provide ongoing and methodical evaluation of exposures to identify for opportunities to prevent hazardous exposures through controls or substitution.

4. RESPONSIBILITIES

a. **Deputy Under Secretary for Health for Operations and Management.** The Deputy Under Secretary for Health for Operations and Management (10N) is responsible for:

(1) Ensuring VHA Occupational Safety and Health (OSH) and Green Environmental Management System (GEMS) programs comply with regulatory requirements.

(2) Ensuring the protection of employee and Veterans' health by minimizing occupational exposures.

(3) Establishing OSH and GEMS performance standards for Veterans Integrated Services Network (VISN) Directors and VA medical facility Directors.

b. **Chief Consultant, Post Deployment Health Services and Program Director, Employee Occupational Health Services, Office of Patient Care Services.** The Chief Consultant, Post Deployment Health Services and Program Director of Occupational Health Services (10P4Q and 10P4Z) are responsible for:

(1) Providing policy, oversight, and programmatic guidance on medical surveillance issues and occupational and environmental exposures.

(2) Interpreting applicable regulations and applicable consensus standards.

(3) Overseeing and establishing performance standards for VHA Employee Occupational Health medical surveillance programs.

c. **Director, Office of Capital Asset Management, Engineering, and Support.** The Director, Office of Capital Asset Management, Engineering, and Support (OCAMES, 10NA5) is responsible for:

(1) Ensuring engineering and facility management programs support opportunities to reduce exposures at VHA facilities.

(2) Collaborating with VHA Occupational Safety, Health, GEMS Programs (10NA8) staff in the development and distribution of directives or other guidance related to occupational exposures and workplace health and safety concerns.

d. **Director, Occupational Safety, Health, GEMS Programs.** The Director, Occupational Safety, Health, GEMS Programs (10NA8) is responsible for:

(1) Ensuring VHA compliance with applicable regulations and VHA-adopted consensus standards by providing guidance and technical support to VISN and facility OSH programs.

(2) Ensuring VHA facilities minimize occupational exposures by utilizing the most conservative Occupational Exposure Limit (OEL) available. The applicable OEL for a specific exposure hazard shall be lowest published value from the following:

(a) OSHA Permissible Exposure Limits (PELs).

(b) American Conference of Governmental Industrial Hygienists Threshold Limit Values (TLVs).

(3) Promote professional development training for Industrial Hygienists and encourage staff to seek Board Certification in Industrial Hygiene.

e. **VISN Director.** The VISN Director is responsible for:

(1) Providing adequate resources for the oversight and the implementation of the Industrial Hygiene programs required by this Directive.

(2) Recommending funding priorities for IH programs within the VISN.

(3) Assessing Industrial Hygiene knowledge skills and abilities at VA medical facilities during AWEs, and developing a VISN training plan to address deficiencies across the VISN.

(4) Ensuring that VISN Occupational Safety and Health Staff implement a VISN-level IH program, in accordance with VHA Directive 7701 and Handbook 7701.01, that includes:

(a) Establishing Annual Workplace Evaluations (AWE).

(b) Designating in writing a VISN Lead Industrial Hygienist to address and consult on IH related issues and perform the IH portion of the AWE.

(c) Establishing VISN level IH program goals and objectives that address VISN trends or progress towards accomplishing facility level sampling strategies.

(d) Monitoring the status of facility IH programs in accordance with VHA Directive 7701 and VHA Handbook 7701.01.

(e) Providing mentorship and guidance to facility level IH staff.

f. **VA Medical Facility Director.** The VA medical facility Director or designee is responsible for:

(1) Providing adequate resources to effectively operate and manage the facility Industrial Hygiene program and IH program elements described in this Directive.

(2) Designating in writing an employee with Industrial Hygiene training and sufficient experience to implement the IH program at the facility and satellite facilities.

(3) Providing an annual notification to employees of their right to access exposure records in accordance with OSHA regulations, Title 29 Code of Federal Regulations (CFR) 1910.1020, and how to access them.

(4) Communicating and coordinating with subject matter experts such as Occupational Health Provider, Infection Prevention and Control, Biological Safety, and Radiation Safety while performing basic characterization and exposure assessments.

(5) Collaborating with pharmacy services to ensure proper hazardous drug industrial hygiene practices specified in VHA Handbook 1108.06, *Inpatient Pharmacy Services*, Section 10, “Compounded Sterile Preparations” are followed.

(6) Ensuring a documented Qualitative and/or Quantitative Baseline Comprehensive Industrial Hygiene Exposure Assessment is conducted and documented for all work locations within a facility, including satellite facilities, by fiscal year 2020.

(7) Providing employee representatives (Union) notification in a timely manner of exposure monitoring activities so they can elect to observe.

(8) Developing and implementing an industrial hygiene program with Standard Operating Procedures (SOP) that include, but are not limited to:

(a) Basic characterization that collects and organizes information on the workplace, worker, task, agent, and exposure potential or estimate. Basic characterization may include:

1. Identify workplace factors, such as work environment, processes, equipment, emission sources, and work practices.

2. Identify operational periods such as routine or non-routine operations, maintenance, startup and shutdown, process changes.

3. Define the scope of potential exposures (work shift, duration, and frequency of exposure).

4. Inventory of potentially hazardous materials, biological, or physical hazards.

5. Review of previous exposure assessments.

6. Evaluations for OSHA substance-specific regulated chemicals, reproductive hazards (pregnant workers), select agents, carcinogen risk assessments, and Waste Anesthetic Gas.

7. Assessment of adequacy of existing exposure controls (engineering, administrative, and personal protective equipment (PPE)).

8. Evaluation of the facility programs, such as Hearing Conservation and Respiratory Protection.

9. Review of medical surveillance records required for Similar Exposure Groups (SEG).

(b) Establishing SEG having the same or general exposure profile for agents being assessed.

(c) Conducting Exposure Assessments performed qualitatively or quantitatively.

1. Qualitative Exposure Assessment must be recorded with the information gathered in the basic characterization with a rationale and determination that the exposure(s) are acceptable, unacceptable, or uncertain.

2. Uncertain or unacceptable qualitative exposure assessments require:

a. Additional information gathering.

b. Establishing exposure controls.

c. Establishing interim controls must also be implemented until a permanent control is established.

d. Performing a Quantitative Exposure Assessment.

3. A Quantitative Exposure Assessment requires at a minimum that:

a. Sampling strategies and monitoring plans must be developed and based upon the Qualitative Exposure Assessment.

b. A sampling strategy may include, but is not limited to:

(1) Identifying the task, location, and SEG.

(2) Appropriate sampling methods identified by NIOSH, OSHA, or EPA.

(3) Number and type of samples to be taken.

(4) Determination of whether the samples are full shift, full period exposures, or multiple partial period samples resulting in full shift/period.

(5) Number of field and media blanks to ensure quality assurance.

c. Laboratories utilized for IH analytical services must be accredited by the American Industrial Hygiene Association (AIHA).

d. Sampling equipment must be calibrated and maintained in accordance with manufacturer instructions.

e. The person performing the sampling must be present during sampling to observe and document the process and tasks.

f. When the sampling is completed, characterize exposures as acceptable, unacceptable or uncertain, and the Director or designee must:

(1) Communicate results as necessary to the Occupational Health Provider for determination of need for medical surveillance in accordance with applicable substance-specific OSHA regulations or VHA Office of Public Health directives.

(2) Conduct follow up exposure assessments to further characterize the exposure as necessary.

g. Notify employee(s) of exposure results in writing within 15 business days of receipt of laboratory analytical results, and as appropriate to the following:

(1) Affected department: Written copy of results of evaluations and recommendations for control of occupational hazards.

(2) Supervisor of the monitored employee: Notification will not include Personally Identifiable Information (PII).

(3) Employees within the SEG (no PII).

(4) Occupational Health Provider: To maintain exposure record in employee health file.

(5) Employee representatives: Provided access to exposure results upon request and in accordance with 29 CFR 1910.1020(c)(3).

(d) Establishing exposure controls and strategies for controlling exposures in order of priority are engineering, administrative, and personal protective equipment.

1. Resources to implement control measures must be provided by the affected department.

2. Control measures implementation and maintenance must be led by the affected department with consultative support from the facility Industrial Hygienist, Safety Manager, and Facilities or Engineering staff as appropriate.

3. Interim control strategies must be implemented until the permanent controls are achieved.

NOTE: *PPE is not a substitute for engineering controls, but may be specified as an interim control until engineering control(s) are installed and determined to be effective.*

(e) Establishing periodic reassessments. These may be required in, but are not limited to, the following situations:

1. Process changes.

2. Periodic evaluations of controls.

3. Employee complaints or requests, such as Indoor Air Quality surveys, Reproductive Hazard Evaluations for pregnant workers, etc.

4. Results of illness or injury investigations.

5. Employee reports of unsafe or unhealthful working conditions.

6. Sustain compliance with regulatory requirements.

7. Periodic reevaluations of tasks to ensure that exposures have not changed.

g. **Facility Chief Engineer.** The Facility Chief Engineer is responsible for:

(1) Ensuring that facility project engineers provide design and specifications for VHA projects to appropriate VISN personnel for review and comment.

(2) Ensuring the Project Engineer/Resident Engineer maintains contract submittals related to OSH programs, including contractor safety programs, product inventories, performance tests and certifications, and Safety Data Sheets for hazardous chemicals.

(3) Ensuring the Project Engineer/Resident Engineer informs contractors of existing potential hazards they may encounter in the VHA work environment.

(4) Ensuring that facility project engineers notify OSH personnel when newly constructed and remodeled space is ready for a pre-occupancy inspection.

h. **Engineering Department and Service Line Managers.** Engineering Department and Service Line Managers are responsible for:

(1) Including Safety and Industrial Hygiene into design and specification reviews and concurrence of new projects or workspace reconfigurations.

(2) Providing notification of work on hazardous building materials or equipment containing Select Agents.

(3) Establishing and maintaining a preventive maintenance program for engineering control systems protecting employees from occupational hazards.

(4) Collaborating with Safety and Industrial Hygiene staff to prioritize corrective actions associated with OSH.

5. REFERENCES

a. 29 CFR 1910.

b. 29 CFR 1926.

c. VHA Directive 7701, Occupational Safety and Health (OSH).

d. VHA Handbook 7701.01, Occupational Safety and Health (OSH) Program Procedures.

e. VHA Handbook 1108.06, Inpatient Pharmacy Services.

f. American Conference of Governmental Industrial Hygienists (ACGIH). American Industrial Hygiene Association (AIHA).

g. Centers for Disease Control - Division of Select Agent and Toxins.

h. National Institute of Occupational Safety and Health (NIOSH).United States Pharmacopeia Convention (USPC). Chapter 797: Pharmaceutical Compounding; Sterile Preparations In; The United States Pharmacopeia, 32nd Ed., and the National Formulary, 27th Ed., Rockville MD: USPC; 2009.