

INDUSTRIAL HYGIENE PROGRAM AND EXPOSURE ASSESSMENT PROCESS

1. REASON FOR ISSUE: This Veterans Health Administration (VHA) directive states policy and responsibilities for implementing the elements of the exposure assessment process which is used to develop the Industrial Hygiene (IH) program at a Department of Veterans Affairs (VA) medical facility. The systemic approach described in this directive allows designated staff to anticipate, recognize, evaluate and control occupational exposure hazards present in VA medical facilities.

2. SUMMARY OF MAJOR CHANGES: This directive:

a. Adds new definitions (see paragraph 3) and training information (see paragraph 7).

b. Adds responsibilities to the Deputy to the Assistant Under Secretary for Health for Support; Veterans Integrated Services Network (VISN) Occupational Safety and Health (OSH) staff, VISN Lead Industrial Hygienist and the VA medical facility Industrial Hygienist (see paragraph 5).

c. Revises responsibilities for the Under Secretary for Health; Assistant Under Secretary for Health for Support; Assistant Under Secretary for Health for Operations; Director, OSH; VISN Director; VA medical facility Director; and VA medical facility Work Area Supervisors (see paragraph 5).

d. Removes detailed basic characterization and exposure assessment processes that are in the IH Guidebook located at <http://vaww.hefp.va.gov/guidebooks/industrial-hygiene-guidebook-0>. **NOTE:** This is an internal VA website that is not available to the public.

3. RELATED ISSUES: VA Directive 5019, Employee Occupational Health Service, dated March 27, 2015; VA Directive 7700, Occupational Safety and Health, dated February 11, 2009; VHA Directive 7701, Comprehensive Occupational Safety and Health Program, dated May 5, 2017; VHA Directive 7703, Occupational Safety Management Systems in VHA, dated March 10, 2021; and VHA Directive 7705, Management of Hazardous Chemicals, dated August 14, 2015.

4. RESPONSIBLE OFFICE: The Assistant Under Secretary for Health for Support (19) is responsible for the content of this directive. Questions may be addressed to the Director, Occupational Safety and Health Office, Office of Healthcare Environment and Facilities Programs (19HEF) at VHAOccSafetyandHealthAction@va.gov.

5. RESCISSIONS: VHA Directive 7702, Industrial Hygiene Exposure Assessment Program, dated April 29, 2016, is rescinded.

July 29, 2021

VHA DIRECTIVE 7702

6. RECERTIFICATION: This VHA directive is scheduled for recertification on or before the last working day of July 2026. This VHA directive will continue to serve as national VHA policy until it is recertified or rescinded.

**BY DIRECTION OF THE OFFICE OF
THE UNDER SECRETARY FOR HEALTH:**

/s/ Deborah E. Kramer
Acting Assistant Under Secretary for Health
for Support

NOTE: *All references herein to VA and VHA documents incorporate by reference subsequent VA and VHA documents on the same or similar subject matter.*

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INDUSTRIAL HYGIENE PROGRAM AND EXPOSURE ASSESSMENT PROCESS

1. PURPOSE

This Veterans Health Administration (VHA) directive states policy for implementing the elements of the exposure assessment process used to develop the Industrial Hygiene (IH) program at a Department of Veterans Affairs (VA) medical facility. This directive states the responsibilities and requirements for anticipating and preventing adverse health effects from occupational exposures to biological, chemical and physical agents; 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 and further developing an IH program.

AUTHORITY: 38 U.S.C. § 7301(b); 29 C.F.R. part 1960.

2. BACKGROUND

a. The IH program at a VA medical facility is determined by the scale, scope and complexity of the exposure assessment process and encompasses different program elements and practices based on site-specific hazards and operations.

b. Employee exposure to occupational and environmental stressors can cause illness and impaired health and well-being, and can adversely affect VHA operations. Left uncontrolled, such stressors can also pose a threat to patients and visitors. The IH program objectives are accomplished by implementing a systemic approach designed to anticipate, recognize, evaluate, measure and control the risks associated with occupational exposure hazards present in VA medical facilities. This approach will:

(1) Minimize or eliminate exposures to prevent adverse health effects or illnesses attributable to occupational exposures to chemical, biological and physical agents.

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

(3) Establish a comprehensive approach for prioritizing and managing occupational exposure risks VHA-wide.

3. DEFINITIONS

a. **Employee Exposure Record.** Employee exposure record is a record containing qualitative and quantitative results of an exposure assessment to include the basic characterization of environmental workplace stressors.

b. **Medical Surveillance.** Medical surveillance is a program of obtaining occupational exposure histories, examinations and tests designed to detect and monitor potential adverse health effects from chemical, biological and physical exposures in the workplace to enable early detection and treatment or other steps to protect employee health (e.g., medical removal from the workplace stressors).

c. **Occupational Exposure.** Occupational exposure is contact with a chemical, biological or physical hazard that results from the performance of an employee's assigned duties or during emergency situations.

d. **Select Agents.** Select agents are biological agents and toxins that have been determined by the Department of Health and Human Services and the United States Department of Agriculture to have the potential to pose a severe threat to public health and safety, to animal and plant health or to animal or plant products. **NOTE:** See www.selectagents.gov/sat/list.htm for a list of currently identified select agents.

e. **Similar Exposure Group.** A similar exposure group (SEG) is a group of employees who experience such similar exposures to one or more specific hazards, that if one of the employees was sampled, the results of the sampling could be used to predict the exposures of the remaining members of the group. Individuals within the group generally conduct the same processes, use the same equipment and procedures, have the same job description and are exposed to the same hazards at similar frequencies and durations.

4. POLICY

It is VHA policy to protect the health and safety of employees and volunteers by providing ongoing and methodical exposure evaluations for tasks which employees perform and identifying opportunities to prevent hazardous exposures by implementing engineering, administrative and personal protective equipment (PPE) controls as part of a comprehensive IH program. VA medical facilities tailor IH programs to site-specific hazards and operations.

5. RESPONSIBILITIES

a. **Under Secretary for Health.** The Under Secretary for Health is responsible for ensuring overall VHA compliance with this directive.

b. **Assistant Under Secretary for Health for Support.** The Assistant Under Secretary for Health for Support is responsible for establishing policy and providing guidance and oversight as necessary to ensure the timely and successful implementation of this directive.

c. **Deputy to the Assistant Under Secretary for Support.** The Deputy to the Assistant Under Secretary for Health for Support is responsible for:

(1) Overseeing the VHA IH program.

(2) Periodically assessing the VHA IH and exposure assessment system and program for continued need, currency and effectiveness.

(3) Coordinating with the Assistant Under Secretary for Health for Operations, Veterans Integrated Services Network (VISN) Directors and VA medical facility Directors to ensure all necessary action is taken and funding is obtained to address IH

and exposure assessment performance in a manner that meets the requirements of Federal, State and local statutes and regulations; applicable Executive Orders; and VA and VHA directives.

d. **Assistant Under Secretary for Health for Operations.** The Assistant Under Secretary for Health for Operations is responsible for:

(1) Communicating the contents of this directive to each of the Veterans Integrated Services Networks (VISNs).

(2) Assisting VISN Directors to resolve implementation and compliance challenges in all VA medical facilities within that VISN.

(3) Providing oversight of VISNs to ensure compliance with this directive and its effectiveness.

e. **Director, Office of Capital Asset Management.** The Director, Office of Capital Asset Management is responsible for:

(1) Ensuring engineering and facility management programs are designed to eliminate or reduce exposures to chemical, biological and physical hazards at VA medical facilities.

(2) Collaborating with VHA Office of Occupational Safety and Health (OSH) staff in the development and distribution of directives or guidance related to occupational exposures and workplace health and safety concerns.

f. **Director, Occupational Safety and Health Office.** The Director, OSH is responsible for:

(1) Supporting the implementation and oversight of this directive across VHA.

(2) Providing guidance, administrative management and technical support to VISN and VA medical facility OSH programs, to include IH programs, using results from the Annual Workplace Evaluations (AWEs) of IH programs. **NOTE:** *The AWE is required by VHA Directive 7701, Comprehensive Occupational Safety and Health Program, dated May 5, 2017.*

(3) Establishing VHA Occupational Exposure Limits (OEL) which must be the lowest published value from the following:

(a) Occupational Safety and Health Administration Permissible Exposure Limits. Permissible Exposure Limits may be found by referencing 29 C.F.R. part 1910 subpart Z and part 1926 subpart Z.

(b) American Conference of Governmental Industrial Hygienists Threshold Limit Values. **NOTE:** *The VA medical facility Director is required to purchase the American*

Conference of Governmental Industrial Hygienists (ACGIH) Threshold Limit Values (TLVs) booklet (<https://portal.acgih.org/s/store#/store/browse/tiles>) using OSH funds.

(4) Promoting professional development training for Industrial Hygienists and encouraging staff to seek Board Certification in IH.

(5) Overseeing and establishing performance standards for VHA Employee Occupational Health (EOH) medical surveillance programs required by VA Directive 5019, Employee Occupational Health Service, dated March 27, 2015.

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

g. **Veterans Integrated Services Network Director.** The VISN Director is responsible for:

(1) Ensuring that all VA medical facilities within the VISN comply with this directive and informing leadership when barriers to compliance are identified.

(2) Ensuring adequate VISN resources including staffing for the oversight and the implementation of the IH program required by this directive.

(3) Determining funding priorities for IH programs within the VISN informed by recommendations from the VISN OSH Staff.

(4) Ensuring that VISN OSH staff oversee the VA medical facility-level IH program, an integral element of compliance for the overall OSH program established in VHA Directive 7701, which includes:

(a) Conducting AWEs in accordance with VHA Directive 7701.

(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. **NOTE:** For VISNs that do not have a Lead Industrial Hygienist, the VISN Director assigns these duties to a different VISN-level or VA medical facility employee with appropriate education and experience meeting the qualifications of a GS-0690 Series Industrial Hygienist.

(c) Establishing OSH program goals and objectives that address VISN trends and progress towards accomplishing VA medical facility-level IH exposure assessment.

(d) Monitoring the status of VA medical facility IH programs in accordance with VHA Directive 7701 and VHA Directive 7703, Occupational Safety Management Systems in VHA, dated March 10, 2021.

(e) Providing leadership, mentorship and guidance to VA medical facility OSH staff.

h. **Veterans Integrated Services Network Occupational Safety and Health Staff.** VISN OSH staff are responsible for overseeing VA medical facility IH programs as

described under paragraph 5.g.(4).

i. **Veterans Integrated Services Network Lead Industrial Hygienist.** *NOTE: Not all VISNs have a VISN Lead Industrial Hygienist. The VISN Director may assign the IH program as a collateral duty to a VISN or VA medical facility employee to oversee. The VISN Lead Industrial Hygienist is responsible for:*

(1) Ensuring that each VA medical facility's IH program is managed as an integral part of the Safety Management System consistent with VHA Directive 7703.

(2) Evaluating IH programs during each VA medical facility AWE.

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

j. **VA Medical Facility Director.** The VA medical facility Director is responsible for:

(1) Providing oversight to ensure that VA medical facility staff comply with this directive.

(2) Designating in writing an Industrial Hygienist or other qualified employee with IH training and sufficient education and experience to qualify as a GS-0690 Industrial Hygienist to implement the IH program, including the exposure assessment processes, at the VA medical facility. *NOTE: Not all VA medical facilities have an Industrial Hygienist. If there is no Industrial Hygienist, the VA medical facility Director assigns the IH program requirement as a collateral duty to another program.*

(3) Ensuring that the VA medical facility Industrial Hygienist implements a VA medical facility IH program, an integral piece of the OSH program described in VHA Directive 7701 and VHA Directive 7703, that includes:

(a) Providing adequate resources to effectively operate and manage the VA medical facility IH program and exposure assessment elements described in this directive.

(b) Purchasing the ACGIH TLV booklet and other consensus standards used to establish VHA Exposure Limits. The TLV booklet is available for purchase using OSH funds at <https://portal.acgih.org/s/store#/store/browse/tiles>.

(c) Incorporating hazard-specific programs based on the results of the exposure assessment process. *NOTE: See the IH Guidebook located at <http://vaww.hefp.va.gov/guidebooks/industrial-hygiene-guidebook-0> for more information on specific hazards. This is an internal VA website that is not available to the public.*

k. **VA Medical Facility Industrial Hygienist.** The VA medical facility Industrial Hygienist is responsible for:

(1) Notifying employees of their right to access employee exposure records in

accordance with OSHA regulations, 29 C.F.R. part 1910.1020, and how to access them.

(2) Developing the VA medical facility IH program by implementing exposure assessments using the components in paragraph 6.

(3) Performing and documenting baseline exposure assessments and reassessments in coordination with subject matter experts such as EOH Providers, Infection Prevention and Control, Laser Safety, Biological Safety, and Radiation Safety, for all work areas within a VA medical facility.

(4) Working with VA medical facility Work Area Supervisors to use exposure assessment results to develop a compliance training needs analysis and the appropriate training for applicable employees. See paragraph 7.

l. **VA Medical Facility Chief Engineer.** The VA medical facility Chief Engineer is responsible for:

(1) Ensuring that VA medical facility project engineers provide designs and specifications for facility projects to appropriate VA medical facility and VISN OSH personnel for review and comment prior to project solicitation by Contracting.

(2) Including VA medical facility OSH staff in design and specification reviews and concurrence of new projects or workspace reconfigurations.

(3) Ensuring the VA medical facility Project Engineer or Resident Engineer maintains contract submittals related to OSH programs, including contractor safety programs, chemical product inventories, performance tests and certifications and Safety Data Sheets (SDSs) for products containing hazardous chemicals. For more information about SDSs, see VHA Directive 7705, Management of Hazardous Chemicals, dated August 14, 2015.

(4) Ensuring the VA medical facility Project Engineer or Resident Engineer informs contractors of existing potential OSH hazards they may encounter in the VHA work environment.

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

(6) Providing notification to affected staff of work on hazardous building materials or equipment containing select agents.

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

m. **VA Medical Facility Work Area Supervisors.** The VA medical facility Work Area Supervisors are responsible for:

(1) Ensuring the safe and effective operation of engineering controls in their area of

responsibility that maintain employee exposures below VHA assigned OELs (refer to paragraph 5.f.(3)).

(2) Working with the VA medical facility Industrial Hygienist (or designating work area staff) to provide work area-specific process and procedure information necessary to complete the exposure assessments.

(3) Working with the VA medical facility Industrial Hygienist to use exposure assessment results to develop an OSH compliance training needs analysis and provide the appropriate OSH training for applicable employees. See paragraph 7.

(4) Ensuring all work area staff are properly trained to utilize safety equipment assigned to their area and how to detect when the equipment is performing as intended by the manufacturer.

(5) Notifying VA medical facility OSH staff when processes and operations change in the work area.

(6) Collaborating with the VA medical facility OSH staff to prioritize corrective actions associated with OSH.

6. EXPOSURE ASSESSMENT COMPONENTS

a. **Basic Characterization.** Basic characterization is a process that collects and organizes information on the workplace, worker, task, agent and exposure potential or estimate. **NOTE:** For a detailed description of the basic characterization process, see the IH Guidebook located at <http://vaww.hefp.va.gov/guidebooks/industrial-hygiene-guidebook-0>. This is an internal VA website that is not available to the public.

b. **Similar Exposure Groups.** Establishing SEGs that have the same or substantially similar exposure profile for agents being assessed.

c. **Qualitative or Quantitative Exposure Assessment.** Qualitative exposure assessments must be recorded with the information gathered in the basic characterization that includes a rationale and determination that the exposure(s) are acceptable, unacceptable or uncertain. **NOTE:** For a detailed description and guidance for the qualitative and quantitative exposure assessment process, see the IH Guidebook located at <http://vaww.hefp.va.gov/guidebooks/industrial-hygiene-guidebook-0>. This is an internal VA website that is not available to the public. A quantitative exposure assessment requires at a minimum that:

(1) Sampling strategies and monitoring plans must be developed.

(2) Laboratories utilized for IH analytical services must be accredited by the American Industrial Hygiene Association (AIHA) for the specific analytes to be tested. **NOTE:** AIHA maintains the list of accredited IH laboratories at <https://www.aihaaccreditedlabs.org/>.

(3) Sampling equipment must be calibrated and maintained in accordance with manufacturer instructions and professional IH practice.

(4) The person performing the sampling must be present during sampling to observe and document the process and tasks, so the results can be correlated with the work tasks and work processes.

(5) When the sampling is completed, exposures must be characterized as acceptable, unacceptable or uncertain, and the following completed:

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

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

(6) Employees receive written notification of exposure results within 15 business days of receipt of laboratory analytical results, and results must also be communicated as appropriate to the following:

(a) Affected Work Area or Section. Written copy of results of evaluations and recommendations for control of occupational hazards.

(b) Supervisor of the Monitored Employee(s). Notification will not include Personally Identifiable Information (PII). See VHA Directive 1605, VHA Privacy Program, dated September 1, 2017.

(c) Employees Within the Similar Exposure Group (With Any PII Deleted).

(d) Employee Occupational Health Provider. To maintain exposure record in employee EOH file.

(e) Employee Representatives. Provide access to exposure results upon request and in accordance with 29 C.F.R. part 1910.1020(e)(2).

d. **Exposure Controls and Strategies**. Recommending exposure controls and strategies for controlling exposures following hierarchy of controls (engineering, administrative and PPE).

(1) Resources to implement control measures must be provided by the affected work area.

(2) Control measure implementation and maintenance must be led by the affected work area with consultative support from the VA medical facility Industrial Hygienist, Safety Manager and facilities or engineering staff as appropriate.

(3) Interim control strategies that provide equivalent employee protection must be

implemented until the permanent controls are achieved and their effectiveness confirmed and documented. **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. **Periodic Reassessments.** The exposure assessment and reassessment schedule for occupational hazards is based on the risk level of the exposure. See the IH Guidebook located at <http://vaww.hefp.va.gov/guidebooks/industrial-hygiene-guidebook-0> for more information. **NOTE:** *This is an internal VA website that is not available to the public.* Periodic reassessments may be required in, but not limited to, the following situations:

(1) Process, procedure and task changes.

(2) Periodic evaluations of controls.

(3) Employee complaints or requests, such as Indoor Air Quality surveys or Reproductive Hazard Evaluations for pregnant workers, as well as male reproductive hazards.

(4) Results of illness or injury investigations.

(5) Employee reports of unsafe or unhealthful working conditions.

(6) Maintain compliance with regulatory requirements.

(7) Periodic reevaluations of work tasks and processes to ensure that exposures have not changed.

7. TRAINING

a. The VA medical facility Industrial Hygienist and Work Area Supervisors must use the exposure assessment results to develop a compliance training needs analysis and then provide the appropriate training to applicable employees.

b. The IH Guidebook includes guidance and training resources at: <http://vaww.hefp.va.gov/guidebooks/industrial-hygiene-guidebook-0>. **NOTE:** *This is an internal VA website that is not available to the public.*

8. RECORDS MANAGEMENT

All records regardless of format (e.g., paper, electronic, electronic systems) created by this directive must be managed as required by the National Archives and Records Administration (NARA) approved records schedules found in VHA Records Control Schedule 10-1. Questions regarding any aspect of records management should be addressed to the appropriate Records Officer.

9. REFERENCES

- a. 38 U.S.C § 7301(b).
- b. 29 C.F.R. parts 1910, 1926 and 1960.
- c. VA Directive 5019, Employee Occupational Health Service, dated March 27, 2015.
- d. VHA Directive 1605, VHA Privacy Program, dated September 1, 2017.
- e. VHA Directive 7701, Comprehensive Occupational Safety and Health Program, dated May 5, 2017.
- f. VHA Directive 7703, Occupational Safety Management Systems in VHA, dated March 10, 2021.
- g. VHA Directive 7705, Management of Hazardous Chemicals, dated August 14, 2015.
- h. VHA Healthcare Environment and Facilities Programs (HEFP) Industrial Hygiene Guidebook. <http://vaww.hefp.va.gov/guidebooks/industrial-hygiene-guidebook-0>. **NOTE:** *This is an internal VA website that is not available to the public.*
- i. American Conference of Governmental Industrial Hygienists (ACGIH) Threshold Limit Values (TLVs). <https://portal.acgih.org/s/store#/store/browse/tiles>.
- j. American Industrial Hygiene Association (AIHA). <https://www.aihaaccreditedlabs.org/>.
- k. Centers for Disease Control and Prevention - Division of Select Agents and Toxins. Select Agents and Toxins List. www.selectagents.gov/sat/list.htm.