



DoD INSTRUCTION 6055.20

ASSESSMENT OF SIGNIFICANT LONG-TERM HEALTH RISKS FROM PAST ENVIRONMENTAL EXPOSURES ON MILITARY INSTALLATIONS

Originating Component:	Office of the Under Secretary of Defense for Acquisition, Technology, and Logistics
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Approved by:	James A. MacStravic, Performing the Duties of the Under Secretary of Defense for Acquisition, Technology, and Logistics

Purpose: Pursuant to Section 313 of the National Defense Authorization Act for Fiscal Year 2013 and in accordance with the authority in DoD Directive (DoDD) 5134.01, and guidance in DoDD 4715.1E, this issuance establishes policy, assigns responsibilities, and establishes procedures for assessing significant long-term health risks from past environmental exposures to military personnel and civilian individuals from living or working on military installations. When and under what circumstances public health assessments are to be requested from the Agency for Toxic Substances and Disease Registry in connection with environmental contamination at military installations and tracking and documenting the status and nature of responses to the findings and recommendations of such assessments are addressed in other DoD issuances and in separate guidance.

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SECTION 1: GENERAL ISSUANCE INFORMATION

1.1. APPLICABILITY. This issuance:

a. Applies to:

(1) OSD, the Military Departments, the Office of the Chairman of the Joint Chiefs of Staff and the Joint Staff, the Combatant Commands, the Office of the Inspector General of the Department of Defense, the Defense Agencies, the DoD Field Activities, and all other organizational entities within the DoD (referred to collectively in this issuance as the “DoD Components”).

(2) Military installations.

b. Does not apply to:

(1) A current exposure, e.g., an occupational exposure, that is covered by DoD Instruction (DoDI) 6055.05 or DoDI 6490.03.

(2) Facilities not owned, managed, or leased by a DoD Component, including host nation, combined, and leased facilities, where DoD does not control the management of infrastructure or resources.

(3) Environmental restoration activities undertaken by a DoD Component within the United States in accordance with DoDI 4715.07.

(4) Environmental corrective actions undertaken to comply with the requirements in DoDIs 4715.05 and 4715.06.

1.2. POLICY. In accordance with DoDD 4715.1E, DoD will protect DoD personnel from injury and illness caused by hazardous occupational and environmental exposures. DoD will assess significant long-term health risks from past environmental exposures to military personnel and civilian individuals from living or working on military installations.

SECTION 2: RESPONSIBILITIES

2.1. UNDER SECRETARY OF DEFENSE FOR ACQUISITION, TECHNOLOGY, AND LOGISTICS (USD(AT&L)). The USD(AT&L) provides policy and oversees environment, safety, and occupational health programs in accordance with DoDD 4715.1E and DoDI 6055.05.

2.2. ASSISTANT SECRETARY OF DEFENSE FOR ENERGY, INSTALLATIONS, AND ENVIRONMENT. Under the authority, direction, and control of the USD(AT&L), the Assistant Secretary of Defense for Energy, Installations, and Environment oversees the implementation of this issuance in accordance with DoDD 4715.1E and DoDI 6055.05.

2.3. ASSISTANT SECRETARY OF DEFENSE FOR HEALTH AFFAIRS (ASD(HA)). Under the authority, direction, and control of the Under Secretary of Defense for Personnel and Readiness and in accordance with DoDD 5136.01, the ASD(HA):

a. Oversees the Military Departments' planning, programming, budgeting, and execution of the occupational and environmental health (OEH) programs within available fiscal guidance and overall Defense Health Program priorities.

b. Coordinates with the Department of Veterans Affairs (VA) to make relevant, health-related information available to support clinical management and claims adjudication for veterans in accordance with DoDI 6040.45 and the DoD-VA Data Transfer Agreement.

2.4. DOD COMPONENT HEADS. The DoD Component heads:

a. Establish, maintain, and fund OEH programs that implement the requirements of this issuance and DoDD 6490.02E.

b. Ensure that health risk assessments (HRAs) are performed by personnel with the necessary support, equipment, competencies, and experience for health and medical surveillance.

c. Within 60 days of learning of a past environmental exposure or as soon as practical, and after an HRA determines the exposure will result in significant long-term health risks, notify the relevant operational command and medical authorities of such exposure.

d. Develop and implement health risk communication procedures to inform individuals whose health risk was assessed.

SECTION 3: PROCEDURES

3.1. GENERAL. The procedures in this section are carried out by the DoD Components and will be implemented when there is a scientifically plausible likelihood of a significant long-term health risk from a past environmental exposure to military personnel or civilians resulting from living or working on military installations.

a. A past exposure may be indicated by a group or an individual's health concerns, clinical evaluation results, epidemiology, current and historical records of environmental monitoring and HRAs extrapolated to previous time periods, and observations made by qualified OEH personnel.

b. An HRA may only be conducted by OEH personnel qualified to assess the exposure pathway or pathways of concern and any associated significant long-term health risks from a past environmental exposure to military personnel or civilians resulting from living or working on military installations.

c. HRA activities at military installations outside the United States will be consistent with applicable international agreements with the relevant host nation. In foreign countries, no communication regarding HRAs will be made directly with host nationals or third country nationals, other than foreign nationals who are employees of DoD or of a nonappropriated fund instrumentality (NAFI), without first consulting with the local U.S. Embassy.

3.2. HAZARD IDENTIFICATION.

a. Gather and analyze relevant data for historical environmental exposures that may have been in environmental media (e.g., air, water, soil, soil gas, sediment) on the military installation. This includes exposure-related information associated with off-installation sources that may have migrated onto, above, or under the military installation.

b. Review all appropriate historic incident and investigation records involving, but not limited to, releases or suspected releases and associated documentation including who was exposed and for how long, and determine if the existing data is sufficient for the HRA.

c. If insufficient information is available, conduct a data gap analysis to identify what is known and unknown and the information needed to fill the data gaps.

d. Document the exposure pathways and associated surveillance data (e.g., samples and surveys) and HRAs in the Defense Occupational and Environmental Health Readiness System-Industrial Hygiene (DOEHRS-IH) for an environmental or occupational exposure.

3.3. HRA.

a. Conduct or update HRAs to identify and assess significant long-term health risks, generated by a past environmental exposure, to military personnel or civilians resulting from living or working on military installations.

b. Conduct or update HRAs based on the health hazards identified, site assessments, routine and incident-driven monitoring and sampling, and other health risk information. The complexity of the HRA should be in proportion to the complexity of a potential exposure on the military installation (e.g., multiple exposure pathways) and include:

(1) The types of health effects that could potentially occur based on the population exposed.

(2) The media involved (e.g., air, water, soil, soil gas, sediment).

(3) Exposure conditions (i.e., route, frequency, intensity, and duration).

c. Evaluate exposure pathways and determine exposure.

d. Assess the long-term carcinogenic and noncarcinogenic risks associated with the exposure.

e. Determine if the risks exceed acceptable exposure levels using appropriate exposure guidelines by:

(1) Conducting a full, site-specific HRA if an exposure exceeds screening or threshold levels.

(2) Using a full, site-specific HRA to determine if significant health risks are identified for action.

(3) Collecting additional information to fill data gaps if the risks of the assessed human exposures are highly uncertain due to lack of information or data gaps as long as the additional information to be collected is reasonably attainable, required to support a decision, and likely to change the risk management decision.

f. Where the assessment of a past exposure indicates the exposure is ongoing, assess the current exposure using an accepted scientific human HRA approach such as the guidance provided in DoDI 6055.05 or Chapter 103 of Title 42, United States Code (U.S.C.), as applicable.

3.4. RISK COMMUNICATION.

a. Provide targeted and effective health risk communication early and continuously as new and credible information becomes available.

b. Inform, as much as possible or feasible, previously exposed or potentially exposed individuals of the HRA results.

c. Provide exposed or potentially exposed individuals with access to additional available in-depth information related to the health risk posed by the hazard.

d. Document all risk communication provided (e.g., any information given to patients, health care providers, media, populations at risk) in the appropriate DoD system of record (e.g., the individual medical treatment record, DOEHRS-IH, site-specific administrative records, established registries, personnel record systems).

(1) OEH sampling and surveillance data (e.g., air, drinking water, soil, wipe sampling) and exposure information that could link an individual exposure to industrial, occupational, operational, or environmental hazards (e.g., Periodic Occupational and Environmental Monitoring Surveys) should be documented in DOEHRS-IH.

(2) Document individual medical surveillance and health risk information provided for DoD civilian employees in the occupational health record of the Employee Medical File System pursuant to Part 293 and Subpart E of Title 5, Code of Federal Regulations.

(3) Document individual medical surveillance and health risk information provided to military personnel and other military or veteran's health beneficiaries (e.g., family members, retirees, veterans) in the individual health record.

3.5. HEALTH SURVEILLANCE.

a. Background. An important characteristic of health surveillance for a past environmental exposure is that the exposure, the population at risk, and the population's behavior are less likely to be as well-defined as with a group of occupationally exposed workers. Access to the medical records of those concerned, exposed, or affected is often unavailable to OEH staff assisting with an assessment of a past environmental exposure.

b. Medical Surveillance. Using the HRA results, and following occupational and environmental medicine best practices, DoD Components determine whether a scientifically plausible past environmental exposure has occurred and if there is a need for clinical examinations to assess for a past environmental exposure. Components will:

(1) If possible, obtain occupational and environmental surveillance data and information and, where available, exposure data for the population at risk and the affected populations with significant health risks. For DoD civilian employees, make additional efforts to obtain related health data not typically available in the Military Health System, including:

- (a) Data from non-Military Health System occupational examinations.
- (b) Workers' compensation claims accepted by the Department of Labor.
- (c) Other data in accordance with applicable law and regulation.

(2) If a plausible explanation connects a past environmental exposure with the adverse health effect of concern, define the exposure as clearly as possible and determine the appropriate medical surveillance for each person in the suspected exposure group.

(3) Use occupational and environmental medicine staff to serve primarily as the source of expertise to commanding officers, facility managers, and other health care providers to describe the potential health effects of the exposure of concern, and recommend appropriate preventive, diagnostic, treatment, and surveillance measures for those exposed.

c. Epidemiology.

(1) Health Data Analysis for HRA.

(a) Review professional literature to assess potential associations between a suspected exposure and the medical condition in the pertinent military personnel, civilians, and military dependents.

(b) Request data from medical data sources including epidemiological review of clinical data and other DoD medical data sources such as inpatient, outpatient, specialty clinics, and clinical laboratory test results to recognize patterns, causes, and effects of health and disease conditions. Assess the strength of any association between the suspected exposure and the medical conditions. Store, access, and maintain received data according to all applicable privacy requirements pursuant to Section 552a of Title 5, U.S.C.; DoDI 6025.18; DoD 6025.18-R; DoDD 5400.11; and DoD 5400.11-R.

(2) Program Assessment.

(a) Conduct routine analyses to identify precursors to, and adverse and non-adverse health effects (e.g., symptoms prior to illness or specific illnesses) associated with, the environmental exposure.

(b) Review and assess the value and completeness of exposure data, health surveillance results, and illness outcome data to determine the effectiveness of the health surveillance program.

(3) Cross-feed of Epidemiology Information.

(a) Provide results of epidemiology, metrics, trending, and other data analysis to public health and environmental staff members to identify and assess hazards, assess and manage risk, and develop countermeasures.

(b) Coordinate with local, State, and Federal agencies, as appropriate.

3.6. RECORDKEEPING AND REPORTING. Record the results of HRAs in DOEHRS-IH.

- a. Document, archive, and periodically re-evaluate environmental HRAs and risk management decisions as new information becomes available that would impact the HRA and associated risk management decisions.
- b. Establish and maintain documentation of HRA data, including hazards assessed but not considered for further risk assessment.
- c. Document patient encounters and significant environmental and incident exposure information in the appropriate patient encounter information management system in accordance with DoDI 6055.05 and DoDI 6040.45.
- d. Document all site-specific environmental risk assessment and remedial action constraints (e.g., host-nation regulatory framework, data gaps, uncertainties) that limit the ability to assess fully the nature, extent, and management of the potential risk to at-risk individuals on the military installation.
- e. Share appropriate hazard, exposure, and HRA data across the DoD and with the VA:
 - (1) Make hazard, exposure, and HRA data available to installation-level OEH staff.
 - (2) Make hazard, exposure, and HRA data available electronically to assist in the development and sharing of longitudinal exposure records for individuals.
 - (3) Provide the VA with hazard and environmental exposure data and determinations to assist in veterans' health care and the adjudication of veterans' disability claims in accordance with DoDI 6040.45 and the DoD-VA Data Transfer Agreement.
 - (4) Provide the DoD Component's Office of Injury for Workers' Compensation, or the Department of Labor's Office of Workers' Compensation Programs, with hazard and environmental exposure data and determinations as needed to resolve injury and disability claims.
- f. Store, provide access to, and maintain exposure data, protected health information, and personally identifiable information according to applicable privacy requirements pursuant to title 5, U.S.C., section 552a; DoDI 6025.18; DoD 6025.18-R; DoDD 5400.11; and DoD 5400.11-R.

GLOSSARY

G.1. ACRONYMS.

ASD(HA)	Assistant Secretary of Defense for Health Affairs
DoDD	DoD directive
DoDI	DoD instruction
DOEHRS-IH	Defense Occupational and Environmental Health Readiness System-Industrial Hygiene
HRA	health risk assessment
NAFI	nonappropriated fund instrumentality
OEH	occupational and environmental health
U.S.C.	United States Code
USD(AT&L)	Under Secretary of Defense for Acquisition, Technology, and Logistics
VA	Department of Veterans Affairs

G.2. DEFINITIONS. Unless otherwise noted, these terms and their definitions are for the purposes of this issuance.

acceptable exposure. An exposure assessed to present a minimal risk for illness or disease.

civilians. Military dependents and individuals meeting the definition of “employee” under Section 2105 of Title 5, U.S.C., as well as employees of a DoD NAFI paid from nonappropriated funds. This includes DoD civilian employees filling full-time, part-time, intermittent, or on-call positions. Specifically excluded are contractors and, in foreign countries, host nationals or third country nationals (other than foreign nationals who are employees of the DoD or of a NAFI).

enduring location. A military installation that is listed as an enduring location in the Enduring Location Master List maintained by the Office of the Under Secretary of Defense for Policy in accordance with DoDI 3000.12.

environmental exposure. Contact with a chemical, biological, or physical hazard in the ambient environment.

hazardous substance. Defined in Section 9601(14) of Title 42, U.S.C., also referred to as Section 101(14) of the “Comprehensive Environmental Response, Compensation, and Liability Act of 1980.”

HRA. The multidisciplinary practice of evaluating environmental exposures, predicting health risks and potential health outcomes, and informing decision making for response to an exposure.

health surveillance. Defined in DoDD 6490.02E.

host nation. Defined in the DoD Dictionary of Military and Associated Terms.

military installation. An installation as defined in Section 2687(g)(1) of Title 10, U.S.C., that is (or was at the time of the environmental exposure) an enduring location.

military personnel. Includes, with the consent of the sending government, foreign military personnel if assigned to a military installation.

occupational exposure. Contact with a chemical, biological, or physical hazard occurring in the workplace as covered by DoDIs 6055.05 and 6490.03.

past environmental exposure. An individual's environmental exposure that existed in, or occurred during, a time before the present.

population at risk. The population or a subset of the population that is at risk of experiencing an event or being exposed to the health threat during a specified period and at a specified location.

qualified OEH personnel. Defined in DoDI 6055.05.

risk communication. The timely process of effectively communicating the nature of health and environmental risks, their health outcomes, any necessary medical follow-up, any risk management actions to control the risks, and other health-related information to commanders, service members, family members, and others in an open, transparent, and understandable manner that fosters trust and credibility.

significant long-term health risk. A condition with the potential for health impact or illness to a population or individual as a result of an exposure above established health-based criteria, or a reported illness associated with exposure to a hazard.

REFERENCES

- Code of Federal Regulations, Title 5
- DoD 5400.11-R, “Department of Defense Privacy Program,” May 14, 2007
- DoD 6025.18-R, “DoD Health Information Privacy Regulation,” January 24, 2003
- DoD Directive 4715.1E, “Environment, Safety, and Occupational Health (ESOH),” March 19, 2005
- DoD Directive 5134.01, “Under Secretary of Defense for Acquisition, Technology, and Logistics (USD(AT&L)),” December 9, 2005, as amended
- DoD Directive 5136.01, “Assistant Secretary of Defense for Health Affairs (ASD(HA)),” September 30, 2013
- DoD Directive 5400.11, “DoD Privacy Program,” October 29, 2014
- DoD Directive 6490.02E, “Comprehensive Health Surveillance,” February 8, 2012, as amended
- DoD Instruction 3000.12, “Management of U.S. Global Defense Posture (GDP),” May 6, 2016, as amended
- DoD Instruction 4715.05, “Environmental Compliance at Installations Outside of the United States,” November 1, 2013
- DoD Instruction 4715.06, “Environmental Compliance in the United States,” May 4, 2015
- DoD Instruction 4715.07, “Defense Environmental Restoration Program (DERP),” May 21, 2013
- DoD Instruction 6025.18, “Privacy of Individually Identifiable Health Information in DoD Health Care Programs,” December 2, 2009
- DoD Instruction 6040.45, “DoD Health Record Life Cycle Management,” November 16, 2015, as amended
- DoD Instruction 6055.05, “Occupational and Environmental Health (OEH),” November 11, 2008
- DoD Instruction 6490.03, “Deployment Health,” August 11, 2006, as amended
- DoD-VA Data Transfer Agreement, “Agreement for Sharing of Environmental and Occupational Exposure Record-Level Data between the U.S. Department of Defense and the U.S. Department of Veterans Affairs,” February 1, 2013¹
- Office of the Chairman of the Joint Chiefs of Staff, “Department of Defense Dictionary of Military and Associated Terms,” current edition
- Public Law 112-239, Section 313, “The National Defense Authorization Act for Fiscal Year 2013,” January 2, 2013
- United States Code, Title 5, Sections 552a and 2105
- United States Code, Title 10, Section 2687(g)(1)
- United States Code, Title 42, Chapter 103 (also referred to as the “Comprehensive Environmental Response, Compensation, and Liability Act of 1980”)

¹ Posted to DENIX (login required) at https://www.denix.osd.mil/denix_secure/shf/References.cfm