

HEADQUARTERS UNITED STATES CENTRAL COMMAND  
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REGULATION  
220-1

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Deployment Health  
DEPLOYMENT HEALTH SURVEILLANCE AND FORCE HEALTH PROTECTION

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## Chapter 1 GENERAL

1-1. PURPOSE. This regulation implements policies and prescribes procedures for deployment health activities for Joint and Service-specific deployments and exercises to monitor, assess, and prevent Disease and Injury (D&I); to control or reduce Occupational and Environmental Health (OEH) risks; to document and link OEH exposures with deployed personnel, including exposures to Chemical, Biological, Radiological, toxic industrial chemicals, and Nuclear (CBRN) warfare agents and establish procedures and reporting requirements for disease surveillance.

### 1-2. APPLICABILITY

a. This regulation applies to all United States Central Command (USCENTCOM) Service Components, Combined Joint Task Force (CJTF), and all other United States military forces operating within the geographic area of responsibility (AOR) assigned to USCENTCOM by the Command Plan as well as Department of Defense (DoD) civilian employees and contractor personnel deploying with United States (U.S.) forces (hereafter referred to as "DoD personnel") consistent with DoD and Service-specific guidance. DoD contractor personnel are addressed per applicable contracts, DoDI 3020.37 and DoDI 3020.41 (References 1 and 2), and/or applicable Service policy.

b. This regulation focuses primarily on the deployment health activities that are required during deployment operations. Pre and post-deployment activities are addressed as follows:

(1) Pre-Deployment. USCENTCOM, through deployment orders and separate instructions, will require the supporting Services and JTFs to accomplish the pre-deployment activities described in MCM 0028-07 and DoDI 6490.03 (References 3 and 4) and individual medical readiness requirements in DODI 6025.19 (Reference 5). Components and JTFs will incorporate OEHS requirements into contingency and crisis action planning.

(2) Post-Deployment. Post-deployment health activities are described in Reference 4, and are a Service responsibility.

c. For OCONUS deployments greater than 30 days with non-fixed U.S. MTFs, all the deployment health activities described by this regulation apply. For OCONUS deployment of 30 days or less, and OCONUS deployment with fixed U.S. MTFs, deployment health activities are based on the health threats identified during the

deployment, the health risk assessment, and the decisions of the COCOM commander, Service component commander, or commander exercising operational control.

d. For information related to the environmental criteria for establishing, operating, maintaining, closing and/or transferring base camps as part of USCENTCOM contingency operations, refer to CCR 200-2: CENTCOM Contingency Environmental Guidance (Reference xx). CCR 200-2 also details the requirements for environmental surveys and reports, including the Environmental Baseline Survey (EBS), the Environmental Conditions Reports (ECR) and the Environmental Site Closure Survey (ESCS).

1-3. REFERENCES. See Appendix A.

1-4. TERMS and DEFINITIONS. Terms used in the regulation not found in Joint Publication 1-02 (Reference 6) are defined in Appendix B.

1-5. POLICY. It is USCENTCOM policy to effectively anticipate, recognize, evaluate, control, and mitigate the health threats to deployed forces in the USCENTCOM AOR.

Chapter 2  
RESPONSIBILITIES

2-1. COMMANDER, USCENTCOM (CDRUSCENTCOM)

a. Establish Command deployment health surveillance policies and programs for all DOD personnel (military and civilian), essential contractors, and other assigned personnel traveling within the USCENTCOM AOR.

b. Support OEH and FHP requirements IAW Appendix A References.

2-2. DEPUTY COMMANDER, USCENTCOM (DCDRUSCENTCOM)

a. Provide Command deployment health surveillance guidance and direction to USCENTCOM Command Surgeon.

(1) Oversee staff coordination of deployment health surveillance issues within the USCENTCOM AOR.

(2) Ensure all data reporting requirements IAW this regulation and DoD policy are met.

2-3. USCENTCOM DIRECTOR OF MANPOWER AND PERSONNEL (CCJ1)

a. Ensure Service Components and JTFs have a process in place to record once-daily individual service member locations.

(1) Ensure the Defense Manpower Data Center (DMDC) is provided theater-wide rosters of all deployed personnel, their unit assignments (company-sized or equivalent), and the unit's geographic locations.

(2) Implement and submit medical travel restrictions to the DOD Foreign Clearance Guide through HQ United States Air Force.

2-4. USCENTCOM DIRECTOR FOR INTELLIGENCE (CCJ2)

a. Coordinate medical intelligence information with USCENTCOM Command Surgeon.

b. Review plans to ensure they describe procedures for collecting and analyzing intelligence information that potentially impacts the health and safety of deployed personnel.

c. Ensure dissemination of procedures for the collection and analysis of health threat and hazard information to all units in the USCENTCOM AOR.

d. Ensure medical intelligence is made available to all DOD activities and Chiefs of Mission (COM) located within the AOR and to Military Departments, supporting unified commands, and DOD agencies in support of their deployment health surveillance responsibilities.

e. In coordination with the Defense Intelligence Agency and National Center for Military Intelligence (NCMI), provide intelligence information specific to the USCENTCOM AOR pertaining to DOD activities for Military Departments, supporting unified commands, and DOD agencies in support of their deployment health surveillance responsibilities when requested.

2-5. USCENTCOM DIRECTOR FOR OPERATIONS (CCJ3)

a. Assist USCENTCOM Director for Strategic Planning and Policy (J5) in ensuring deliberate and crisis action plans address force health protection and deployment health surveillance requirements.

b. Provide the Command Surgeon and Service Health Surveillance Centers known forward operating base locations for OEHS and medical intelligence preparation of the operational environment (MIPOE) and intelligence preparation of the battle space (IPB) assessments.

c. Coordinate with the USCENTCOM Command Surgeon/FHP Officer regarding suspected and confirmed CBRN incident exposures to facilitate personnel tracking of known or potentially exposed personnel, such as SIGACT numbers to facilitate updates to the designated CENTCOM SIGACT Database (e.g. CIDNE supported BUA SIGACT Events Database) and pushing information to echelon Level IV medical assets.

2-6. USCENTCOM DIRECTOR FOR LOGISTICS (CCJ4)

a. Factor preventive medicine personnel and equipment requirements for performing deployment health surveillance into time-phased force and deployment data (TPFDD) planning.

b. Coordinate with the USCENTCOM Command Surgeon to field qualified personnel or teams on the development of Environmental Baseline Assessments (EBA), Environmental Baseline Surveys (EBS), Occupational and Environmental Health Site Assessments (OEHSA) and other relevant environmental surveys related to infrastructure

construction or demolition projects and base camp closures/transfers.

2-7. USCENTCOM DIRECTOR FOR STRATEGIC PLANNING AND POLICY (CCJ5)

a. Ensure deliberate and crisis action plans address force health protection and Occupational and Environmental Health Surveillance (OEHS) requirements specifically food/water vulnerability assessments, OEHSA, CBRN and OEH incidents, and reportable medical event reporting and documentation.

2-8. USCENTCOM DIRECTOR FOR COMMAND, CONTROL, COMMUNICATIONS, AND COMPUTERS (CCJ6)

a. Provide appropriate communication capability to medical units within the USCENTCOM AOR to facilitate medical reporting requirements and medical intelligence information dissemination.

b. Develop guidance to allow for the protection of operationally sensitive information while ensuring the widest distribution of OEHS information.

2-9. USCENTCOM COMMAND SURGEON (CCSG)

a. Monitor the implementation of this regulation for the USCENTCOM AOR according to References.

b. Specify OEHSA, CBRN and OEH incident reporting, D&I, RME, and POEMS requirements in Contingency and Operational Plans and Orders.

c. Identify USCENTCOM OEHS program critical shortfalls and assist Service Components and JTFs with developing solutions to meet compliance.

d. Establish a Joint FHP working group who will meet as required and at least annually to review current deployment health surveillance guidance from higher headquarters. In addition, the group will review OEHS lessons learned and after action report (AAR) items from past deployments and exercises highlighting successes, problems, and solutions. The group will develop and recommend changes to this regulation, as appropriate.

e. Develop, implement, monitor, and evaluate a USCENTCOM OEHS Program.

f. Provide guidance and direction concerning the FHP and OEHS program to separate DOD agencies and their contractors located within the USCENTCOM AOR that do not report directly to a higher DOD authority within the USCENTCOM AOR.

g. Work with the Public Affairs Office to identify appropriate communications channels, develop messages, and develop and implement media plans supporting health risk communication efforts.

h. In coordination with J3, J4, and J5, ensure that deliberate and crisis action plans address FHP and OEHS (including risk communication) requirements.

i. In the event of an exposure incident that involves weapons of mass destruction (WMD) to include CBRN agents or toxic industrial chemicals or materials (TICs/TIMs) coordinate with J3 and ensure the proper documentation and dissemination of information (per Appendices H and I) as quickly as possible and facilitate tracking patients to final disposition. Ensure use of SIGACT numbers from the designated CENTCOM SIGACT Database (e.g. CIDNE supported BUA SIGACT Events Database).

j. Provide final approval for OEHSA and POEMS or designate this approval to Service Component/JTF Surgeons.

#### 2-10. USCENTCOM SERVICE COMPONENT AND JTF COMMANDERS AND DIRECTORS OF SEPARATE OPERATING AGENCIES.

a. Integrate OEHS requirements into deployment plans and orders.

b. Ensure FHP and OEHS planning is accomplished during exercise planning conferences.

c. Ensure subordinate commands and units (battalion/squadron/ship size or larger) appoint an individual, responsible for administering the OEHS program for deployments.

d. Ensure requirements are accomplished according to this regulation.

#### 2-11. CJTF AND SERVICE COMPONENT COMMAND SURGEONS

a. Ensure compliance and execution of deployment health surveillance and FHP requirements for all operational requirements and contingencies IAW References. Direct medical and OEHS surveillance activities identified in Appendix C of this

regulation. Specifically, ensure that:

(1) All baseline and vulnerability documents as well as OEHSAs, POEMS, D&I surveillance, RME reports and CBRN/OEH exposure incident reports are completed and updated IAW this regulation.

(2) Medical threats and health risks within the area of responsibility are assessed and managed IAW established military risk assessment and risk management doctrine. See Appendix D for further details regarding OEH operational risk assessment and management methodology.

(3) Health risk communication plans and/or tools are available to address OEH exposures and associated medical risks concerns.

b. Provide maximum protection and institute appropriate OEHS measures and provide PVNTMD support for identified hazards consistent with mission and available resources.

c. Monitor reporting of RMEs, D&Is, and other medical information, as required IAW References 3 and 4. Ensure D&I surveillance is submitted within JMEWS on a weekly basis. Submit health surveillance data and reports to include RMEs to USCENTCOM Surgeon and Service-specific public health activities. See Appendices C-I for further details.

d. Institute appropriate OEHS measures and provide PVNTMED support for health risk assessment of residual hazards during decontamination of CBRN contaminated equipment and human remains before they leave the CJTF JOA.

e. Identify critical shortfalls and capability gaps required to meet the requirements of this regulation. Verify PVNTMED/FHP units are staffed, equipped, and trained to execute USCENTCOM FHP policy. Provide the USCENTCOM Surgeon with situational awareness of critical shortfalls and gaps.

f. Ensure AARs include OEHS lessons learned, and that the lessons learned identify any deficiencies in doctrine, organization, training, education, budgeting, risk communication processes, and/or equipment. Forward all AARs through the appropriate chain of command to Joint Uniform Lessons Learned System (JULLS) and appropriate Service component Lessons Learned Centers. Send copies to USCENTCOM, USAPHC(P), USAFSAM, NMCPHC, and OSD HA (FHP&R).

g. Assign a Force Health Protection (FHP) Officer responsible for:

(1) Oversight of the OEHS program and specified reporting/record keeping requirements. These are detailed in Appendix C of this regulation.

(2) Coordination and liaison with the USCENTCOM FHP Officer.

(3) Implementing procedures to develop and document OEHSAs for all camps, sites, forward operating base locations within respective AOR. Coordinate with Health Surveillance Centers for reachback assistance and advice. See Appendix E for additional details.

(4) Submitting a monthly OEHS status report to CENTCOM FHP Officer. Reporting requirements are identified in Appendix C, Reporting Requirements.

(5) Implementing procedures to ensure completion of the POEMS for all camps, sites, forward operating base locations within respective AOR. See Appendix F for further details.

h. Ensuring subordinate Preventive Medicine (PVNTMD) units and FHP Officers help develop OEHS plans for each assigned unit within their area of responsibility before deployment. These include:

(1) Submitting all OEH monitoring data, food/water, PVNTMED and Veterinary Service survey and inspection reports, OEHSAs, and POEMS to designated DoD OEH data archive as described in Appendix C.

(2) Providing weekly D&I reports and daily RMEs to the Service Component/JTF Surgeon, and USCENTCOM Command Surgeon IAW procedures identified in Appendices G. Per Appendix H, Tri-RMEs are reported within 24 hours through the Service-specific data systems. Those conditions that represent a potential significant threat to public health (including highly communicable disease and biothreat agents) should be reported to the Service Component/JTF Surgeon and USCENTCOM Command Surgeon immediately. CENTCOM specific RMEs such as treatment resulting from a CBRN/TIC TIM exposure incidents must be documented on the RME from which must be submitted to USCENTCOM Command Surgeon as soon as possible but NLT 48 hours of treatment.

(3) Reporting all OEH/CBRN agents or TICs/TIMs OEH exposure incidents IAW procedures in Appendices H and I.

(4) Updating applicable documents and medical countermeasures as new information becomes available.

(5) Develop and implement health risk communication plans. This includes use of Medical Threat Briefs (MTBs) and other products such as facts sheets, or information cards that describe CENTCOM country, area or basecamp-specific health threats/medical risks and associated countermeasures. Coordinate with Service-specific public health activities/centers for assistance with products. See Appendix C for links to available resources.



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## Chapter 3 PROCEDURES

3-1. SCOPE. This regulation focuses on deployment health activities that are required during deployment operations. A summary of the procedures for the key required activities are described below. Additional details regarding the associated documents and reporting responsibilities are summarized in Appendix C. Detailed guidance is also provided in Appendices D (Risk Management), E (OEHSA), F (POEMS), G (D&I), H (RME), and I (OEH/CBRN Incident reporting).

3-2. PREDEPLOYMENT AND BASELINE DOCUMENTS. Deployment health activities are based on the pre-deployment and baseline health threat and risk assessment documents for the area or area of operations and the specific deployment location. These documents, and early site reconnaissance should be reviewed by incoming site PVNTMD personnel and updated as the deployment proceeds.

a. Pre deployment threat assessment information is documented in the IPB/MIPOE and Preliminary Health Assessments/Phase 1 reports.

b. OEHSAs, site reconnaissance, EBAs and EBSs, food and water vulnerability assessments and surveys are conducted to identify and assess actual or potential health threats, evaluate and identify completed exposure pathways, and determine courses of action and countermeasures to control or reduce the health threats and protect the health of deployed personnel. These documents, especially the OEHSA are critical baseline documents that establish a conceptual site model that identifies key hazards and populations. The OEHSAs for the CENTCOM AOR are the responsibility of and finalized under the authority of CJTF and Service Component designated FHP personnel. They may be drafted by USAPHC(P), USAFSAM, NMCPHC with assistance from Service preventive medicine assets/units in theater. The designated FHP personnel should use OEHSAs to direct and prioritize follow-on OEH activities such as routine sampling/monitoring, or focused sampling of a specific hazard or high risk areas, or to address significant information data gaps. Information based on follow-on and incident-driven monitoring and sampling and health risk assessments must be submitted to the DOD-approved system of record as described in Appendix C.

3-3. RISK COMMUNICATION PLANS AND TOOLS. It is critical that personnel be provided hazard and countermeasure information prior to deployment to an area, during the deployment, and also be made aware of information he/she can access post deployment regarding

potential site hazards/exposures. Information should be accurate, appropriate for the audience and cleared through appropriate technical and command channels to include Public Affairs if applicable. See Appendix D.

3-4. ROUTINE OEH MONITORING DOCUMENTS. OEH surveillance includes monitoring and assessment of air, water, soil, food, vectors, noise, heat/cold and other potential hazards/exposures that can affect the short or long term health of troops. Routine monitoring and many individual surveys and reports are necessary to comprise a complete and effective OEHS program. OEHS related documents will be sent by the completing unit IAW DoD guidance for archiving to the DOD-approved system of record as described in Appendix C.

#### 3-5. MEDICAL DATA DOCUMENTATION

a. D&I surveillance shall be collected, reported, distributed, and archived within the JMEWS and per Appendix G.

b. All deployment patient encounters, including those resulting from CBRN or OEH exposures must be documented in the electronic medical record (or alternatively on SF600 if the electronic system is not available) using on an SF600 (use applicable codes per Appendix H) using an appropriate diagnostic (ICD9) code.

c. RME that meet the requirements described in Appendix H (which include CBRN OEH incidents) shall be collected, reported, distributed, and archived according to Appendices H and I of this regulation, as well as DOD and Service specific policies.

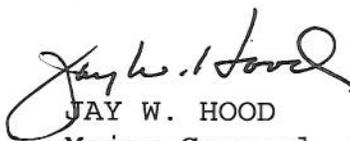
d. Once-Daily Location Tracking of Personnel. During deployments, a process will be in place to record once-daily individual service member locations per page 2-1, section 2-3. These data should be reported to DMDC.

Chapter 4  
PROPONENT PAGE

4-1. PROPONENT. The proponent for this regulation is the Command Surgeon (CCSG). Units are invited to submit comments and suggested improvements on DA Form 2028 (Recommended Changes to Publications and Blank Forms) directly to HQ USCENTCOM Attn: CCSG, 7115 SOUTH BOUNDARY BOULEVARD, MacDill AFB, FLORIDA 33621-5101.

FOR THE COMMANDER:

OFFICIAL:



JAY W. HOOD  
Major General, U.S. Army  
Chief of Staff

DONALD S. WALKER  
Lt Col, USAF  
Chief, Documents and Records  
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Appendix A  
REFERENCES

1. DODI 3020.37, "Continuation of Essential DoD Contractor Services During Crises, November 6, 1990 (Incorporating Change 1, January 26, 1996)
2. DODI 3020.41, Contractor Personnel Authorized to Accompany the US Armed Forces, October 3, 2005
3. MCM 0028-07, Procedures for Deployment Health Surveillance, 2 November 2007
4. DODI 6490.03, Deployment Health, 11 August 2006
5. DODI 6025.19, Individual Medical Readiness (IMR), 3 January 2006
6. Joint Pub 1-02, Department of Defense Dictionary of Military & Associated Terms, 12 Apr 02 (As amended through 12 October 2008)
7. MCM 0026-02, Chemical Warfare (CW) Agent Exposure Planning Guidance, 29 April 2002
8. DODD 6490.02E, Comprehensive Health Surveillance, certified current as of 23 April 2007
9. DODI 6055.05, Occupational and Environmental Health, 11 November 2008
10. DODD 8320.2, Data Sharing in Net-Centric Department of Defense, 2, December 2004
11. DODD 6200.04, Force Health Protection, certified current as of 9 October 2004
12. American Society for Testing and Materials (ASTM) International, E 2318-03 Standard Guide for Environmental Health Site Assessment Process for Military Deployments, December 2003
13. FM 3-11.19, Multiservice Tactics, Techniques, and Procedures for Nuclear, Biological, and Chemical Reconnaissance, 30 July 2004
14. Tri-Service Reportable Events Guidelines & Case Definitions, Armed Forces Health Surveillance Center (AFHSC), June 2009.
15. Assistant Secretary of Defense for Health Affairs, Policy

Memorandum - Implementation of the Post-Deployment Health Clinical Practice Guideline, April 2002

16. DODI 4150.07, DoD Pest Management Program, 29 May 2008
17. U.S. Army Center for Health Promotion and Preventive Medicine (USACHPPM) Technical Guide (TG) 188, US Army Food and Water Vulnerability Assessment Guide, July 2008
18. USACHPPM TG 195 Safety and Health Guidance for Mortuary Affairs Operations: Infectious Materials and CBRN Handling, July 2009
19. USACHPPM, TG 230, Chemical Exposure Guidelines for Deployed Military Personnel, Published May 2003 with Addendum January 2004
20. USACHPPM TG 244 Medical CBRN Battlebook, October 2008
21. USACHPPM TG 248, Guide for Deployed Preventive Medicine on Health Risk Assessment August 2001
22. USACHPPM TG 251, A Soldier's Guide of Environmental and Occupational Field Sampling for Military Deployment, (Under Revision by the Environmental Surveillance Integration Program)
23. USCENTCOM Regulation (CCR) 415.1, Construction and Base Camp Development in the USCENTCOM AOR -The Sand Book, 17 December 2007
24. Field Manual (FM) 3-100.12, Risk Management, February 2001
25. ASTM E2318 - 03 Standard Guide for Environmental Health Site Assessment Process for Military Deployments, 2003



Appendix B  
TERMS and DEFINITIONS

1. Health Risk - Potential for adverse health impact to an exposed population or individuals - the consequences associated with military actions and resources. The risk may be due to acute health effects or chronic long-term health effects. *See specific risk level definitions in Appendix E of this document.*

2. Health Risk Communication Plan - A specific plan that documents means of delivery and development of key messages on deployment health threats and risks (including actual and potential exposures), associated countermeasures, and any necessary medical follow-up for deployed personnel. The plan should document how OEHS data and IHA information will be used to develop appropriate written and oral materials to communicate deployment health risks. The plan should identify how health risk communications will be updated as new information about health risks becomes available.

3. Health Surveillance - The regular or repeated collection, analysis, and interpretation of health-related data and the dissemination of information to monitor the health of a population and to identify potential health risks, thereby enabling timely interventions to prevent, treat, reduce, or control disease and injury. It includes occupational and environmental health surveillance and medical surveillance subcomponents.

4. Health Threat - A composite of ongoing or potential enemy actions; adverse environmental, occupational, and geographic and meteorological conditions; endemic diseases; and employment of nuclear, biological, and chemical weapons (to include weapons of mass destruction) that have the potential to affect the short- or long-term health (including psychological impact) of personnel.

5. Industrial Hazard Assessments - Reports developed by the intelligence community (i.e., National Center for Medical Intelligence) that identify potential local industrial operations and the hazards normally associated with those operations.

6. Low Level Exposures - Low-level exposures are occupational and environmental health exposures that do not produce acute health effects of significant clinical or physiological impact and, thus, will not pose significant operational (mission) impact. This involves a range of exposures and points along a hazard's dose-response continuum to include a) potential for mild non-impairing, minimally noticeable reversible acute effects and, b) for certain hazards, some limited possibility of latent (post-deployment onset)

and/or non-clinical effects (reversible or non-reversible), and c) levels associated with no anticipated effects of any kind. Low-level exposures are generally assigned a negligible hazard severity.

7. Medical Surveillance - The ongoing, systematic collection, analysis, and interpretation of data derived from instances of medical care or medical evaluation, and the reporting of population-based information for characterizing and countering threats to a population's health, well-being, and performance.

8. Occupational and Environmental Health (OEH)/Exposure Incident - In general may be defined as an unexpected significant OEH (to include CBRN) exposure event that results in an acute illness or that has the potential to cause latent illness to those individuals affected or possibly exposed. However, *several variables, including perception and limited data confidence will factor into determination of whether an event is an 'incident'. See Appendix C of this document for more details.*

9. Occupational and Environmental Health Risks - The likelihood of health risks associated with-

a. The accidental or deliberate release of non-weaponized TICs/TIMs; hazardous physical agents; ionizing or nonionizing radiation; or residue from CBRNE.

b. Environmental contaminants, to include vector- and arthropod-borne threats, residues, or agents, naturally occurring or resulting from previous activities of U.S. forces or other concerns, such as non-U.S. military forces, local national governments, or local national agricultural, industrial, or commercial activities.

c. The TICs/TIMs or hazardous physical agents currently being generated as a by-product of the activities of U.S. forces or other concerns, such as non-U.S. military forces, local national governments, or local national agricultural, industrial, or commercial activities.

d. Endemic diseases, deployment related stress, and climatic and/or environmental extremes.

e. Noise induced hearing injury as a result of hazardous noise exposure.

10. Occupational and Environmental Health (OEH) Significant Exposure - Exposure to OEH hazard that will plausibly result in some clinically-relevant adverse health outcome to exposed individuals as determined by an appropriate medical/health professional. These include situations where specific OEH hazards are determined to:

a. Present a Moderate or higher level of operational risk based on quantified OEH data that indicate acute effects are anticipated;

b. Be plausibly and causally associated with actual observed (acute) clinical health outcomes that are reported and/or treated (e.g., complaints of headaches, dizziness, respiratory problems, ocular effects, nausea, seizures, etc) even in the absence of quantitative exposure data and/or an actual OEH risk assessment being performed);

c. Present a "Low Risk" because onset of associated health outcomes would occur post-deployment but where the confidence is High that such a latent long term (chronic) health impact has been strongly associated with exposures of similar magnitude and duration. For example:

(1) The use of facilities with substantial friable asbestos as the official (1-year) living/working quarters for a deployed unit may be a "Low risk" relative to the acute impacts to the mission. However, the asbestos exposure could be deemed significant if toxicological and or epidemiological scientific evidence supports High confidence exposures of similar magnitude and duration are strongly associated with the development of disease (e.g., asbestosis or mesothelioma).

(2) Most Low risk exposures associated with potential long-term chronic health effects will not be considered significant because available scientific data does not support extrapolation of the dose-response curve to low exposures with any degree of confidence in the predictive value.

11. Occupational and Environmental Health Site Assessment (OEHSAs) - Documents the OEH conditions found at a site (e.g., base camp, bivouac site or outpost, or other permanent or semi-permanent basing location). The assessment, done by Service preventive medicine personnel, includes site history; environmental health survey results for air, water, soil, and noise; entomological surveys; occupational and industrial hygiene surveys; and ionizing and non-ionizing radiation hazard surveys, if indicated. Its

purpose is to identify hazardous exposure agents with complete or potentially complete exposure pathways that may affect the current or future health of deployed personnel (Appendix E).

12. Occupational and Environmental Health Surveillance - The regular or repeated collection, analysis, archiving, interpretation, and dissemination of OEH-related data for monitoring the health of, or potential health hazard impact on, a population and individual personnel, and for intervening in a timely manner to prevent, treat, or control the occurrence of disease or injury when determined necessary.

13. Occupational and Environmental Health Threat - Threats to the health of military personnel and to military readiness created by exposure to hazardous agents, environmental contamination, or toxic industrial materials.

14. Periodic Occupational and Environmental Monitoring Summary (POEMS) - A POEMS is a document that summarizes the DoD medical interpretation of existing occupational and environmental health (OEH) exposure information/data for deployment sites (e.g. base camps). Specifically, a POEMS describe the types of exposure hazards identified at a site (e.g., airborne pollutants, water pollutants, infectious disease, noise, heat/cold), summarizes data/information collected about those hazards, and then provides an assessment of the significance of any known or anticipated potential acute (short term) and long-term (post deployment) health effects to the personnel population deployed to the site. The POEMS concludes with a summary of the key acute and chronic hazards/risks. If a specific recommendation for follow-up is indicated, this must be coordinated with a health care provider before inclusion to the POEMS (Appendix F).

15. Reportable Medical Event (RME)- An event that meets the following criteria. In addition, a reportable medical event may be defined by the supported combatant command or subordinate organization (e.g., JTF).

a. There must be a clear case definition and a single standard code (from the International Classification of Diseases, 9th revision).

b. An intervention must be available and/or a public health response indicated.

c. A sufficient, timely source of the required information must not already exist.

d. The condition/event must also meet one of the following criteria:

(1) It represents an inherent, significant threat to public health by having the potential to affect large numbers of people, to be widely transmitted within a population, or to have severe/life threatening clinical manifestations.

(2) It represents a significant military operational threat by having the potential to disrupt military training, deployment, or operations.

(3) It is commonly reportable by state or federal laws, regulations, or guidelines.

(4) Tri-Service Reportable Events Guidelines and Case Definitions are available at <http://afhsc.army.mil/> under "Policy/References" heading and then under "AFHSC" Heading.

(5) Is identified a CBRN incident related exposure or CENTCOM specified event of interest as described in Appendix H of this regulation.

16. Risk Communication - The timely process of adequately and accurately communicating the nature of actual and potential OEH hazards, risks (probability and severity), countermeasures, health outcomes, and other health-related information associated with pre-, during, and post-deployment operations to all personnel (especially commanders) and other individuals/groups directly affected by, or highly interested in, the health risks. Health risk communication efforts must be understandable and foster trust. They may involve multiple techniques and should allow for timely two-way communications between subject matter experts (medical personnel) and those individuals and groups who have concerns.

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Appendix C

SUMMARY OF DEPLOYMENT HEALTH ACTIVITIES AND REPORTING REQUIREMENTS

This Appendix summarizes the key deployment health activities and associated documents/products discussed in this regulation. It summarizes responsible parties and timelines for key deployment health activities and documents.

Table C-1. Summary of Key Deployment Health Surveillance Activities* (per DoDI 6490.03, Section E4.A2.1.)	
Activity Description	Key Applicable/Required Forms, Reports, Documents
Ensure that appropriate site OEH baseline documents are reviewed and/or completed and accurate; provide information through appropriate channels to update as appropriate*	<ul style="list-style-type: none"> <li>• Preliminary Hazard Assessment (PLHA)/Phase I Deployment OEH Site Assessment (MCM 0028-07)</li> <li>• Environmental Baseline Survey (EBS) (Environmental Baseline Survey Handbook)</li> <li>• Occupational Environmental Health Site Assessment (OEHSA) (See Appendix E)</li> </ul>
Implement health risk communication plans/conduct risk communication *	<ul style="list-style-type: none"> <li>• Country/site specific:                             <ul style="list-style-type: none"> <li>○ Medical Threat Briefings (MTB)</li> <li>○ Deployment Health Guides (DHG)</li> <li>○ Other factsheets/info cards</li> </ul> </li> </ul> <p>Sources:</p> <ul style="list-style-type: none"> <li>- <a href="http://usachppm.apgea.army.mil/HIO_DRES/">http://usachppm.apgea.army.mil/HIO_DRES/</a></li> <li>- See Appendix C</li> </ul>
Perform continuous health surveillance/monitoring activities to identify potential health hazards and detect trends in the health of deployed personnel or identify health conditions; ensure appropriate reports are created, updated, and submitted through appropriate channels for archiving *	<ul style="list-style-type: none"> <li>• Base Camp Assessments (periodic preventive medicine assessment of all facilities/services for a site)</li> <li>• D&amp;I reporting (see Appendix G)</li> <li>• Field Data Sheets for environmental sample collection (sampling conditions and parameters for air, soil, water samples intended for advanced laboratory analyses) (See Appendix C)</li> <li>• Deployment Occupational and Environmental Health Risk Characterization Assessment (documents/reports/analytical data and summaries resulting from advanced laboratory analyses) See Appendix C</li> <li>• PVNTMD Field Surveys/Assessments (e.g. field water, food, sanitation, facilities, etc.) (See Appendix C)</li> <li>• Pest Management Records (DD Form 1532-1) (DoDI 4150.07)</li> <li>• Industrial Hygiene Surveys (AR 40-5)</li> <li>• Veterinary Service Reports and Data: food and bottled water sanitation audit reports; veterinary laboratory food, bottled water, and zoonotic disease test results; veterinary medicine zoonotic disease data (AR 40-905 )</li> <li>• Vector Surveillance Reports (e.g. adult/larvae monitoring surveys) See Appendix C</li> <li>• Other:                             <ul style="list-style-type: none"> <li>○ Preventive medicine unit and situation reports</li> <li>○ Occupational Noise Hazards</li> </ul> </li> <li>• Periodic Occupational and Environmental Monitoring Summary (POEMS) (See Appendix F)</li> </ul>
Record and report once-daily locations of all deployed personnel.	<ul style="list-style-type: none"> <li>• DMDC/DTAS</li> </ul>

Table C-2  
Coordinating Elements for Deployment Health Surveillance Activities

Activity Description*	Activity Responsibilities										
	CENTCOM Commander	CENTCOM Deputy Commander	CENTCOM J1	CENTCOM J2	CENTCOM J3	CENTCOM J4	CENTCOM J5	CENTCOM J6	CENTCOM Command Surgeon	CENTCOM Service Component & JTF Commanders & Directors of Separate Operating	CJTF & Service Component Command Surgeons
Activity 1 - Ensure that appropriate site OEH baseline documents are completed and accurate; provide information through appropriate channels to update as appropriate.*				X	X	X			X	X	X
Activity 2 - Implement health risk communication plans/conduct risk communication.*	X				X				X	X	X
Activity 3 - Perform continuous health surveillance / monitoring activities to identify potential health hazards and detect trends in the health of deployed personnel or identify health conditions; ensure appropriate reports are created, updated, and submitted through appropriate channels for archiving.	X	X	X	X	X	X			X	X	X
Activity 4 - Record and report once-daily locations of all deployed personnel.		X	X		X						
Activity 5 - Investigate, report and document all OEH and CBRN exposure incidents.*	X		X		X				X	X	X
Activity 6 - Document patient encounters on the SF 600. Include documentation of any specified OEH/CBRN related exposures and use specified ICD-9 codes; file in the deployment health record (DD Form 2766) or equivalent.	X		X		X				X	X	X

Table C-3  
Responsibilities for Key Deployment Health Surveillance Report/Documents

A c t i v i t y	Key Applicable / Required Forms, Reports, Documents*	Documentation Responsibilities										
		Component & JTF Combat Units	Component & JTF Combat Support Units	Component & JTF Combat Service Support Units	Health Surveillance Centers / Reachback Units	Component & JTF Medical Units/Elements	Component & JTF Engineer Units	Component & JTF Preventive/Veter inarian Medicine	CENTCOM Surgeon/FHP	CENTCOM Command Staff (J1, J2, J3, J4, J5, J6)	Component & JTF Surgeon/FHP Offices	CJTF & Service Component Command Staff
A c t i v i t y  1	Annex Q	UI	UI	UI	UE			UE	UE D	CPAU E	UE D	CPA UE
	Preliminary Hazard Assessment (PLHA)/Phase I Deployment OEH Site Assessment	UI	UI	UI	CPAUE	UI		UE	UE D	EI	UE D	E
	Environmental Baseline Survey (EBS)				ES		CP A U E	UE	ED	E	ED	E
	Occupational and Environmental Health Site Assessment (OEHS)	I	I	U	CPAUE S			CPAUE	ED	E	ED	E
A c t i v i t y  2	Country/site specific: Medical Threat Briefings (MTB)	UI	UI	UI	P	UI	U	PU	ED	U	ED	U
	Country/site specific: Deployment Health Guides (DHG)	UI	UI	UI	P	U	U	PU	ED	U	ED	U
	Country/site specific: Other factsheets/info cards	UI	UI	UI	P	U	U	PU	ED	U	ED	U
A c t i v i t y  3	D&I reporting				E	PS		PSUE	ED		ED	
	Field Data Sheets for environmental sample collection (sampling conditions and parameters for air, soil, water samples intended for advanced laboratory analyses)				ES			CPAUE	ED		ED	
	Deployment Occupational and Environmental Health Risk Characterization Assessments (documents/reports/analytical data and summaries resulting from advanced laboratory analyses)	I	I	I	PES	UDI		CUDI	ED		ED	
	PVNTMD Field Surveys/Assessments (e.g. field water, food, sanitation, facilities, etc.)	I	I	I	ES	UDI		CPAUES DI	ED		ED	
	Pest Management Records	PA	PA	PA	ES			CPAUES	ED		ED	
	Industrial Hygiene Surveys (e.g., chemical, noise, etc)	I	I	I	CPAUE S			CPAUES DI	ED		ED	

Table C-3  
Responsibilities for Key Deployment Health Surveillance Report/Documents

A c t i v i t y	Key Applicable / Required Forms, Reports, Documents*	Documentation Responsibilities										
		Component & JTF Combat Units	Component & JTF Combat Support Units	Component & JTF Combat Service Support Units	Health Surveillance Centers / Reachback Units	Component & JTF Medical Units/Elements	Component & JTF Engineer Units	Component & JTF Preventive/Veter inarian Medicine	CENTCOM Surgeon/FHP	CENTCOM Command Staff (J1, J2, J3, J4, J5, J6)	Component & JTF Surgeon/FHP Officers	CJTF & Service Component Command Staff
	Veterinary service reports and data: food and bottled water sanitation audit reports; veterinary laboratory food, bottled water, and zoonotic disease test results; veterinary medicine zoonotic disease data	I	I	I	ES			CPAUES DI	ED		ED	
	Vector Surveillance Reports	I	I	I	ES			CPAUES DI	ED		ED	
	Other: Preventive medicine unit and situation reports	UI	UI	UI	ES			CPAUES	ED		ED	
	Periodic Occupational and Environmental Monitoring Summaries (POEMS) <sup>#</sup>	UI	UI	UI	CPAUES			CPAUES	ED		ED	
A c t i v i t y 4	Location Report	CPA	CP A	CP A	UES				U		U	
A c t i v i t y 5	Reportable Medical Event (RME)	CPA UE	CPA UE	CPA UE	UES	CPAU E		E	ED	UE	ED	UE
	Significant Action Report (SIGACTS) (e.g. CIDNE/TIGR) and associated reports related to incident exposures	CPS	CP S	CP S	UES	U		E	AE D	UE	AE D	UE
	NBC reports (e.g. EOD reports)	CPS	CP S	CP S	UES				AE D	UE	AE D	UE
	• Basic Exposure Evaluation Form (BEEF)	PS	PS	PS	UES	PUE		CPAUES	AE D	UE	AE D	UE
	• Health Incident Technical Summary (HITS)	PS	PS	PS	UES	PUE		CPAUES	AE D	UE	AE D	UE
A c t	• SF 600					PA						

Table C-3  
Responsibilities for Key Deployment Health Surveillance Report/Documents

A c t i v i t y	Key Applicable / Required Forms, Reports, Documents*	Documentation Responsibilities											
		Component & JTF Combat Units	Component & JTF Combat Support Units	Component & JTF Combat Service Support Units	Health Surveillance Centers / Reachback Units	Component & JTF Medical Units/Elements	Component & JTF Engineer Units	Component & JTF Preventive/Veterinarian Medicine	CENTCOM Surgeon/FHP	CENTCOM Command Staff (J1, J2, J3, J4, J5, J6)	Component & JTF Surgeon/FHP Officer	JTF & Service Component Command Staff	
i v i t y 6	• DD Form 2766					PA							

Source: DoDI 6490.03, Section E4.A2.1

\* Required for all >30 day deployments; for <30 day deployments the asterisked\* activities are not required though recommended if feasible (Commander determined)

! Veterinary Medicine Units

# POEMS are approved by CENTCOM Command Surgeon/FHP Officer or designated Component/JTF Surgeon/FHP Officer

NOTE: Reports will usually go through the respective organizational chain of command  
Specific Action Legend

C - Coordinate

P - Prepare Document

A - Submit to DOEHS Data Portal & Archival Repositories (For SF 600 & DD 2766 submit to Individual Medical Record. For Location report submit to DTAS & DMDC)

S - Submit to FHP Officer/Command Surgeon

U - Use/Take Action

E - Evaluation of trends, Follow-up of issues, Determine if recommendations implemented, Recommend appropriate countermeasures, etc.

D - Develop appropriate policy/guidance if needed.

I - Implement Recommendations as appropriate

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## Appendix D

## MILITARY RISK MANAGEMENT PROCESS APPLIED TO HEALTH HAZARDS

## 1. Background

a. Commanders are responsible for protecting and preserving personnel and equipment against injury, damage, or loss that may impact the military mission and force readiness. Risk is an expression of the possible mission impacts (either tactical or strategic) that a hazard may have in terms of both the consequences of its occurrence (severity) and the probability effects may occur. The determination as to whether a risk is acceptable or not for military operations is an iterative process that requires evaluation of changing conditions and multiple kinds of hazards and risks. This is an *all-hazards* approach to risk management.

b. The process used to identify and control hazards across the full spectrum of military missions, functions, operations, and activities described in multiservice doctrine (*Operational Risk Management* - FM 3-100.12) as well as service specific doctrine (e.g., *Army's Composite Risk Management* - FM 5-19). The matrix shown in Table D-1 is the qualitative ranking tool described by military doctrine. Use of this standardized matrix is to characterize all types of risk facilitates comparison of different risks and supports balanced decision-making.

c. To determine a risk estimate, first, a hazard must be identified, then the hazard severity is assessed, then the hazard probability assessed. The Hazard severity and probability are converted into the specified risk estimate levels shown in the matrix shown in Table D-1.

HAZARD	HAZARD PROBABILITY
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SEVERITY	Frequent (A)	Likely (B)	Occasional (C)	Seldom (D)	Unlikely (E)
Catastrophic (I)	Extremely High	Extremely High	High	High	Moderate
Critical (II)	Extremely High	High	High	Moderate	Low
Marginal (III)	High	Moderate	Moderate	Low	Low
Negligible (IV)	Moderate	Low	Low	Low	Low

Table D-1 Military Risk Management Matrix (FM 3-100.12, FM 4-02, &amp; FM 5-19)

## 2. Using Military Risk Management to Estimate Health Risks from OEH Exposures

a. Current DoDI and Joint Staff policy requires this process to be used to estimate risks of both the acute and chronic health effects to military personnel that could occur from OEH exposures during deployments. Since the types of risks and impacts caused by acute health effects versus those of long term/chronic health effects are different (e.g. tactical relevance versus strategic life-cycle impact), OEH exposures must be evaluated as two separate types of risk - short-term (tactical) and long term (strategic/life-cycle). The general approach and definitions to be used to assess severity and probability of OEH health hazards IAW current DOD and Joint policy is described in following paragraphs.

b. The process of assessing and characterizing deployment-related risks from OEH exposures inherently involves significant data limitations, uncertainty, variability, and professional judgment. The guidance in this AR provides the general framework and definitions to be used by personnel who develop OEH risk estimates for deployed personnel. It is noted, however, that the application of this process requires certain assumptions and interpretations that go beyond those explicitly provided by existing policy or doctrine. Hazard specific assessment tools (such as USACHPPM's Technical Guide 230, *Chemical Exposure Guidelines for Deployed Military Personnel*, should be used to specifically assess unique hazard types. Such guidance is used to with the site-specific exposure information, sampling and field data to develop risk estimates for those specific types of hazards.

## 3. Identifying the OEH Hazard

a. A deployment-related OEH hazard exists when a substance/material is present at a level and in a form that might be associated with either an acute and/or a chronic adverse health outcome in an exposed population.

b. It is noted that the mere presence or detection of a substance/material does not mean it is an OEH hazard. A substance/material is only considered a potential problem if it is determined to be present in a form/in media to which personnel could plausibly be exposed for adequate periods of time at concentrations that could be associated with either acute or chronic health effects. Hazard specific guidance tools should be consulted to help determine whether a specific OEH hazard exists.

#### 4. Assessing and Ranking OEH Hazard Severity

a. The Hazard Severity of any given deployment-related OEH exposure refers to the extent and severity of potential acute and/or chronic (long-term/latent) injury, illness, disease, or other adverse health effects within the population under assumed exposure conditions.

b. The extent and the severity of effects are presented in terms of significance to military operations and anticipated medical response needs. The significance of the potential health outcomes are ranked differently for tactical versus strategic hazards. Current military policy as articulated by the Office of the Chairman of The Joint Chiefs of Staff (MCM 2007) now provides distinct and separate health-based hazard severity level definitions for acute and chronic (long-term/latent) health effects. While the severity categories (e.g., Catastrophic, Critical, Marginal, and Negligible) correspond to the four hazard severity levels established by the doctrinal risk matrix in Table D-1, the Joint policy definitions provide the interpretations of these levels as they specifically apply to acute and chronic (long-term) health effects. The policy definitions from the Joint Staff memorandum (MCM 2007) are presented in Table D-2. The difference between "acute" and "chronic" health effects as it pertains to the military risk assessment process is described below:

5. Acute Health Effects. These are health effects that develop immediately or shortly after an exposure. Generally speaking, acute/short term *effects* occur after single relatively brief or short term *exposures* (minutes to days). Acute health effects can degrade personnel ability to conduct real-time deployment required mission tasks and thus have direct/real-time (tactical) consequences to military operations and force readiness. Overall consequences to be considered include direct impacts on soldier/unit capability as well as any associated impacts on medical or preventive medicine resources required to address the health effects during the specific deployment operation. This is essentially 'traditional' military risk management.

6. Chronic (Long-Term/Latent) Health Effects. These are health effects that develop post-deployment (e.g. months or years later). Chronic, long-term, or latent health effects are generally associated with continuous or repeated chronic or long-term exposures (e.g. many months or more). However, it is also possible for certain single, short-term exposures to result in a latent health effect (e.g., permanent damage to lung tissue leading to long term respiratory disease). Chronic health effects can have strategic life-cycle consequences for military operations and force readiness. The full force readiness 'life cycle' includes personnel accession through retirement or separation and beyond. Impacts to overall DoD resources and readiness are inherently tied to medical documentation, surveillance, and potentially the follow-up of personnel if at risk of long-term illness associated with exposures encountered during deployments. While such effects do not have tactical impact, in accordance with the current policy, Commanders must consider these future medical risks during operational as well as strategic decision-making.

<b>Negligible Severity</b>	<b>Marginal Severity</b>	<b>Critical Severity</b>	<b>Catastrophic Severity</b>
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<p><b><u>Acute Effects</u></b> Few exposed personnel (if any) are expected to have noticeable health effects during mission. Exposed personnel are expected to be able to effectively perform all critical tasks during mission operations. Minimal to no degradation of abilities to conduct complex tasks are expected.</p>	<p><b><u>Acute Effects</u></b> Many exposed persons are expected to have noticeable but not incapacitating health effects. Observable effects require minimal if any medical attention but may reduce some individual physical capabilities and/or may enhance stress-related casualties. Exposed personnel able to perform most critical tasks. Note: Ability to accomplish complex tasks may be degraded.</p>	<p><b><u>Acute Effects</u></b> Personnel are expected to have incapacitating health effects that require immediate medical treatment or support (e.g., are considered 'casualties'.) There may be limited numbers of fatalities. Personnel not experiencing these more serious effects are expected to have at least noticeable, but not incapacitating health effects. Exposed personnel will have limited ability to perform most critical tasks. Note: Ability to accomplish complex tasks likely to be degraded.</p>	<p><b><u>Acute Effects</u></b> Casualties with severe incapacitating effects requiring immediate and significant medical attention and/or additional support for survival. Increasing number of fatalities are expected. Exposed personnel unable to perform critical tasks.</p>
and/or	and/or	and/or	not a driver
<p><b><u>Chronic Effects</u></b> Few exposed personnel (if any) are expected to develop delayed onset, irreversible effects</p>	<p><b><u>Chronic Effects</u></b> Many exposed personnel are plausibly expected to develop delayed onset, irreversible effects. While this may not affect the immediate physiological capabilities of individuals, commanders must consider long-term implications and appropriately communicate the potential risks. Operational stress related implications may adversely impact operations particularly over extended operational periods.</p>	<p><b><u>Chronic Effects</u></b> Majority to all exposed personnel are plausibly expected to develop delayed onset, irreversible effects due to the specified exposure. While this may not affect the immediate physiological capabilities of individuals, commanders must consider long-term implications and appropriately communicate the potential risks. Psychological implications may adversely impact operations particularly over extended operational periods.</p>	<p><b><u>Chronic Effects</u></b> This level of hazard severity is reserved for the most serious of conditions where immediate survivability against acute effects is the priority. Those that survive may be at increased risk for certain chronic effects.</p>

Table D-2, Health Effects Descriptions for Each Hazard Severity Category (MCM 2007)\*

This matrix applies to all health hazards encountered during deployment. Health effects associated with chemical exposures are typically either acute or chronic, but in some cases may be both. In general, short-term one-time chemical exposures are primarily associated with acute effects, while repeated long-term exposures are associated with chronic effects.

\* Format modified from MCM version for ease of presentation, to include the elimination of the 'no effects' category.

## 7. Assessing and Ranking OEH Hazard Probability

a. The Hazard Probability of an identified OEH hazard represents the likelihood that the population exposure will result in the hazard severity outcome.

b. Thus, OEH hazard probability is generally ranked after hazard severity is ranked. There are five doctrinal levels of hazard probability. Definitions applicable to OEH hazard assessment are described in Table D-3. Determination of the probability level is based on a variety of exposure factor considerations - to include frequency, duration, and rate of exposure as well as degree or extent of population exposed.

Rank	OEH HAZARD PROBABILITY DEFINITION
<b>Frequent</b>	Personnel will continuously experience exposures that are greater than that required to produce the health effect outcomes associated with the hazard severity level.
<b>Likely</b>	Personnel will commonly experience exposures that are greater than that required to produce the health effect outcomes associated with the hazard severity level.
<b>Occasional</b>	Personnel will occasionally experience exposures that are greater than that required to produce the health effect outcomes associated with the hazard severity level.
<b>Seldom</b>	Personnel will rarely experience exposures that are greater than that required to produce the health effect outcomes associated with the hazard severity level.
<b>Unlikely</b>	Personnel are unlikely to experience any exposures that are greater than that required to produce the health effect outcomes associated with the hazard severity level.

Table D-3 OEH Hazard Probability Definitions\*

\* Derived from FM 4-02, MCM Memorandum 0028-07 (MCM 2007), FM 3-100.12

8. Estimating the OEH Risk. As previously indicated, the previously described steps are used to determine two different kinds of risk: risk of acute health effects (tactical or short-term risk) and then risk of chronic health effects (strategic/life-cycle long-term risks). Specifically, the acute and chronic hazard severity levels and probability ranks are compared with the risk matrix (Table D-1) to determine a risk level. The risk levels have specific definitions depending on type of health effects (e.g., tactical risks and strategic lifecycle risks). These are explained below.

9. Tactical risk associated with acute health effects from OEH hazards. Acute health effects may result in tactical risk to ongoing mission and thus are described as a short-term health or medical risk. Current doctrinal risk definitions are presented in Table D-4 along with the possible types/degree of real-time (in-theater) medical risk management responses that may be anticipated

(in italics). In addition to the medical resources needed to treat and document acute effects, certain exposures that result in acute health effects may also be associated with effects that require post-deployment medical surveillance/follow-up. The potential for any post-deployment medical follow-up and surveillance should be addressed as part of the long-term health risk estimate as discussed below.

10. Strategic/lifecycle risk associated with chronic health effects from OEH hazards. Strategic risk estimates reflect long-term medical risks to Force Readiness and are described in terms of the degree of impact to the medical support system following deployment. Risk definitions are presented in Table D-5 below along with possible risk management responses for preventive medicine and medical assets (in italics). While the risk/consequences represented are less oriented on treatment/countermeasures than those associated with acute health risks, they can reflect significantly broad long-term resource responsibilities to the military medical system and overall force readiness.

Risk Level	Consequences to Military Operations and Force Readiness <sup>1, 2, 3, 4</sup>
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Extremely High	Loss of ability to accomplish the mission if hazards occur during mission. <i>Notable in-theater medical countermeasures and resources anticipated. For example, protection, treatment, and exposure documentation.</i>
High	Significant degradation of mission capabilities in terms of the required mission standard, inability to accomplish all parts of the mission, or inability to complete the mission to standard if hazards occur during the mission. <i>Some in-theater medical countermeasures and resources anticipated. For example, protection, treatment, and exposure documentation.</i>
Moderate	Expected degraded mission capabilities in terms of the required mission standard and will result in reduced mission capability if hazards occur during the mission. <i>Limited in-theater medical countermeasures and resources anticipated. For example, protection, treatment, and exposure documentation.</i>
Low	Expected losses have little or no impact on accomplishing the mission. <i>Little to no in-theater medical resources anticipated for protection and treatment. However, a summary of any negative or low level sampling results should be documented and archived particularly if some personnel express concerns.</i>

Table D-4 OEH Tactical Risk Definitions and Possible Medical Responses Associated with Real-Time or "Acute" Health Effects

<sup>1</sup> The italicized phrases are not part of the doctrinal definitions (FM 3-100.12) but are the types of anticipated medical and preventive medicine responses associated with the expected health outcomes associated with these risk levels.

<sup>2</sup> In addition to the medical resources needed to treat and document acute effects, certain exposures that result in acute health effects may also be associated with effects that require post-deployment medical surveillance/follow-up. The potential for any post-deployment medical follow-up and surveillance should be addressed as part of the "chronic" risk estimate

<sup>3</sup> For certain OEH exposures the risk outcomes may be especially pronounced in certain individuals who have underlying traits or behaviors that make the more susceptible to developing effects. For example, moderate risk exposures to the chemical sulfur dioxide may be very irritating to most personnel and cause some mild impairment, but may significantly exacerbate the condition of asthmatics and require medical countermeasures. Individuals who smoke may also be more likely to demonstrate effects.

<sup>4</sup> Per DoDI 6490.03, exposure documentation includes any applicable medical treatment documentation (e.g. SF 600) as well as exposure data incident information (to include field data and incident descriptions). In addition to required in-theater reporting channels; documentation should be submitted through the designated DoD (OEHS Data Archive) [oehs@apg.amedd.army.mil](mailto:oehs@apg.amedd.army.mil) or secure e-mail: [oehsdata@usachppm.army.smil.mil](mailto:oehsdata@usachppm.army.smil.mil). Environmental exposure data archive data reports can be viewed through the DoD OEHS Data Portal: <https://doehsportal.apgea.army.mil/doehrs-oehs/>.

<b>Risk Level</b>	<b>Consequences to Military Operations and Force Readiness</b> <sup>1,2</sup>
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Extremely High	Significant future medical surveillance activities and medical provider resources anticipated. <i>Documentation of exposure data in designated DoD archive and designate a registry to actively track the exposed personnel. Conduct specific active surveillance and/or medical follow-up procedures for life-cycle of identified group.</i>
High	Notable future medical surveillance activities and related resources anticipated. <i>Documentation of exposure data in designated DoD archive. Specific identification and documentation of the exposed personnel. Possible passive medical surveillance related activities.</i>
Moderate	Limited future medical surveillance activities and related resources anticipated. <i>Documentation of exposure data in designated DoD archive. Consider documenting exposed groups or personnel of surveillance interest.</i>
Low	No specific medical action required. <i>Documentation of exposure in designated DoD archive.</i>

Table D-5 OEH Strategic (Lifecycle) Risk Definitions and Medical Responses Associated with Post-Deployment "Chronic" Health Effects

<sup>1</sup> The definitions reflect the objectives of current DoD and Joint Staff policies and requirements. The italicized phrases are the types of anticipated medical and preventive medicine responses associated with the expected health outcomes associated with these risk levels.

<sup>2</sup> Per DoDI 6490.03, exposure data should be submitted through the designated DoD (OEHS Data Archive) [oehs@apg.amedd.army.mil](mailto:oehs@apg.amedd.army.mil) or secure e-mail: [oehsdata@usachppm.army.smil.mil](mailto:oehsdata@usachppm.army.smil.mil). Environmental exposure data archive data reports can be viewed through the DoD OEHS Data Portal: <https://doehsportal.apgea.army.mil/doehrs-oehs/>.

## 11. Estimating Degree of Confidence in the OEH Risk Estimate

a. The best decisions are made based on obtaining the best data, and considering the uncertainties associated with that data. Data quality, including both sampling data and information that informs exposure parameters, will have a direct impact on the confidence in the risk assessment.

b. Some considerations in determining the confidence in the assigned risk are presented below. While some guidelines are presented, there is no "standard" definitions level of confidence. The risk assessor should consider all the information at hand, and should communicate to the decision maker, the level of confidence they have in the risk level being presented. Indicators of confidence are given in Table D-6.

(1) High Confidence. High confidence in a risk level implies significant understanding of all the variables used to determine the risk. It results from sampling data that is adequate to characterize typical exposures and the range of those types of exposures, as well as a good understanding of the exposure patterns of the population being characterized.

(2) Medium Confidence. Medium confidence in a risk level implies some understanding of most of the variables used to determine the risk. It results from sampling data that is plausibly adequate to characterize typical exposures and the range of those types of exposures.

(3) Low Confidence. Low confidence is assigned when sampling data may not be adequate to characterize the situation, and when the assessor is making a best scientific assessment in the absence of complete information.

Confidence	Criteria
High	<ul style="list-style-type: none"> <li>- Field Sampling data quality is very good - substantial samples over time/space.</li> <li>- Field activity patterns are well known.</li> <li>- True exposures are reasonably approximated.</li> <li>- No important missing information.</li> <li>- The predicted health outcomes are highly plausible (strong toxicological weight of evidence/human data) or already demonstrated.</li> </ul>
Medium	<ul style="list-style-type: none"> <li>- Field data quality is relatively good.</li> <li>- Estimates of field exposure are likely to be greater than true exposures due to incomplete data coverage relative to actual exposure durations.</li> <li>- Detailed information is lacking regarding true personnel activity patterns in the field.</li> <li>- Predicted health outcomes are plausible but there is toxicological data but limited weight of evidence/human data is lacking.</li> </ul>
Low	<ul style="list-style-type: none"> <li>- Important data gaps and/or inconsistencies exist.</li> <li>- Exposure conditions are not well defined.</li> <li>- Field personnel activity patterns are basically unknown.</li> <li>- Predicted health outcomes are not plausible because it is not consistent with real-world events/experience.</li> </ul>

Table D-6 Example Criteria for Assigning Confidence Levels

Appendix E  
OEHSA TEMPLATE AND INSTRUCTIONS

1. The OEHSA provides a comprehensive assessment of both occupational and environmental health hazards associated with a deployment location (e.g., permanent or semi-permanent basing location) and the activities and missions that occur there. The template can be found at the following web link: <http://chppm-www.apgea.army.mil/oeh/>.
2. OEHSA are to be initiated within 30 days of date of establishment and completed within 3 months for all permanent and semi-permanent base camps, whenever feasible and IAW procedures identified in ASTM E2318 - 03, Standard Guide for Environmental Health Site Assessment Process for Military Deployments (Reference 12). An OEHSA requires updating anytime there is a change in operations that may either have a negative or positive impact upon the occupational or environmental setting References 3 and 4.
3. OEHSA are conducted to validate actual or potential health threats, evaluate exposure pathways, and determine course of action and countermeasures to control or reduce the health threats and protect the health of deployed personnel.
4. OEHSA related documents will be sent by the completing unit through the designated CJTF PM/FHP officer for submittal and archiving to USAPHC(P) at one of the following email addresses:
  - SECURE EMAIL: oehs@usachppm.army.smil.mil,
  - NONSECURE EMAIL: oehs@amedd.army.mil.

**IMPORTANT NOTE: DO NOT DIGITALLY SIGN OR ENCRYPT E-MAIL MESSAGE SENT TO THE DOEHS DATA ARCHIVE. THESE TWO E-MAIL FEATURES INTERFERE WITH THE PROCESSING OF E-MAIL SUBMISSION. TO DISABLE THESE FEATURES IN MS OUTLOOK 07, CLICK THE 'SIGN' AND/OR 'ENCRYPT' BUTTONS ON YOUR OUTGOING MESSAGE RIBBON TOOLBAR. THE BUTTONS WILL APPEAR GRAYED ONCE THE FEATURES ARE DISABLED.**

5. Service Component Commands and JTFs are responsible for approving OEHSA completion and will submit a monthly OEHSA status report to the CENTCOM PM/FHP Officer. The metric for OEHSAs is: Percent of currently operational contingency operating bases and sites by country which have completed OEHSAs. This is calculated as:

$$\left[ \frac{\text{(Number currently operational contingency operating bases and sites with completed OEHSAs that have been submitted to DOEHS data portal)}}{\text{(Number currently operational contingency operating bases and sites)}} \right] \times 100\%$$

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## Appendix F

## PERIODIC OCCUPATIONAL AND ENVIRONMENTAL MONITORING SUMMARY (POEMS)

1. This appendix includes the official approved template for POEMS. An electronic blank template and guidance for POEMS can be found at: <http://chppm-www.apgea.army.mil/oeh/>.
2. The POEMS are the official DoD approved documents that summarize health risks and associated medical implications resulting from occupational and environmental health (OEH) exposures identified at major deployment sites (e.g. base-camps). Specifically, POEMS describe the types of exposure hazards (e.g., airborne pollutants, water pollutants, infectious disease, noise, heat/cold), summarize data/information collected, and provide an assessment of the significance of any known or potential short term (deployment during and long-term (post deployment) health risk to the personnel population deployed to the site.
3. The POEMS are developed to address the requirements of DoDI 6490.03 and 6055.05, and JCSCM (MCM) 0028-07, *Procedures for Deployment Health Surveillance*, 2007. The POEMS satisfies the requirement to prepare "periodic occupational and environmental monitoring summaries on an SF 600 for each permanent or semi-permanent basing location." POEMS are to be created and validated/updated for every major deployment site as soon as sufficient data is available, but no later than one year after occupation. In general, POEMS should reflect data and information collected from a year or more time at a site in order to adequately evaluate potential risks from long term exposures. POEMS should be reevaluated as data indicates exposure conditions have changes.
4. The CJTF or Component PM/FHP Officer is responsible for verification of certain information by designated field PVNTMD personnel and ensuring the POEMS in the AOR are completed and approved. However, requests may be submitted to specialized technical support (e.g. specialized deployable teams/units, USACHPPM, NMCPHC, USAFSAM) for drafting elements of the POEMS especially for description of long-term health risks.
5. The primary audience of the POEMS is military public health personnel and health care providers (military, VA, as well as private sector). As indicated, the intent of POEMS was to satisfy the need for such information to be available to providers should service personnel have OEH exposure-related concerns. The same information is also desired by the Active and Reserve Component members who are or have been deployed to these sites. Since service members are required to complete pre- and post- deployment

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questionnaires regarding their health status and any occupational or environmental exposures that they had while deployed, they will have access to the POEMS. POEMS will be unclassified but will be posted on the password protected Deployment Occupational and Environmental Health Surveillance Data Portal, located at <https://doehsportal.apgea.army.mil/doehrs-oehs/>

[COCOM/Designated Component/Approved (for CENTCOM (Surgeon)): POC xxxx, date-ref]

**Military Deployment      Last Updated**

**Periodic Occupational and Environmental Monitoring Summary (POEMS):**

**Name: [This is a blank template]**

**AUTHORITY:** This document has been developed in accordance with Department of Defense (DoD) Instructions 6490.03, and JCSM (MCM) 0028-07, *Procedures for Deployment Health Surveillance*, 2007.

**PURPOSE:** This POEMS documents the DoD assessment of base camp level occupational and environmental health (OEH) exposure data for [site name]. It presents the identified health risks and associated medical implications. The findings are based on information collected from [MO/YEAR through MO/YEAR] to include OEH sampling and monitoring data (e.g. air, water, and soil), field investigation and health assessment reports, as well as country and area-specific information on endemic diseases. While this assessment may reflect similar exposures and risks pertaining to historic or future conditions at this site, the underlying data is limited to the time period(s) and area(s) sampled and thus may not reflect fluctuations or unique occurrences. It also may not be fully representative of all the fluctuations during the timeframe. To the extent data allow, this summary describes the general ambient conditions at the site and characterizes the risks at the *population-level*. While useful to inform providers and others of potential health effects and associated medical implications, it does not represent an individual exposure profile. Actual individual exposures and specific resulting health effects depend on many variables and, should be addressed in individual medical records by providers as appropriate at the time of an evaluation of a unique exposure.

**SITE DESCRIPTION:** [brief summary of location/activities/population]

**SUMMARY:** The Table on the following page provides a list of identified health risks at [site name]. Summarized below are the key risks estimated to present a Moderate or greater risk of medical concern along with any recommended follow-on medical actions that providers should be aware. As indicated in the detailed Sections that follow the Table, controls that have been effectively established to reduce risk have been factored into this assessment. In some cases, e.g. ambient air, specific controls are not available/feasible.

**Short-term health risks & medical implications:** The following may have caused acute health effects in some personnel during deployment at [site name]:

[ ].

While for the most part any associated effects from the above should have resolved post-deployment, providers should be prepared to consider relationships to current complaints. Personnel who reported with symptoms or required treatment while at this site should have exposure/treatment noted in medical records/on SF600.

**Long-term health risks & medical implications:**

[ ].

Providers should still consider overall individual health status (e.g. any underlying conditions/susceptibilities) and potential unique individual exposures (such as occupational, or personal dosimeter data) when assessing individual concerns. Certain individuals may need to be evaluated for specific occupational exposures/injuries (e.g. annual audiograms for those enrolled in Hearing Conservation Program; and personnel covered by Respiratory Protection program and/or Hazardous Waste Medical Surveillance).

Where Do I Get More Information?			
If a provider feels that the Service member's or Veteran's current medical condition may be attributed to specific OEH exposures at this deployment location, he/she can contact the Service specific organization below. Organizations external to DoD should contact DoD Force Health Protection and Readiness (FHP & R).			
U.S. Army Center for Health Promotion and Preventive Medicine (USACHPPM) Phone: (800) 222-9698 <a href="http://chppm-www.apgea.army.mil">http://chppm-www.apgea.army.mil</a>	Navy and Marine Corps Public Health Center (NMCPHC) (formerly NEHC) Phone: (757) 953-0700 <a href="http://www-nehc.med.navy.mil">http://www-nehc.med.navy.mil</a>	US Air Force School of Aerospace Medicine (USAFSAM) (formerly AFIOH) Phone: (888) 232-3764 <a href="https://kx.afms.mil/esoh">https://kx.afms.mil/esoh</a>	DoD Force Health Protection and Readiness (FHP & R) Phone: (800) 497-6261 <a href="http://fhp.osd.mil">http://fhp.osd.mil</a>
OEH sampling data were obtained from Defense Occupational and Environmental Health Readiness System (DOEHRS) at <a href="https://doehrs-ih.csd.disa.mil/Doehrs/">https://doehrs-ih.csd.disa.mil/Doehrs/</a> . Additional environmental health reports/information from DoD OEHS Data Portal: <a href="https://doehsportal.apgea.army.mil/doehrs-oehs/">https://doehsportal.apgea.army.mil/doehrs-oehs/</a> . Endemic/infectious disease info from National Center for Medical Intelligence (NCMI): <a href="https://www.intelink.gov/ncmi/index.php">https://www.intelink.gov/ncmi/index.php</a>			

POEMS

Last Updated \_\_\_\_\_<sup>1, 2</sup>

Population-Based Health Risk Estimates-[Blank Template Example\*]<sup>1, 2</sup>

Sources of Identified Health* <sup>3</sup>	Health Risk Assessment Summary <sup>4</sup>	
	Short Term Health Risk	Long Term Health Risks
<b>AIR</b>	<b>Airborne Substances - Overall Short Term Risks:</b>	<b>Airborne Substances - Overall Long-Term Risks:</b>
Particulate matter (PM <sub>10</sub> )		
Particulate matter (PM <sub>2.5</sub> )		
Metals		
Chemical Pollutants		
<b>POTABLE WATER</b>	<b>Waterborne Substances - Overall Short Term Risks:</b>	<b>Waterborne Substances - Overall Long Term Risks:</b>
Used for Drinking		
Used for Other Purposes		
<b>MILITARY UNIQUE</b>	<b>Military Unique - Overall Short Term Risks:</b>	<b>Military Unique - Overall Long Term Risks:</b>
(e.g. CBRN; Depleted Uranium; Ionizing/Non ionizing radiation)		
<b>ENDEMIC DISEASE</b>	<b>Endemic Disease - Overall Short Term Risks:</b>	<b>Endemic Disease - Overall Long Term Risks</b>
Food borne/Waterborne (e.g. diarrhea)		
Arthropod Vector Borne		
Respiratory		
Water-Contact (e.g. wading)		
Animal Contact		
<b>VENOMOUS ANIMAL/INSECTS</b>	<b>Venomous Animals/Insects - Overall Short Term Risks:</b>	<b>Venomous Animals/Insects - Overall Long Term Risks:</b>
(snakes, spiders, etc)		
<b>HEAT/COLD STRESS</b>	<b>Heat/Cold - Overall Short Term Risks:</b>	<b>Heat/Cold - Overall Long Term Risks:</b>
Heat		
<b>NOISE</b>	<b>Noise - Overall Short Term Risks:</b>	<b>Noise - Overall Long Term Risks:</b>
Continuous		
Impulse		
<b>OTHER</b>	<b>Other - Overall Short Term Risks:</b>	<b>Other - Overall Long Term Risks:</b>
Pesticides		
Asbestos/Lead Paint		
<b>UNIQUE INCIDENT/CONCERNS</b>		

\*[The sub Categories of Health Risks listed are general examples and may be somewhat different per site]

<sup>1</sup> This Summary Table provides a qualitative estimate of population-based short- and long-term health risk s associated with the general ambient and occupational environment conditions at [site name]. It does not represent a unique individual exposure profile. Actual individual exposures and health effects depend on many variables. For example, while a chemical may be present in the environment, if a person does not inhale, ingest, or contact a specific dose of the chemical for adequate duration and frequency, then there may be no health risk. Alternatively, a person at a specific location may experience a unique exposure - such as [description of unique event at site] which has been reported at this sire - which could result in a significant individual exposure. Any such person seeking medical care should have their specific exposure documented in an SF600.

<sup>2</sup> This assessment is based on specific data and reports obtained from the [MO/YEAR through MO/YEAR] timeframe. It is considered a current representation of general site conditions but may not reflect certain fluctuations or unique exposure incidents. Acute health risk estimates are generally consistent with field-observed health effects.

<sup>3</sup> This Summary Table is organized by major categories of identified sources of health risk. It only lists those sub-categories specifically identified and addressed at [site name]. The health risks are presented as Low, Moderate, High or Extremely High for both acute and chronic health effects. The risk level is based on an assessment of both the potential severity of the health effects that could be caused and probability of the exposure that would produce such health effects. Details can be obtained from USACHPPM. Where applicable, "None Identified" is used when though an exposure was identified, no risk of either a specific acute or chronic health effects were determined. More detailed descriptions of OEH exposures that were evaluated but determined to pose no health risk are discussed in the following sections of this report.

<sup>4</sup> Risks in this Summary Table are based on quantitative surveillance thresholds (e.g. endemic disease rates; host/vector/pathogen surveillance) or screening levels (e.g. Military Exposure Guidelines (MEGs) for chemicals). Some previous assessment reports may provide slightly inconsistent risk estimates because quantitative criteria such as MEGs may have changed since the samples were originally evaluated and/or because this assessment makes use of all historic site data while previous reports may have only been based on a select few samples.

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## DISCUSSION OF HEALTH RISKS AT [SITE NAME] BY SOURCE

The following is a blank template that shows the general format of the various sections to be completed for a POEMS. Sections can be expanded to the extent necessary to capture relevant information.

The following Tables describe the major source categories of potential health risk that were evaluated at [site name]. For each category, the evaluation process includes identifying what, if any, specific sub-categories/health concerns are present. This initial step results in "screening out" certain sub-categories that pose no identifiable health risk (for example if all data is below screening levels). While these Tables identify sub-categories that have been determined to present no identifiable health risk, the Summary Table on the previous page only contains those sub-categories that were determined to pose some level of potential health risk.

<b>1. AIR</b>	
<b>Site-Specific SOURCES Identified (all those checked):</b>	
<input type="checkbox"/> Wind-blown Sand	<input type="checkbox"/> Commercial Industry
<input type="checkbox"/> Burn pits	<input type="checkbox"/> Agricultural
	<input type="checkbox"/> Other : vehicles
	<input type="checkbox"/> Not Determined
[include information regarding sources and completed exposure pathways]	
<b>Assessment of Data and Identified Risks</b>	
Particulate matter, 10 microns (PM <sub>10</sub> )  (see CHPPM 2008 PM factsheet; 64-009-0708 for more details)	Sample data/Notes: . _____
	Short term health risk: _____
	Long term health risk: _____
Particulate matter, 2.5 microns (PM <sub>2.5</sub> )  (see CHPPM 2008 PM factsheet; 64-009-0708 for more details)	Sample data/Notes: . _____
	Short Term health risk: _____
	Long Term health risk: _____
Metals	Sample data/Notes: _____
	Short and Long term health risk: _____
Chemical Pollutants (gases and vapors)	Sample data/Notes: _____
	Short and Long term health risk: _____

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<b>2. SOIL</b>		
<b>Site-Specific SOURCES of Contaminants Identified (all those checked):</b>		
<input type="checkbox"/> Waste Site/Burn pits	<input type="checkbox"/> Commercial Industry	<input type="checkbox"/> None
<input type="checkbox"/> Agricultural	<input type="checkbox"/> Other : vehicles	<input type="checkbox"/> Not Determined
<i>[include information regarding sources and completed exposure pathways]</i>		
<b>Assessment of Data and Identified Risks</b>		
<i>Analyses includes metals/inorganic as well as organics</i>	<b>Sample data/Notes:</b> _____	
	<b>Short and Long term health risk:</b> _____	

<b>3. POTABLE WATER*: Used for Drinking and Other Purposes</b> (Personal Hygiene, Cooking, Showering, etc)			
<b>Identified Water Supplies</b>			
<input type="checkbox"/> Bottled; Local procured	<input type="checkbox"/> Military Bottled/Packaged (unknown)	<input type="checkbox"/> ROWPU	<input type="checkbox"/> Municipal Sources
<p><b>*Perform separate risk assessments and include information on two tables (e.g. 3A and 3B) if there are distinct different water sources for "Drinking Water" and "Water for other Purposes (personal hygiene, cooking, etc)"</b></p> <p>Water must meet potable water standards per <i>TB Med 577</i>. Routine field tests conducted by _____ include bacteriological, CBRN, free available chlorine (FAC) and other sanitation surveillance parameters per <i>TB Med 577</i>.</p>			
<b>Assessment of Data and Identified Health Risks</b>			
<i>Analyses include metals/inorganics as well as organics</i>	<b>Sample data/Notes:</b> _____		
	<b>Short and Long term health risk:</b> _____		

<b>4. MILITARY UNIQUE</b>
<b>Chemical Biological, Radiological Nuclear (CBRN) Weapons:</b>
_____
<b>Short and Long term health risk:</b> _____
<b>Depleted Uranium (DU):</b>
_____
<b>Short and Long term health risk:</b> _____
<b>Ionizing Radiation</b>
<b>Short and Long term health risk:</b> _____
<b>Non-Ionizing Radiation</b> (example - possible include summary info regarding EMF/laser injuries that are to be submitted through specified repositories - see Instruction Sheet)
<b>Acute or chronic health risk:</b>

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<p><b>5. ENDEMIC DISEASE</b></p> <p>(based on NCM I [date ] (<a href="https://www.intelink.gov/ncmi/index.php">https://www.intelink.gov/ncmi/index.php</a>)</p> <p>NOTE: "Risk" level refers to both severity of disease (without controls) and probability of disease based on local rates/endemic status. Diseases described are those presenting greater risk when compared with US conditions. Most identified disease risks can and are being mitigated with military preventive medicine measures/policies.</p>
<b>Food borne and Waterborne Diseases</b>
Short and Long term health risk: _____
<b>Arthropod Vector-Borne Diseases</b>
Short and Long term health risk: _____
<b>Water Contact Diseases</b>
Acute or chronic health risk: _____
<b>Respiratory Diseases</b>
Short and Long term health risk: _____
<b>Animal- Contact Diseases</b>
Short and Long term health risk: _____

<p><b>6. VENEMOUS ANIMAL/INSECT</b></p> <p><b>Snakes, scorpions, and spiders</b></p> <p>Acute or chronic health risk. _____</p> <p><b>Other</b></p> <p>Acute or chronic health risk. _____</p>
--

<p><b>7. HEAT/COLD STRESS</b></p> <p><b>Heat</b></p> <p>Short and Long term health risk: _____. The risk of heat injury is _____ in unacclimatized personnel. Risk is reduced to _____ through preventive measures. Long term health implications from heat injury are rare but can occur - especially from more serious heat injuries such as heat stroke. It has also been considered possible that high heat in conjunction with various chemical exposures can increase long term health risks, though specific scientific evidence is not conclusive. The overall risk though _____ may be greater to certain susceptible persons - those older (&gt;45), in lesser physical shape, or with underlying medical/health conditions.</p> <p><b>Cold</b></p> <p>Short and Long term health risk: _____</p>
---

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<b>8. NOISE</b>
<b>Continuous:</b>
_____
Short and Long term health risk: _____
<b>Impulse:</b>
_____
Acute or chronic health risk: _____
<b>OVERALL RISKS, CONFIDENCE, CONTROLS, ADDITIONAL NOTES</b>
_____

<b>9. OTHER UNIQUE OCCUPATIONAL HAZARDS</b>
_____
_____
Short and Long term health risk: _____
_____
Acute and chronic health risks: _____

<b>10. UNIQUE EXPOSURE INCIDENTS/CONCERNS</b>
<b>[Event description - e.g., specific situation/condition resulting in specific real-time medical treatment/health assessment/risk communication actions]</b>
_____
Short and Long term health risk: _____

[COCOM/Designated Component/Approved (for CENTCOM (Surgeon)): POC xxxx, date-ref]

Appendix G  
DISEASE AND INJURY (D&I) SURVEILLANCE

1. Purpose and Processes for D&I surveillance

a. D&I (formerly known as disease and non-battle injury [DNBI]) surveillance, as required by Reference 3, can reveal abnormal patterns and trends that may signal a serious, widespread health problem that could negatively impact the mission. The causes of such health problems include environmental health threats, weakened hygiene and sanitation systems, lack (or inadequate use) of personal preventive measures or unhealthy personal behaviors, among others.

b. The purpose of D&I surveillance is to promote and maintain the health and fitness of deployed forces through monitoring illness and injury rates and instituting interventions as needed. Specific objectives include:

(1) Communicable disease outbreak detection.

(2) Sentinel event detection, primarily related to reportable medical events (Appendix H).

(3) Evaluating the effectiveness of systems to provide healthy food, clean water, safe sanitation and adequate shelter in the deployed environment.

c. D&I surveillance is based on information from healthcare visits at every level of the combat healthcare system. In locations where an electronic medical record is used, the bulk of information can flow automatically from the NIPRNET-based health information system to the Joint Medical Workstation (JMeWS), a SIPRNET-based application that facilitates monitoring of D&I trends throughout the AOR (<https://jmews.fhp.smil.mil>). JMeWS allows users to monitor trends over time and compare D&I rates across geographic and command levels in order to survey for potential problems.

(1) Sites without NIPRNET in their healthcare areas must maintain a spreadsheet containing the counts of their local healthcare visits IAW Reference 3.

(2) Sites without SIPRNET must transmit their weekly reports to the next higher medical activity or surgeon in their chain of command for entry into JMeWS. Every physically distinct medical activity (Role I through III), including those conducting split-base operations, must provide a report.

d. The weekly D&I report through JMeWS indicates the number of cases of disease or injury (as defined by Reference 3) along with the size of the population at that location.

(1) Populations in the battlespace often overlap. Medical activities should report, to the best of their abilities, the number of personnel directly eligible for primary healthcare at their location.

(2) At locations where there is a significant overlap in the population under care, medical personnel must coordinate to reduce the amount of "double-counting" of individuals.

e. Using JMeWS, FHP personnel aggregate weekly reports by UIC (or a similar location-specific code) in order to survey their specific AOR.

(1) It is the responsibility of FHP personnel using JMeWS to establish, maintain and hand-over D&I baseline rates for their location. This may entail maintaining legacy files (spreadsheets) with D&I data for the last 1-2 years. JMeWS does not currently support the archiving and reporting of baseline data. It is not necessary to maintain D&I data beyond 24 months.

(2) FHP personnel should develop methods for reporting D&I information to their surgeons and commanders. At a minimum, FHP personnel responsible for D&I surveillance must review and analyze D&I data on a weekly basis and BPT summarize the results of their latest analysis as needed.

(3) It is the responsibility of FHP personnel and surgeons to determine when the command should be notified immediately about a certain case or condition. Indicators of potential emergencies include (but are not limited to) communicability, severity of disease, a fatality or a condition that suggests a failure in the established public health system.

f. Commanders and surgeons should use the results of D&I surveillance for composite risk management, when evaluating the health and fitness of the force, and in determining the needs for (and allocation of) preventive medicine and force health protection resources.

## 2. Specific Procedures.

a. Reference 3 contains the latest requirements for conducting D&I surveillance. Additional procedures designed to enhance D&I surveillance in USCENTCOM are provided below.

b. Properly configure the JMeWS "Joining Report."

(1) The Joining Report establishes the data linkage between the NIPRNET health information system (MC4/AHLTA-T) and the SIPRNET JMeWS. Every unique medical activity, including those conducting split-base operations, must have a unique identifier, such as a version of their UIC. The medical activity identifier for MC4/AHLTA-T must exactly match the "UIC" in the JMeWS Joining Report.

(2) Medical activities must report their unique identifier (or changes) to their next higher surgeon and their local FHP personnel.

(3) Medical activities that are assuming responsibilities at a location where the health information system (computers, servers, etc) are not being redeployed should not attempt to submit a new Joining Report, but may change the description of their facility in the appropriate data field.

c. Ensure that reports conform to the established methods for counting cases. It is critical that D&I surveillance at all levels follows the established case definitions. FHP personnel and surgeons are responsible for distributing copies of the JSC memo throughout their AORs and conducting local training, as needed.

$$DNBI (\%) = \left( \frac{\# Patients}{\# Troops} \right) \times 100$$

$$DNBI_{derm} (\%) = \left( \frac{20}{500} \right) \times 100$$

$$DNBI_{derm} (\%) = (0.04) \times 100$$

$$DNBI_{derm} (\%) = 4\%$$

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Appendix H  
CENTCOM REPORTABLE MEDICAL EVENT (RME) DATA PROCEDURES

1. Purpose and Process for RME reporting.

a. RMEs are those diseases and conditions defined by Reference 14 that represent a special concern to the military leadership and public health authorities. Many are consistent with conditions that are reportable under US federal or individual state laws.

b. Medical providers at all levels are responsible for knowing the list of RMEs and informing FHP personnel of their occurrence within 24 hours of diagnosis and assisting in the necessary investigation. FHP personnel will coordinate the collection of detailed information as required by Reference 14 and are responsible for reporting cases through one of the Service-specific RME data systems.

(1) FHP personnel responsible for RME reporting must use available health information systems to discover the occurrence of events that have not been reported by a provider. Such resources include (but are not limited to) JMeWS, the Theater Medical Data System (TMDS), sick call logs or emergency room admission records. Such resources, where available, should be reviewed daily.

(2) FHP personnel will maintain a regional approach to ensure that all geographic and command AORs are covered for health surveillance and reporting of medical events. Where needed, FHP personnel will coordinate with each other to ensure coverage and reduce overlap. A RME should be officially reported only once.

c. Certain conditions may represent a significant threat to public health and may require further investigation as determined by FHP personnel and local surgeons. Reporting of cases should not be delayed by lack of confirmatory (definitive) laboratory testing or uncertain clinical criteria. In the deployed environment, rapid assessment and containment of communicable disease outbreaks is essential to maintaining force strength.

d. FHP personnel who lack direct access to one of the Service-specific RME data systems must record the necessary information on the available RME form and email or fax the report through their surgeon or higher FHP activity. The form is available at <http://chppm-www.apgea.army.mil/oe/>.

(1) FHP personnel may also send forms directly to a reporting site at a fixed MTF in CONUS or OCONUS, but must coordinate with that site to ensure that it is capable of handling

the additional workload. Such agreements must be approved by the Theater Surgeon.

(2) When external reporting sites are used, FHP personnel should maintain careful records regarding the transmission of RMEs in order to ensure that cases are not missed and properly updated when needed.

## 2. Specific procedures.

a. The Services maintain specific policies for the reporting of medical events, but all conform to the minimum requirements in Reference 14. For USCENTCOM, additional requirements and guidelines are provided as follows.

b. The CENTCOM Surgeon has identified the following additional medical conditions and exposures for reporting in the CENTCOM AOR.

(1) Chemical, Biological, Nuclear, and Radiological Exposure. If treatment is provided to personnel with effects from exposures to acutely toxic chemicals (warfare agents as well as commercial chemicals such as chlorine, ammonia, sulfur dioxide) or radiological exposures, these are considered CBRN/OEH exposure incidents that may require long-term medical surveillance and/or future epidemiologic/legal investigation. The CENTCOM FHP Officer is required to complete the CBRN/OEH incident technical summary reports (see Appendix I). To ensure complete incident documentation, individual medical treatment data is crucial. In these cases, the RME form should be completed with special attention to the section that requires a brief summary of the type of exposure. Because CBN incidents are not captured in all Service-specific RME systems, the RME form should be sent directly to the CENTCOM Surgeon/FHP Officer [ccsg-pmo@centcom.smil.mil](mailto:ccsg-pmo@centcom.smil.mil) within 48 hours of treatment. Treatment records should include the appropriate code from below:

- (a) 987 Toxic effects of other gases, fumes, vapors
- (b) 987.6 Chlorine gas
- (c) 987.8 Mustard gas
- (d) E996.1 Radiation in war operations

(2) Pneumonia, code by organism, to include 518.3 Eosinophilic pneumonia.

(3) Acinetobacter infections, coded as a bacterial infection specific to an anatomical site, along with antibiotic sensitivities if available and recent travel history.

(4) Death or injury from failure of helmet or body armor, coded using E991.0-E991.5 or E997.8 (injuries due to war operations).

(5) 993.0 Acoustic trauma (otitic barotrauma).

(6) Traumatic loss or damage to vision or eye, coded as 870.3-871.6 (penetrating injury) or 918.1-918.9 (non-penetrating injury. Note if eye protection was worn.

c. MTF laboratory personnel should promptly notify the requesting provider and supporting FHP personnel of any positive laboratory test that confirms or supports the diagnosis of a RME, specifically for infectious/communicable diseases.

d. FHP personnel and surgeons will periodically monitor and review non-emergency RME reports from their AOR for patterns indicative of a public health problem. Additional time and resources may be necessary in order to determine the need for a specific public health intervention.

e. FHP personnel, surgeons and reporting providers are responsible for proper completion of all required data elements. The "Country" field should be used to indicate the country in which the Service Members is deployed. Travel history (Country 1 and 2) should include any other country relevant to the condition, including CONUS (if the patient was recently on leave, for instance). Travel to more than 3 countries can be added to the comments field.

**CENTCOM REPORTABLE MEDICAL EVENT (RME) FORM**

(U) PATIENT DATA:

<b>Last Name</b>			<b>First Name</b>			
<b>Rank/Grade</b>			<b>Social Security Number</b>		<b>Gender (M/F)</b>	<b>Date of Birth (DDMMYY)</b>
<b>Unit</b>			<b>Unit UIC</b>			
<b>Unit Location (Base, Camp, etc)</b>			<b>Duty/Unit Phone</b>			
<b>Country</b>	<b>APO Zip Code</b>	<b>Category*</b>	<b>Race:</b>			
			<b>White</b>		<b>Asian</b>	
			<b>Black</b>		<b>Am. Indian</b>	
			<b>Hispanic</b>		<b>Other</b>	

(U) DISEASE DATA (complete as much as possible):

<b>Diagnosis Code*</b>		<b>Diagnosis Description</b>				<b>Onset of Symptoms (DDMMYY)</b>	
<b>Confirmed</b>		<b>Method of Confirmation</b>			<b>Admitted</b>		<b>Date of Admission (DDMMYY)</b>
	<b>YES</b>		<b>CLINICAL</b>		<b>BIOPSY</b>		<b>YES</b>
	<b>NO</b>		<b>CULTURE</b>		<b>SEROLOGY</b>		<b>NO</b>
	<b>PENDING</b>		<b>SLIDE</b>		<b>OTHER</b>		
<b>Pertinent Travel:</b>			<b>Yes</b>	<b>Country #1</b>			
			<b>No</b>	<b>Country #2</b>			
<b>Malaria Chemoprophylaxis:</b>			<b>Yes</b>	<b>Prophylaxis #1</b>			
			<b>No</b>	<b>Prophylaxis #2</b>			

(U) FOR HEAT OR COLD INJURIES:

<b>Ambient Temperature (°F)</b>			<b>WBGT</b>		<b>Previous Heat or Cold Injury</b>	<b>Yes</b>	
						<b>No</b>	
<b>Wind Speed (MPH)</b>			<b>Body Part or Organ System Affected:</b>		<b>Multi-system involvement:</b>	<b>Yes</b>	
<b>Rectal Temperature (°F)</b>						<b>No</b>	
<b>Uniform: ACU/Armor/ MOPP/PT</b>					<b>Water Consumption:</b>		

(U) FOR CBRN/OEH TIC/TIM EXPOSURE INCIDENTS:

<b>Provide to extent possible: Substance and/ source description and exposure route; Approximate duration, estimated degree of exposure; signs &amp; symptoms; treatment /other medical codes; disposition. EXAMPLE: (e.g. several minutes exposure to accidental release of vapor with ammonia-like odor from facility, coughing difficulty breathing (786.2); RTD.</b>

(U) REPORTING SOURCE:

<b>Healthcare Provider:</b>		<b>Preventive Medicine Officer (or person completing form)</b>	
<b>Medical Unit/MTF:</b>			
<b>Phone #</b>		<b>Place additional notes/comments on next page</b>	



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## Appendix I

## CBRN and OEH EXPOSURE INCIDENT DOCUMENTING AND REPORTING

## 1. PURPOSE

a. General: Current DoD and Joint Staff policies require documentation of exposure to CBRN or other OEH contaminants that result in a significant exposure to any deployed individual. This Appendix provides guidance as to what circumstance warrant this reporting and how it should be accomplished.

b. Information Requirements: The specific information that is required<sup>1, 2</sup> to be documented and archived includes:

- (1) Location, date, and time of incident
- (2) Unit rosters of all personnel involved (affected or possibly exposed)
- (3) Acute or known/anticipated latent health outcomes and any medical follow-up required
- (4) Documentation of personal protective equipment (PPE) or countermeasures used, effectiveness of and compliance with countermeasures, and any other exposure incident response activities
- (5) Results of environmental monitoring including hazard and exposure information (duration, frequency, field measurements and laboratory results)
- (6) Attachment or description of any health risk communication materials provided to health care providers, patients, or the population at risk

## 2. AUTHORITY

a. The process and documents described in this document meet deployment health reporting requirements<sup>1</sup> for capturing, consolidating and archiving exposure incident information for all OEH exposure incidents:

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<sup>1</sup> DoDI 6490.03, Deployment Health, 11 August 2006; DoDI 6055.05, Occupational and Environmental Health (OEH), 11 November 2008; Chairman of Joint Chiefs of Staff Memorandum (MCM) 0028-07, Procedures for Deployment Health Surveillance, 2 November 2007; FM 3.11.3, MTTP for CBRN Contamination Avoidance

### 3. BACKGROUND

a. General: OEH exposure incident reports are to be prepared for all exposure incidents and provided to medical channels in a timely and adequate manner.

b. Information Requirements: As described by the various responsibilities outlined by policy and regulation, timely and adequate data/information collection, transfer, and archiving of actual or potential OEH exposures is essential (and required) to address future investigation and or health surveillance of potential exposed personnel.

c. Command Support Necessity: Especially in situations involving non-routine or unexpected exposures, medical or preventive medicine components may not be immediately available to recognize or collect all the necessary information. Therefore, Commanders must ensure that all elements collect and transfer information appropriately.

### 4. PROCEDURES

a. General. To capture the required information, multiple entities have documentation responsibilities. Information is captured on the following forms which are discussed in this guidance. Figure I-1 depicts the various products

(1) Basic Exposure Evaluation Form (BEEF) (on site assessment) (see Appendix I - Annex A),

(2) CENTCOM Medical Reportable Medical Event (RME) documentation for CBRN/OEH Exposures (see Appendix H), and

(3) Health Incident Technical Summary (HITS) (preventive medicine assessment based on SIGACT, BEEF, RME documentation, risk communication products, and other documentation) (see Appendix I - Annex B)<sup>2</sup>. Ideally the HITS is to be prepared as an UNCLAS document as official incident assessment document for personnel and providers.

---

<sup>2</sup> All documentation is to be forwarded to the Deployment Occupational and Environmental Health Surveillance (DOEHS) Data Portal for analysis and archiving at <https://doehsportal.apgea.army.mil/doehrs-oehs>.

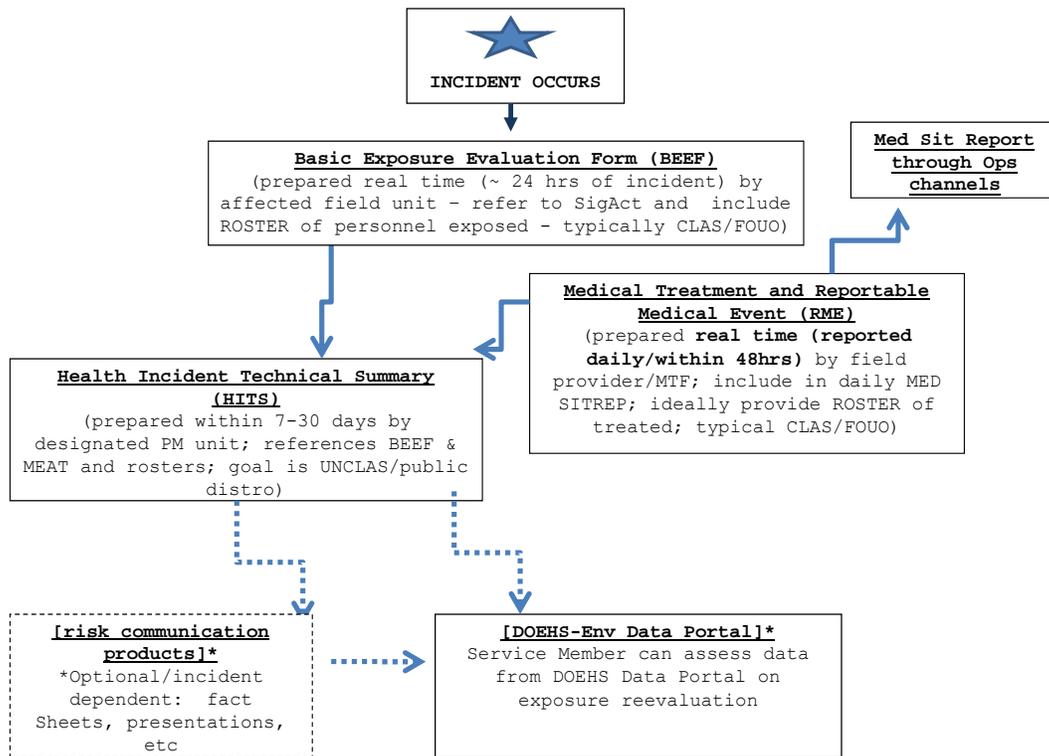


Figure I-1: OEH Incident Documentation and Reporting forms

b. Process Flow: Figure I-2 shows the process by which the various forms are completed along with the parties responsible for them. The procedures in the process include the following steps:

(1) Identify an incident and initiate the data collection and documentation process.

(a) This initializing step is the involved unit's responsibility. There may/may not be PM assets within the unit. It is the Commanders responsibility to ensure someone is assigned with completing the necessary documentation and forwarding it appropriately. The unit can accomplish this by completing the Basic Exposure Evaluation Form (BEEF) as described in Appendix I - Annex A.

(b) The BEEF must be transmitted within 24 hours of the incident to the Command Surgeon/FHP Officer.

(2) Document personnel treated for exposures.

(b) Medical support personnel/MTFs that receive and treat persons for an CBRN or OEH incident should document the exposure condition as a RME per the guidance and codes described in Appendix H of this regulation.

(c) Per Appendix H, for CBRN/acutely hazardous TICs/TIMs exposure incidents, a hardcopy RME report must be submitted to the Command Surgeon/FHP Officer within 72 hours of treating personnel and as part of the daily Medical SITREP reported through command reporting channels.

c. Consolidate, assess, and summarize overall incident information pertaining to personnel exposures and health effects.

(1) The Command Surgeon/FHP Officer will designate a PM Unit to review the BEEF, Medical SitRep/CBRN RME reports and other pertinent documents (NBC reports, Sig Acts, Field Sampling/data reports) to complete the Health Incident Technical Summary (HITS) report as described in Appendix I - Annex B.

(2) The PM Unit should coordinate /consult with Service SMEs (see below) to ensure proper risk assessment (especially for potential chronic/long term health impacts) and medical follow up is documented. The HITS report is the final field documentation of the incident and associated health outcomes. It should be completed within 7 days of an incident.

(3) The PM unit completing the HITS report must submit the report and accompanying documents to the Combined Joint Task Force (CJTF) Surgeon/FHP Officer (providing a copy back to the original requesting Command Surgeon).

Suggested reachback for service SME consultative assistance:

U.S. Army Center for Health Promotion and Preventive Medicine (USACHPPM) Phone: (800) 222-9698 <a href="http://chppm-www.apgea.army.mil">http://chppm-www.apgea.army.mil</a>	Navy and Marine Corps Public Health Center (NMCPHC) (formerly NEHC) Phone: (757) 953-0700 <a href="http://www-nehc.med.navy.mil">http://www-nehc.med.navy.mil</a>	US Air Force School of Aerospace Medicine (USAFSAM) Phone: (888) 232-3764 <a href="http://www.brooks.af.mil/units/airforceinstituteforoperationalhealth/index.asp">http://www.brooks.af.mil/units/airforceinstituteforoperationalhealth/index.asp</a>
--	---	---

d. Determine if follow-on investigation and/or health surveillance is warranted.

(1) The CJTF reviews the HITS and either approves and submits for final data archiving in DOEHS Data Portal and provides a copy to the CENTCOM Surgeon/FHP office.

(2) If the CJTF determines follow-on investigation and/or health surveillance is warranted, he/she requests additional technical SME evaluation/investigation through the CENTCOM Surgeon/FHP Officer who submits request to appropriate organization(s).

HITS and accompanying documents should be forwarded to the designated DOD OEHS data archive:	
<p><b>CLASSIFIED channels:</b>                      Secure e-mail:  <a href="mailto:oehsdata@usachppm.army.smil.mil">oehsdata@usachppm.army.smil.mil</a>                      Secure phone/FAX: DSN: 312.584.4244;                      COMM: 410.436.4244                      Unclassified Mail: USACHPPM; ATTN: MCHB-CS-OCF (OEHS Data Archive) 5158 Blackhawk Road, Building E1930; Aberdeen Proving Ground, MD 21010-5403</p>	<p><b>UNCLASSIFIED channels:</b>                      Unsecured e-mail: <a href="mailto:oehs@amedd.army.mil">oehs@amedd.army.mil</a>                      Unsecured phone: DSN: 312.584.4230 COMM: 410.436.4230                      Unclassified Mail: USACHPPM; ATTN: MCHB-TS-RDD; 5158 Blackhawk Road, Building E1675                      Aberdeen Proving Ground, MD 21010-5403</p>

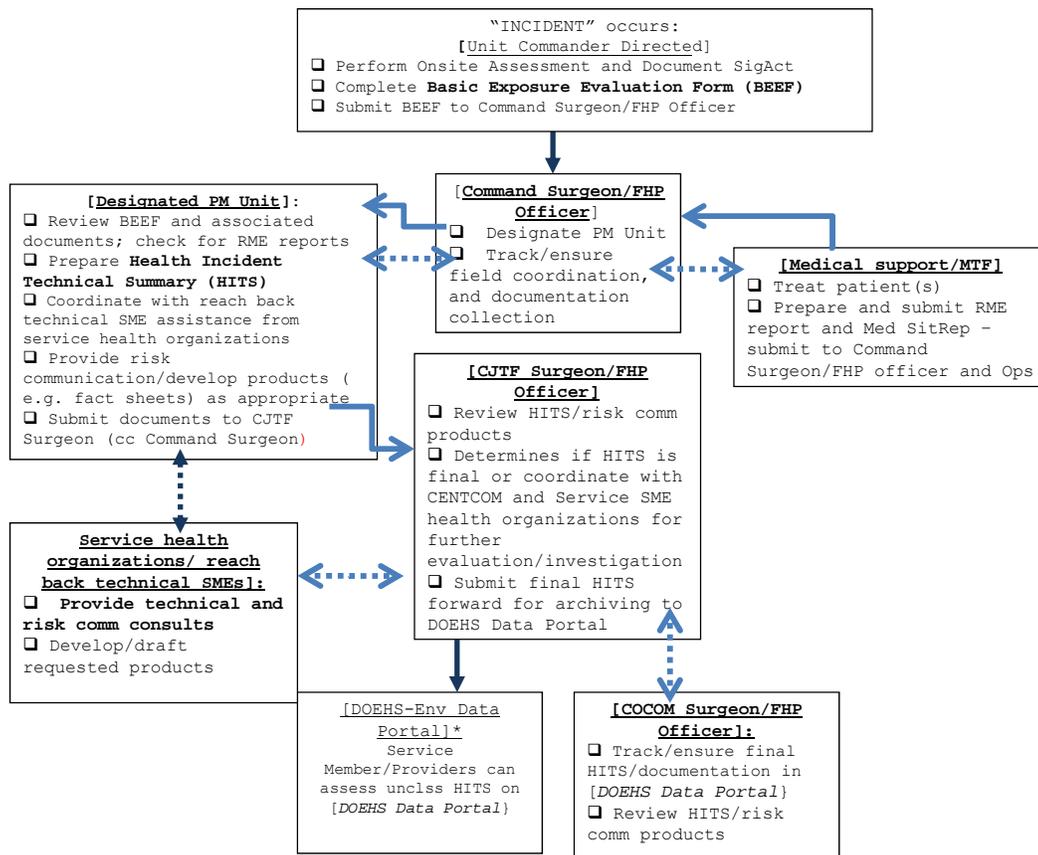


Figure I-2: CBRN and OEHS Incident Documentation and Reporting Process

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Appendix I - ANNEX A  
IDENTIFYING AN OEH/CBRN INCIDENT AND PREPARING THE BEEF

1. What is an OEH Exposure Incident? The determination that an OEH exposure is 'significant' enough to warrant reporting as an "incident" is somewhat subjective, but there are certain criteria that indicate a report should be prepared. The most obvious scenarios are those events that result in real-time health impacts that require medical countermeasures/treatment. However, even events for which there is no notable impact to human health or mission should be documented if something triggers a specific evaluation or investigation of the potential presence of a CBRN/OEH hazard. For these types of incidents, documentation of negative findings can be important to address future medical queries. It is essential that service members understand that it is to their own benefit to help ensure that potential exposure incidents are adequately documented in the event that they have future health concerns/claims that may be attributed to such exposures.

2. OEH Exposure Incident Considerations Checklist. Table I-A-1 provides a checklist of considerations that can be used to determine if an OEH incident warrants a SigAct and additional exposure documentation.

Since standard SigActs typically do not include all the required information for CBRN/OEH exposure incidents, a form called the Basic Exposure Evaluation Form (BEEF) is provided in this Annex to as a template to expand the information that may have been put in the SigAct. If a SigAct already contains all the required information, then a separate BEEF is not required; otherwise the BEEF should be completed and should just reference the SigAct#.

3. Command Emphasis. By completing the BEEF form in this Annex, you and your unit will allow Preventive Medicine specialists to properly investigate the exposure and work with medical personnel to ensure appropriate medical follow up and health surveillance is conducted. In addition, the information can provide valuable lessons learned that could help mitigate future health impacts from similar events. Complete the form as thoroughly as possible and submit to the Command Surgeon/FHP Officer within 24 hours of an incident.

Y/N	Indicator of potential OEH Exposure Incident → Initiate BEEF
	The presence of an OEH hazard is plausibly associated with

	actual observed (acute) clinical health outcomes that are reported and/or treated (e.g., complaints of headaches, dizziness, skin/eye irritation/burning, coughing, nausea, etc).
	The presence of an acute OEH hazard is indicated through positive detection using real-time field equipment. (e.g. M8/M256/ICAM detectors for chemical warfare agents)
	Evaluation of data/related information by an appropriate medical/health professional indicates that exposure to the OEH hazard could plausibly result in some significant (e.g., Moderate of higher risk level) clinically-relevant adverse health outcome (to include significant long term chronic effects*).
	Visual/sensory cues indicating potential presence of a OEH hazard (e.g., smoke/cloud, odors, strange liquid/powers, etc) are present

Table I-A-1. Checklist of Indicators to Initiate BEEF

An electronic version of the BEEF template can be found at the following web link: <http://chppm-www.apgea.army.mil/oeh/>.

CLASSIFICATION

BASIC EXPOSURE EVALUATION FORM (BEEF)

## CLASSIFICATION

## BASIC EXPOSURE EVALUATION FORM (BEEF)

I. GENERAL INCIDENT INFORMATION				
CCIR/SigAct #:				
WHO: (list key units involved /Activity/Operation)				
ATTACH Roster w/ SSNs of all persons exposed: > Note those requiring medical treatment on Roster along with disposition > If roster not provided, please explain/estimate overall number persons in unit exposed/presumed to be exposed) > If no full roster, provide list of personnel/SSNs who required medical treatment and their disposition _____				
WHAT: Brief Summary of Incident (What happened? What type of exposure hazard? Where did it come from? How long did it last?)  [Example: cylinder N INDUSTRIAL AREA exploded WHEN BY CONVOY WENT BY; A greenish yellow cloud was released and blew over TROOPS APPROXIMATELY 100 meters away . Lasted about 10 minutes. The soldiers experienced burning of exposed skin and eyes and several were coughing. 2 Individuals Required Treatment]				
WHERE: (GRID/GPS COORDINATES /COUNTRY CODES (CC) city/base,)				
WHEN: (TIME AND DURATION OF EXPOSURE AS DTG OR [XX00 HRS, MO/DAY/YEAR - XX00 HRS MO/DAY/YEAR])				
HOW: ( ) Attack ( ) Accidental Release ( ) Unknown  hazard type and source: ( ) chemical (specific type/category) ( ) radiation (source) ( ) unknown/other (specify)  exposure routes (how were personnel exposed) ( ) Airborne hazards ( ) Liquid/solid contact ( ) Ingestion (Food/water)				
Reported symptoms/complaints (document best estimate of # of personnel reporting/noted with signs symptoms; describe as many as apply and note any others observed):				
<u>Eyes</u> ( ) irritation/burning ( ) pin pointed pupils ( ) none ( ) other: _____	<u>Respiratory</u> ( ) irritation/burning ( ) coughing ( ) trouble breathing ( ) none ( ) other: _____	<u>Gastrointestinal</u> ( ) nausea/vomit ( ) none ( ) other: _____	<u>Neurological</u> ( ) dizziness ( ) seizures ( ) other: _____	<u>Skin</u> ( ) burning/irritation ( ) blistering ( ) other: _____
Odors Y or N - if yes, describe _____				
SUMMARY OF EVENT: (Storyline of events/action written in timeline format)				
SUMMARY: Field/laboratory data, protective and medical measures, other pertinent documents Complete sections on next page				

CLASSIFICATION

**BASIC EXPOSURE EVALUATION FORM (BEEF)**

IV. DETECTION DATA *(Attach results if more space/detail needed available)*

➤ Field monitoring/detector results: YES or NO *if YES complete below:*

Who performed (Unit and POC person name)

\_\_\_\_\_

List detector(s)/equipment used, date/time, location, list/summarize results or attach.

\_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

➤ Were samples collected and submitted for analyses): YES or NO

Who collected samples (Unit and POC person name)

\_\_\_\_\_

What kind of samples (air, soil, water, other) and where (e.g. laboratory/location ) were they sent

\_\_\_\_\_

V. HAZARD MITIGATION AND COUNTERMEASURES

➤ PREVENTIVE PROTECTIVE MEASURES:

○ Describe types of Personal Protective equipment (PPE) (e.g., gloves, M40 mask, etc) available? used?

\_\_\_\_\_

➤ MEDICAL:

○ What type of medical care was required (check and describe location of all that apply)

- 1. Unit Medic \_\_\_\_\_
- 2. Battalion Aid Station \_\_\_\_\_
- 3. MTF/CS \_\_\_\_\_

○ What type of medical countermeasures used

\_\_\_\_\_

Non- treatment related actions: *(Please check or describe)*

Risk communication *(attach any documents used)*

General SF 600 overlay with summary of incident/exposures *(attach if available)*

Other *(describe or attach)* \_\_\_\_\_

VI. CONTACT INFORMATION OF INDIVIDUAL PREPARING REPORT

Name/Position/Unit:

Phone/email

Date report completed:

Remarks:

CLASSIFIED BY: \_\_\_\_\_ (Name/Position)

Reason: \_\_\_\_\_ (Pertinent classification category, 1.4 + letters)

Declassify on: \_\_\_\_\_ (Duration of classification)

[Reference: <http://www.archives.gov/isoo/training/markings-booklet.pdf>]

<p style="text-align: center;"><b>ROSTER OF PERSONNEL EXPOSED</b>                      for CCIR/SIGACT NO: XXXXXX-CC-XXXX                      Page 1 of ____</p>					
N	LAST NAME	FIRST NAME	SSN	Treated or exposed <sup>1</sup>	Duty Status
1.					
2.					
3.					
4.					
5.					
6.					
7.					
8.					
9.					
10.					
11.					
12.					
13.					
14.					
15.					
16.					
17.					
18.					
19.					
20.					
21.					
22.					
23.					
24.					
25.					
<b>TOTAL n</b>	<b>REMARKS</b>				
	<p><b>MT = Medical treated:</b> had signs/symptoms and outright (acute) health effects resulting from exposure where immediate medical treatment was required; (note resulting duty status noted)</p> <p><b>PEX = Presumed exposed:</b> identified at at/near immediate in area of contamination/hazard, possibly experienced signs/systems effects with but no evidence that sought medical care</p>				

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Appendix I - ANNEX B  
SUMMARIZING OVERALL HEALTH IMPACTS ASSOCIATED WITH AN OEH INCIDENT:  
HEALTH INCIDENT TECHNICAL SUMMARY (HITS) REPORT

1. Purpose. The Health Incident Technical Summary (HITS) is a consolidated assessment of overall incident information pertaining to personnel exposures and any associated health effects. Completion of the HITS ensures that the necessary information is consolidated and submitted to the designated DoD data archive. Ideally this information is prepared in as an UNCLAS document so that personnel and providers can have access.

2. Responsibility. A PM unit designated by the Command Surgeon/FHP Officer will prepare the HITS.

3. Security Classification. While details in some of the underlying documents and reports (SIGACTS, BEEF, and roster) may be classified, to the extent possible the HITS report itself should be completed at the lowest classification possible for the widest distribution.

4. Completion of the HITS Form. The HITS Form consists of six basic sections. Most sections are straightforward but some additional information is described below.

(a) Source of Information. Most of the required elements listed on the HITS report form should be contained in other documents. Information such as SigAct, BEEF, rosters, field and/or analytical data, risk communication documents, may be referred to as attachments. However, some assessment/ interpretation of the information is necessary to provide an overall summary of the required information. For example, the PM personnel should summarize the incident information and provide a qualitative risk estimate of the level of the acute health effects presented during the incident as well as a risk estimate of the potential for long term chronic health consequences of concern (see USACHPPM Technical Guide 230 for information regarding OEH risk estimation). Depending on the incident, risk communication products (e.g., fact sheets, briefings, etc) may be prepared.

(b) Health Effects and Medical Information (Section II).

(1) Include reference to the roster that indicates those persons medically treated and their disposition. Provide any RME reports and any SF600 overlays.

(2) Describe overall types and severity of acute and chronic health effects and the 'risk levels' ranking assigned for each. *If none are identified say "none identified/anticipated." If health effects/risk are only to a unique personnel/units explain:* Risk levels to be used are described in the following Tables I-B-1 and I-B-2:

Table I-B-1. ACUTE RISK LEVELS (EFFECTS IN FIELD):	
(Note if there are different risk levels for different units)	Extremely High: Loss of ability to accomplish the mission if hazards occur during mission. <i>Notable in-theatre medical countermeasures/resources were required (e.g. protection, treatment &amp; exposure documentation).</i>
	High: Significant degradation of mission capabilities in terms of the required mission standard, inability to accomplish all parts of the mission, or inability to complete the mission to standard if hazards occur during the mission. <i>Some in-theatre medical countermeasures/resources (e.g. protection, treatment and exposure documentation) were required.</i>
	Moderate: Expected degraded mission capabilities in terms of the required mission standard and will result in reduced mission capability if hazards occur during the mission. <i>Limited in-theatre medical countermeasures/resources (e.g. protection, treatment &amp; exposure documentation) were required,</i>
	Low: Expected losses have little or no impact on accomplishing the mission. <i>No in-theatre medical resources required/anticipated other than documentation for HITS/etc.</i>

Table I-B-2. LATENT CHRONIC RISK LEVELS (LONG TERM/PERMANENT EFFECTS):	
(Note if there are different risk levels for different units)	Extremely High: Significant future medical surveillance activities and medical provider resources anticipated: <i>Document HITS and exposure data in designated DoD archive and designate a registry to actively track the identified personnel/group and conduct specific active surveillance and/or medical follow-up procedures for life cycle of identified group.</i>
	High: Notable future medical surveillance activities and related resources anticipated. <i>Document HITS and exposure data in designated DoD archive; specifically identified exposed personnel/group documented; possible passive medical surveillance activities for this group.</i>
	Moderate: Limited future medical surveillance activities and related resources anticipated. <i>Document HITS and exposure data in designated DoD archive; document potential groups/personnel of interest.</i>
	Low: No specific medical action required. <i>Document HITS and exposure data in designated DoD archive</i>

5. Consultative Assistance. When completing the HITS, especially for assessing the degree of any potential long-term health risks of concern and/or follow-up medical surveillance, and preparing risk communication products (e.g., fact sheets, briefings, etc) PM personnel should contact service SMEs for consultative assistance:

U.S. Army Center for Health Promotion and Preventive Medicine (USACHPPM) Phone: (800) 222-9698 <a href="http://chppm-www.apgea.army.mil">http://chppm-www.apgea.army.mil</a>	Navy and Marine Corps Public Health Center (NMCPHC) (formerly NEHC) Phone: (757) 953-0700 <a href="http://www-nehc.med.navy.mil">http://www-nehc.med.navy.mil</a>	US Air Force School of Aerospace Medicine (USAFSAM) Phone: (888) 232-3764 <a href="http://www.brooks.af.mil/units/airforceinstituteforoperationalhealth/index.asp">http://www.brooks.af.mil/units/airforceinstituteforoperationalhealth/index.asp</a>
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5. Submission of HITS. When completed, the HITS report form and all associated attachments/documents (including copies of BEEF, associated ROSTER, analytical DATA, medical treatment/RME information, and risk communication products (e.g., fact sheets, briefings, etc) should be submitted to the CJTF Surgeon/FHP Officer who is ultimately responsible for final determination and submittal to the DOEHS Data portal for archiving as well as notifying/coordinating with CENTCOM Surgeon and Service health organizations.

6. Follow-on assessment/surveillance determination. Additional technical SME evaluation/investigation would be requested through the CENTCOM Surgeon/FHP Officer who submits request to appropriate organization(s).

7. The HITS Form provided in this Regulation is provided for immediate use. Future updates to the form template will be captured in the electronic version. Alternative formats to documenting the information in the HITS template may be acceptable so long as all critical items are captured and coordinated through the CENTCOM FHP Officer.

8. An electronic version of the HITS template can be found at the following web link: <http://chppm-www.apgea.army.mil/oeh/>.

CLASSIFICATION

<b>Health Incident Technical Summary (HITS) Report</b> Provide UNCLASSIFIED information summary to extent feasible - refer to detail in other (provided) documents for classified information	
<b>I. GENERAL INCIDENT INFORMATION</b>	
CCIR/SigAct:	
WHO: Unit(s) involved:	Roster submitted where:
WHERE: location/grid	WHEN: Date/Time(s) of incident TIME1 YRMODY - TIME2 YRMODY
WHAT: EXPOSURE INCIDENT EXSUM - <u>INCLUDE SOURCE of hazard, exposure pathways, duration of exposure, and KEY UNITS EXPOSED</u>	
<b>II. HEALTH EFFECTS AND MEDICAL INFORMATION</b>	
_____ # of personnel medically treated (in field) for acute effects from exposure _____ Roster of these medically treated personnel is/is not attached and/or was provided to	
_____ # of overall personnel considered to have been exposed (population of interest (POI)) _____ Roster of these exposed personnel (POI) is/is not attached and/or was provided to	
Acute health effects observed: (Explain if risk levels were different to different units/personnel and why): Summary of Severity of Signs/Symptoms/Effects - type of effects and #s of persons with SEVERE, MODERATE, MILD effects:	
	Acute Risk Ranking Level for identified units/ personnel: (see instruction guidance tables for definitions of risk levels): <input type="checkbox"/> Low <input type="checkbox"/> Moderate <input type="checkbox"/> High <input type="checkbox"/> Extremely High
Medical Treatment/diagnostics performed: (summarize number treated, # RME reports, codes used; treatment and general effectiveness, duty status of those treated)	
Latent (chronic) health outcomes of concern (if any) (summarize specific long term/chronic effects anticipated; if none are identified say "none identified/anticipated", if to only unique personnel/units explain:	
Summary of Types of Potential Latent/Chronic Permanent effects to which personnel and basis for determination of likelihood/degree of risk for such effects:	Latent Chronic Risk Ranking Level for identified units/ personnel: (see instruction guidance tables for definitions of risk levels): <input type="checkbox"/> Low <input type="checkbox"/> Moderate <input type="checkbox"/> High

## CLASSIFICATION

Health Incident Technical Summary (HITS) Report		
Provide UNCLASSIFIED information summary to extent feasible - refer to detail in other (provided) documents for classified information		
		<input type="checkbox"/> Extremely High
Is any follow on medical procedures/surveillance recommended? Y or N if yes:		
<input type="checkbox"/> What type of medical follow-up? For who? Is it documented in personal medical records (e.g. in SF600)?		
Service health/medical organization /SME Consulted: Date _____ Organization _____		
Name _____ email _____ Phone _____		
III. HAZARD ID - DETECTION, MONITORING, ANALYSES		
Field detection used? Y or N if yes:		
<input type="checkbox"/> Either attach information with results and who obtained samples or indicate where available		
Summarize results of field data:		
Environmental laboratory analyses used? Y or N if yes:		
<input type="checkbox"/> List numbers of samples analyzed for various of environmental media sampled : _____ air _____ soil _____ water _____ wipe _____ other- <i>describe</i> : _____		
<input type="checkbox"/> Either attach information with results and who obtained samples or indicate where available		
Summarize results of field data:		
IV. HAZARD MITIGATION AND COUNTERMEASURES		
Personal Protective Equipment or other controls used to minimize exposures? Y or N if yes:		
<input type="checkbox"/> List types of PPE/controls _____ protective clothing _____ mask (list type(s)) _____ gloves _____ other- <i>describe</i> : _____		
<input type="checkbox"/> Comments on benefits/disadvantages to PPE/controls: _____		
Risk communication efforts and/or documents to inform exposed personnel? Y or N if yes		
<input type="checkbox"/> Describe or ATTACH risk communication documents or efforts		
Comments regarding risk communication efforts: _____		
V. POINTS OF CONTACT, ADDITIONAL INFORMATION SOURCES/REFERENCES		
(Name/Position/Unit)	Phone/email	NOTES:
INDIVIDUAL PREPARING REPORT:		Date report completed:
OTHER POINTS OF CONTACT:		
ADDITIONAL INFORMATION SOURCES/REFERENCES:		
VI. REPORT SUBMITTAL PROCEDURES: IAW the proper reporting channels, forward all the above documentation to the designated DOD occupational and environmental data archive:		
CLASSIFIED channels: Secure e-mail: oehsdata@usachppm.army.smil.mil Secure FAX: DSN: 312.584.4244; COMM: 410.436.4244 Unclassified Mail: USACHPPM; ATTN: MCHB-CS-OC (OEHS Data Archive) 5158 Blackhawk Road, Building E1930; Aberdeen Proving Ground, MD 21010-5403	UNCLASSIFIED channels: Unsecured e-mail: oehs@apg.amedd.army.mil Unsecured phone: DSN: 312.584.4230 COMM: 410.436.4230 Unclassified Mail: USACHPPM; ATTN: MCHB-TS-RDD; 5158 Blackhawk Road, Building E1675 Aberdeen Proving Ground, MD 21010-5403	

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