DCPH–A
Defense Centers for Public Health – Aberdeen
(formerly U.S. Army Public Health Center)

HEALTH HAZARD ASSESSMENT PROGRAM

in Support of the Army Acquisition Process (AR 40-10)

PROGRAM GUIDE




OPEN

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TA-523-0423

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HEALTH HAZARD ASSESSMENT PROGRAM OVERVIEW

The Health Hazard Assessment (HHA) Program is designed to identify, assess, and eliminate or control health hazards associated with the life cycle management of materiel items such as weapon systems, munitions, equipment, clothing, training devices, and other materiel systems. The HHA Program focuses on potential health hazards resulting from training, combat, and maintenance throughout a system's life cycle.

Throughout the life cycle of a system, Health Hazard Assessment Reports (HHARs) may be completed in support of Milestone Decision Reviews, Type Classification, Materiel Release, etc. Materiel Developers (MATDEVs), testers, evaluators, users, maintainers, logisticians, and disposers should use all of the HHARs to eliminate or control personnel exposures to health hazards.

The HHA Program supports the Army acquisition community's compliance with health hazard assessment requirements contained in Department of Defense (DoD) policy and Army Regulations (AR). The proponent for HHA is The U.S. Army Surgeon General (TSG) with the Defense Centers for Public Health – Aberdeen (DCPH-A) serving as the Lead Agent.

HOW THE HHA PROCESS WORKS

The MATDEV should initiate the HHA process as early as possible during the Materiel Solution Analysis Phase.

HHAs are required to be performed for all acquisitions to include materiel changes, modification work orders, engineering change proposals, non-developmental items (NDI), new developments, and rapid fielding initiatives.

The Process

- **Identification of the potential health hazards**. Potential health hazards are identified in coordination with the MATDEV. Data requirements, initial recommendations, health effects, and medical criteria are detailed in an Initial Health Hazard Assessment Report (IHHAR). Lessons learned from similar predecessor systems are retrieved from the HHA Program database and provided to the developer
- **Early integration of health hazard concerns**. The IHHAR is designed to inform the MATDEV regarding potential health hazards and data collection requirements early in the acquisition process so that resources are programmed to address them. The health hazard information should be reflected in documents such as Capability Development Documents, Request For Proposals, and early design specifications. The NDI programs should use the IHHAR to tailor market investigations. An IHHAR should also provide data collection guidance.
- **Collection of health hazard data**. The MATDEV is responsible for providing information to the medical assessor. The data may already exist (i.e., that from a predecessor or like system may be sufficient), or they may be acquired during developmental/technical (and sometimes user/operational) testing. The information from the IHHAR should be incorporated into test plans (e.g., Test and Evaluation Master Plan and Detailed Test Plans) to provide testers with an awareness of potential system health hazards when acquiring new data.

- **Assessment of health hazard data.** When the health hazard data are provided to the Army Medical Department's Independent Medical Assessors (IMAs), an assessment is performed. Often there are multiple health hazard issues; therefore, the expertise of people from several scientific and health disciplines is required. A matrix concept is employed to address multiple health issues. A team of IMAs is formed and coordinated by the HHA Program at the DCPH-A. The product of this process is the HHAR which meets the requirements of AR 40-10, AR 70-1, AR 602-2, AR 770-3, and DoD Instruction 5000.02.
- **Allow sufficient time for the HHA**. The HHA process requires interaction between developer, tester, and matrixed Army Medical Department communities and should occur throughout the life cycle of a development program. AR 40-10 indicates that at least 90 days are required to produce a formal HHAR; this time allows the interaction of multiple scientific and health specialists.

The 90-day period starts when all the health hazard information is available to the IMA. If data are missing, the report may be delayed.

Click on each document title for more details:

- **AR 40-10**, Health Hazard Assessment Program in Support of the Army Acquisition Process.
- **AR 70-1**, Army Acquisition Policy.
- **AR 602-2**, Human Systems Integration (HSI) in the System Acquisition Process.
- **AR 770-3**, Type Classification and Materiel Release.
- **DoDI 5000.02**, Operation of the Adaptive Acquisition Framework.

HEALTH HAZARD CATEGORIES ADDRESSED BY THE HHA PROGRAM

Acoustic Energy The potential energy that exists in a pressure wave transmitted through the air which may interact with the body to cause hearing loss or damage to internal organs.

Biological Substances Exposures to microorganisms, their toxins, and enzymes; addresses sanitation concerns such as bloodborne pathogen transmission, human waste disposal, food handling and storage, water treatment and distribution, and personal hygiene.

Chemical Substances Hazards resulting from exposures to substances such as mists, gases, vapors, fumes, or particulate matter. Exposure via inhalation, ingestion, skin contact, or eye contact may cause toxic effects. Hazards may also be caused by exposure to toxic liquids and solids by ingestion, skin contact, or eye contact.

Oxygen Deficiency Health effects associated with atmospheric oxygen concentrations that decrease below that which is commonly found in air (21% by volume). This hazard may occur when atmospheric oxygen is displaced from an enclosed space or when a system is operated at high altitudes.

Radiation Energy Health effects associated with the exposure to emissions from the electromagnetic spectrum that may be highly focused and may or may not have sufficient energy to ionize particles. This category includes hazards such as x-rays, radiofrequency radiation, and laser and optical radiation.

Shock The delivery of a mechanical impulse or impact transmitted to an individual by the acceleration or deceleration of a medium with which the individual has come into contact. Recoil forces may result in trauma to the musculoskeletal system.

Thermal Stress & Humidity Health effects associated with high or low temperatures (possibly in conjunction with high humidity) which may be exacerbated by the use of a materiel system.

Trauma Physical trauma may result from the impact of a sharp or blunt object to the eyes or body surface. Musculoskeletal trauma may occur during the lifting or carrying of heavy objects such as projectiles or ammunition boxes.

Vibration Health effects resulting from the contact between a mechanically oscillating surface and the human body.

Visit the HHA website for additional information on all health hazard categories and the topics listed below:
https://phc.amedd.army.mil/topics/workplacehealth/hha/Pages/default.aspx

- Data Requirements.
- Initial Recommendations.
- Health Effects.
- Health Protection Criteria.
- References.
- Medical Cost Avoidance Model.

HOW TO REQUEST AN HHA IN THREE EASY STEPS

STEP 1

Assemble the following information (if available) to support the HHA request:

- Safety Assessment Report.
- Human Systems Integration Documentation.
- Programmatic Environment, Safety, and Occupational Health Evaluation.
- Test Plans.
- Acquisition Strategy.
- Independent Evaluation Plans/Reports.
- Developmental/Operational Testing Reports.
- Program Review Documentation.
- Operational Mode Summary/Mission Profile.
- Operator/Technical Manuals.

STEP 2

Prepare a formal, signed memorandum requesting an HHA. Your memorandum should contain:

- Your name/technical POC, address, Program Executive Office, phone numbers, and e-mail.
- System nomenclature and description to include major components.
- Purpose of the system.
- Number of systems and number of users/ operators per system.
- System life-cycle phase and Acquisition Category level.
- Purpose of HHA report and date required.
- System/prototype availability (where/when).
- Statement on availability of funds to support HHA effort (ACAT I - labor & travel; ACAT II, III, IV - travel).
- Names, phone numbers, e-mail addresses of system safety, HSI, test and evaluation POCs.

STEP 3

Submit an Official Request.

- Go to the DCPH-A website located at: https://phc.amedd.army.mil/Pages/default.aspx
- At the top of the DCPH-A website home page, mouse over “Products & Services” and click on “Request Services.”

- Select “Health Hazard Assessment Request (Acquisition Only)” from the “How can we help?” drop-down box.
- Click on the link that appears.
- Complete all required information, and upload the signed memorandum. Click submit.

Submit your request via the DCPH-A website **as soon as possible**. Budget for HHA Program Reimbursable Support in accordance with ACAT level guidance in Step 2. Early HHA involvement prevents last-minute surprises and delays. Normally, it takes **90 days from the date we receive all HHA data** to complete an HHA report.

Note: You will not be able to submit your request unless you upload the memorandum requesting an HHA.