

# DOEHRS-IH Exposure Assessment Demonstration Model Evaluation, Analysis and Technology Transfer (Task N.0830)

## Statement of Need

The absence of a standardized approach for the conduct of field industrial hygiene surveys directly impacts the quality and quantity of information available in the DoD's Defense Occupational and Environmental Health Readiness System (DOEHRS). Army implementing guidance [Army Regulation 40-5, Department of the Army Pamphlet (DA Pam) 40-11, and DA Pam 40-5] fails to provide detailed procedures and/or best practices for Industrial Hygiene (IH) surveys. Each installation IH program approaches the conduct of field IH work and the associated activities independently to include those activities associated with translating field survey information into DOEHRS. Additionally, current sampling strategies are oriented around the determination of compliance with exposure limits for the maximum-risk employee. Improved approaches are needed for IH exposure characterization, exposure control planning, data collection and quality assurance of Army DOEHRS-IH data. This will facilitate its use by U.S. Army Medical Command (MEDCOM) and the U.S. Army Public Health Command (USAPHC) to gauge how well the workforce is protected from occupational health hazards, to maintain readiness, reduce worker compensation claims, and avoid potential Occupational Safety and Health Administration (OSHA) liability.

## Technical Approach

The NDCEE will develop, demonstrate, and validate a standardized industrial hygiene field survey process to improve the quality and quantity of IH information in DOEHRS-IH with standardized field IH processes across a wide range of Army worksites. Specifically, this task will demonstrate and validate process improvements following the DoD IH Exposure Assessment Model (EAM) with particular focus on steps 5-8:

1. Define Scope and Support of Resources
2. Basic Characterization
3. Similar Exposure Group
4. Develop Worksite Monitoring Plan
5. Characterize Exposures
6. Assess Exposures and Provide Control Plan
7. Reporting and Recording
8. Re-Evaluation

The demonstration will span eight installations and include training of Army IH practitioners in process improvements. Demonstrated improvements to IH data collection and management associated with the EAM can be mandated for use by the U.S. Army MEDCOM across the Army to improve resource decisions and occupational health.

**Government POC**  
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**Status**  
Ongoing

## Anticipated Results and Benefits

The NDCEE anticipates that this task will result in robust characterization of hazard exposure across the workplaces with highest risks at the eight installations. Field-proven survey procedures will be documented in a Field Operations Manual to guide consistent IH data collection and management associated with the EAM to include DOEHRS data entry. This task will also include the completion of high-quality DOEHRS records with independent backup of field records and development of metrics to support IH program decisions at the installation, command, and Army enterprise levels.

## Technology Transfer and Outreach

The team will work with stakeholders across the Services to promote collaboration and partnering opportunities. Specific target organizations include U.S. Navy Bureau of Medicine and Surgery, Navy and Marine Corps Public Health Center, Defense Health Agency, and 711th Human Performance Wing's U.S. Air Force School of Aerospace Medicine.



*NDCEE measures worker exposure to occupational hazards such as airborne chemicals and noise.*

