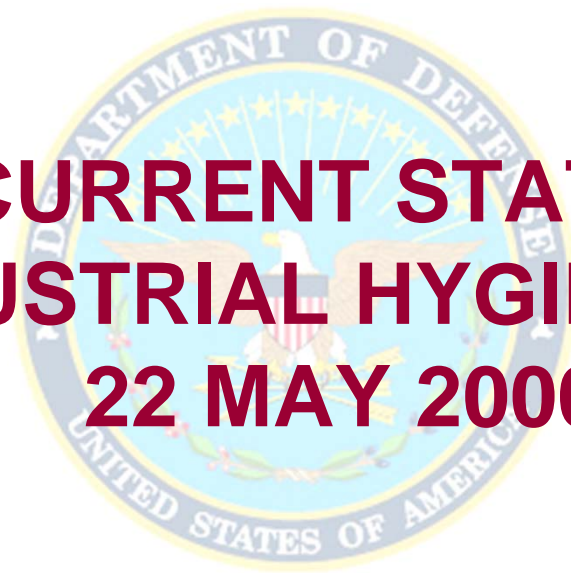




# DOEHRS

## DEFENSE OCCUPATIONAL & ENVIRONMENTAL HEALTH READINESS SYSTEM

**CURRENT STATUS**  
**DoD INDUSTRIAL HYGIENE FORUM**  
**22 MAY 2000**



# BRIEFING AGENDA

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- **Project Overview**
- **Mandates for DOEHRS**
- **Functional Involvement**
- **Background**
- **Objectives**
- **Exposure Assessment Process**
- **Deployment Occupational & Environmental Health**
- **Mobility**
- **Training**
- **Architecture**
- **Support**
- **Deployment Schedule**
- **Data Repository**
- **Questions and Conclusion**

# PROJECT OVERVIEW

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- The DOEHRS is the Occupational Health migration system for the Department of Defense (DoD). DOEHRS is an automated information system designed to support the DoD Industrial Hygiene (IH), Environmental Health (EH), Hearing Conservation (HC), and Occupational Medicine (OM) programs.
- DoD MHS Information Management Proponent Committee (IMPC) re-confirmed decision in October 1999
- Funded for initial deployment in FY00
- FY01 MHS Investment Portfolio includes funding for DOEHRS-IH deployment



# PRESIDENTIAL DIRECTIVE

I am directing the Department of Defense and Veterans Affairs to create a new Force Health Protection program. Every soldier, sailor, airman, and marine will have a **comprehensive, life-long medical record** of all illnesses and injuries they suffer, the care and inoculations they receive and their **exposure to different hazards**. These records will help us prevent illness and identify and cure those that occur.

President William Clinton, 8 Nov 1997



# A NATIONAL OBLIGATION

## PRD 5

- Actions to ameliorate, avoid, or, ideally, prevent such health effects include: improving service member's understanding of health risk information; improving medical and non-medical countermeasures; **enhancing government collection of health and exposure data, along with improving linkages between health information systems**; coordinating agency research programs; and improving delivery of health care services to veterans and their families.



# PUBLIC LAW



This portion of the National Defense Authorization Act for Fiscal Year 1998 adds a new Section 1074f to Chapter 55 of Title 10 US Code which requires a medical tracking system for members deployed overseas and asks for a report on the FY99-FY04 costs and operational considerations of the required system.

**FY1998 Public Law 105-85 for Force Health Protection**

# DoD DIRECTIVE/INSTRUCTION

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## *Joint Medical Surveillance*

DoDD 6490.2 and DoDI 6490.3 establish and implement Joint Medical Surveillance policies and procedures. The DoDI states (para F 2 a (1)) that OASD(HA) shall field DoD medical systems that will **capture exposure data** in central repositories and specifically names the Defense Occupational Health Readiness System (DOHRS=DOEHRS) as one of the systems.

# FUNCTIONAL INVOLVEMENT

## USERS IDENTIFIED “THEIR” REQUIREMENTS

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- DoD Industrial Hygiene Task Force
- DoD Occupational Health Working Group
- Joint Environmental (Health) Surveillance Working Group
- DoD Clinical Working Group approval
- DoD Ergonomics Working Group
- DOEHRS-IH Functional Working Group
- DOEHRS-IH Presentation Layer Working Group





# DOEHRS INDUSTRIAL HYGIENE BACKGROUND

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- Collect all exposure information
  - “Environmental” & “Occupational” exposures
  - Deployments & fixed facilities
  - Army, Navy, Marine Corps, Air Force, Defense Agencies
- Local value to Commanders
  - HEALTH risks → Operational Risk Mgt
- Central medical record of ALL exposures
  - Duration of employment + 40 years

# DOEHRS-IH KEY OBJECTIVES

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- Prevent occupationally related illnesses and injuries by anticipating, recognizing, and evaluating hazards; and by recommending controls to commanders, supervisors, exposed personnel and Occupational Safety and Health Managers for implementation
- Characterize occupational and environmental health exposures to enable targeted medical surveillance and treatment by health care providers
- Investigate abnormal medical findings and trends referred to IH from health care providers to prevent illness or injury

# DOEHRS-IH KEY OBJECTIVES

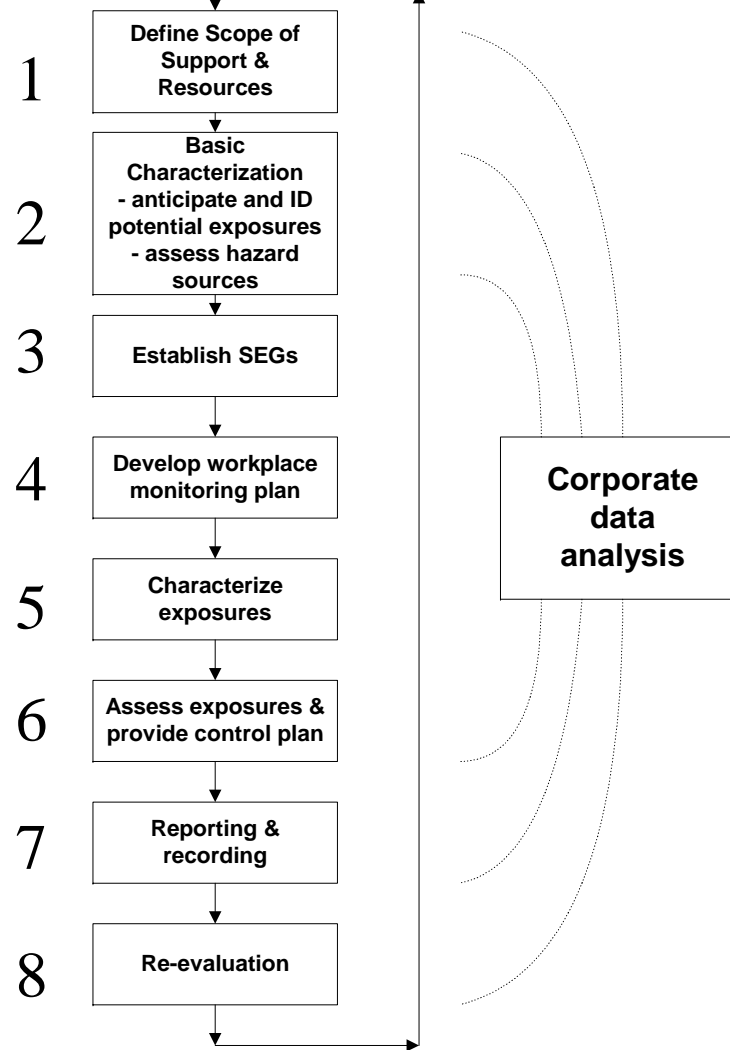
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- Establish and document a historical record of exposure levels for personnel, and communicate exposure monitoring results
- Provide tools for IH decision support
- Streamline IH operations by supporting personnel and workplace monitoring (WPM), medical surveillance, and decision-making
- Streamline data entry through downloads of demographic and clinically relevant data from other DoD systems.

# EXPOSURE ASSESSMENT PROCESS

DOEHRS uses the  
DoD Exposure  
Assessment Model



# DEPLOYMENT OCCUPATIONAL & ENVIRONMENTAL HEALTH STRATEGY

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- Fundamental Strategy: Incorporate Deployment OEHS requirements into existing MHS Systems.
- The ultimate goal is to link deployed and non-deployed occupational and environmental health exposure information to individual medical records.
  - By linking DOEHRS, Composite Health Care System II (CHCS II), and the Theater Medical Information Program (TMIP), this link becomes reality.

# DEPLOYMENT OEHS SURVEILLANCE



**Area Medical Lab calibrating Personal Air Sampling Devices used in assessing Occupational and Environmental Health Exposures**

# DEPLOYMENT OEHS SURVEILLANCE



**Chemical Agent Resistant Coating  
Spray painting during Gulf War**

# MOBILE/PEN CAPABLE COMPUTERS





# DOEHRS-IH TRAINING

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## Computer Based Training (CBT)

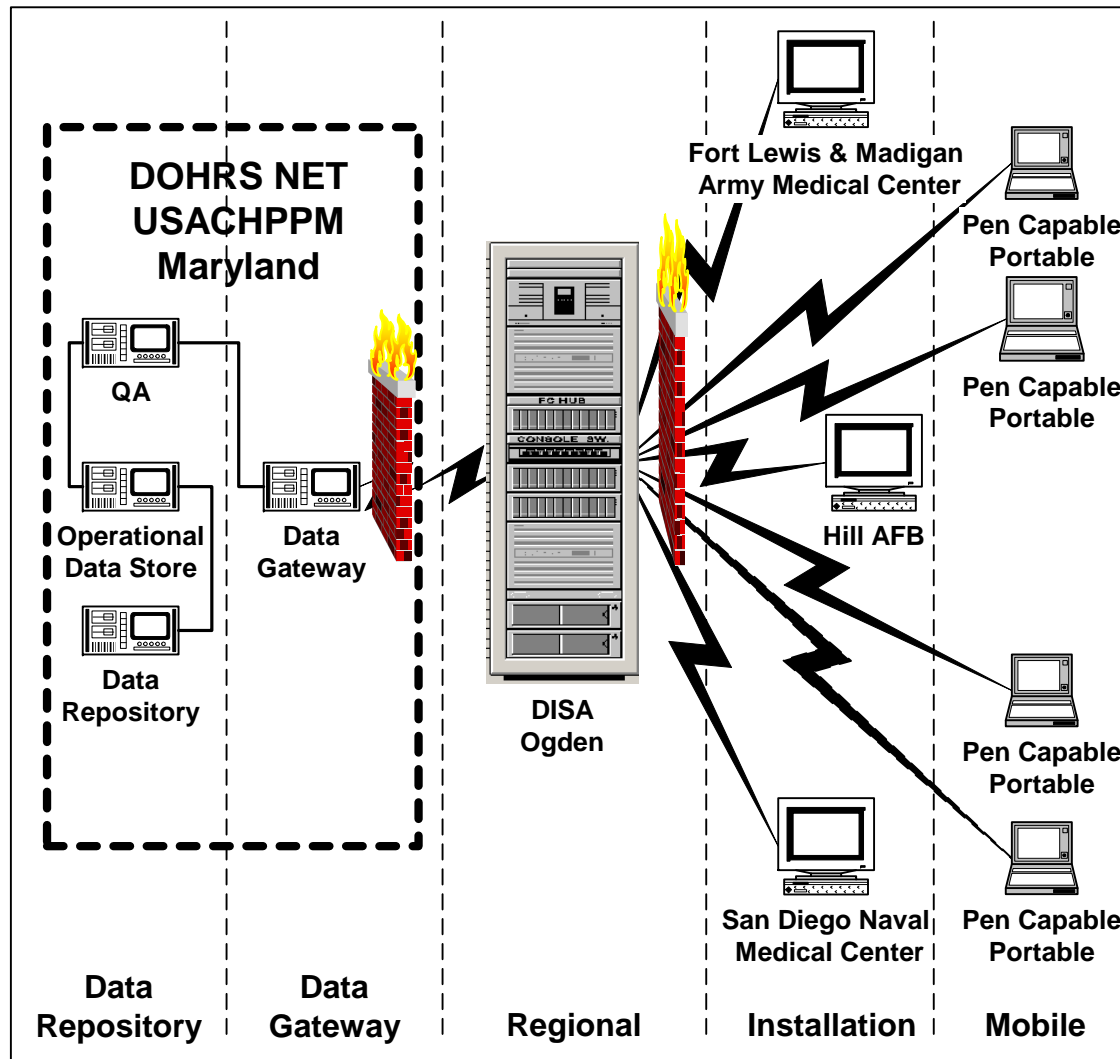


## Initial On-Site Training using DOEHRIS End User Devices (EUDs)



# DOEHRS-IH ARCHITECTURE

## ALPHA TESTING CONFIGURATION



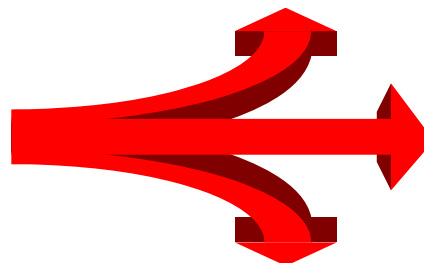
# HELP DESK SUPPORT

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**TMSSC**  
Tri-Service Medical Systems Support Center



**TMSSC (Tier 1)**



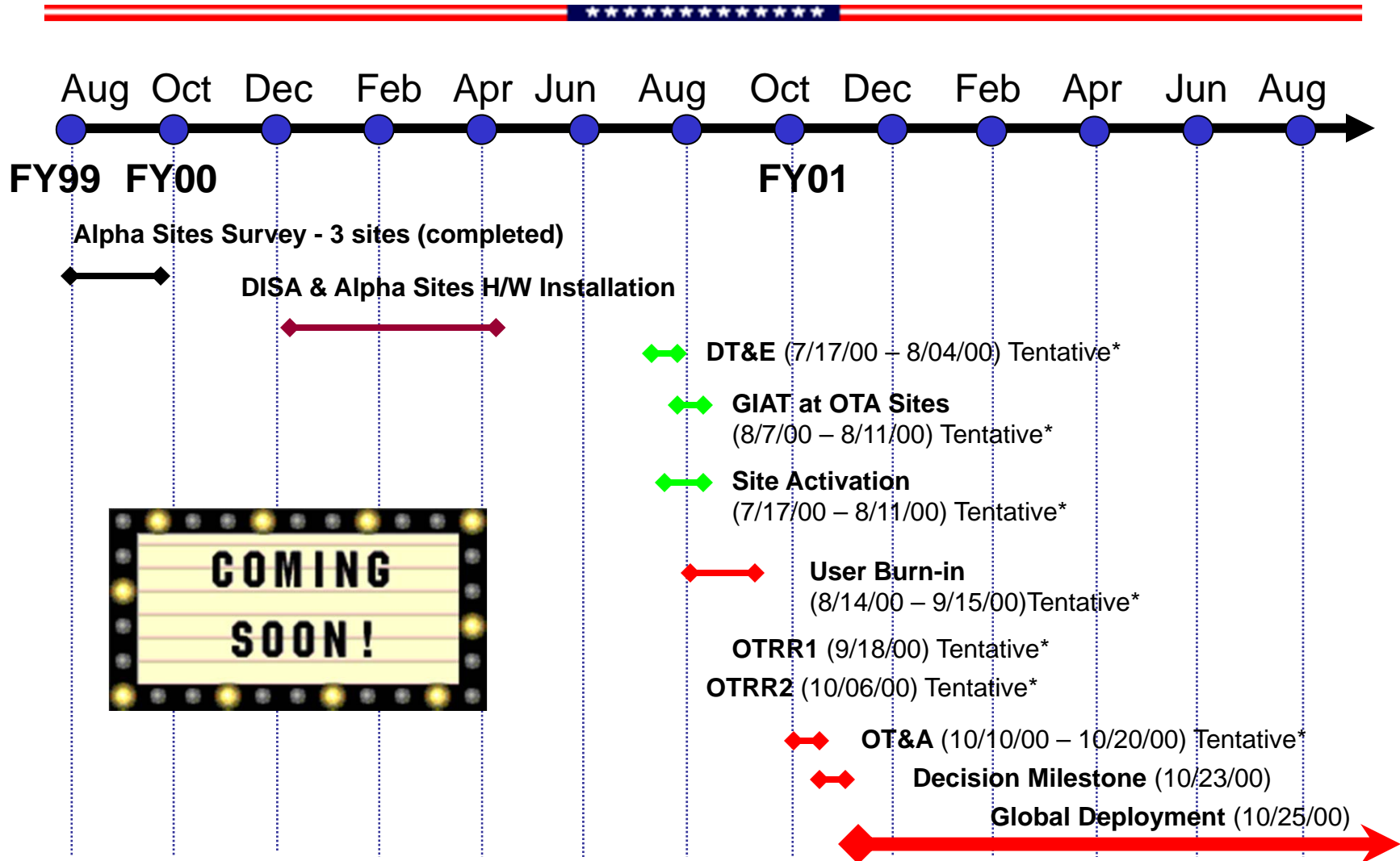
**SAIC (Tier 2 & 3)**

**Hardware Warranty (GTSI\*)**

**Toll Free Access in CONUS and OCONUS**

**\*Vendor dependent**

# DOEHRS-IH SCHEDULE



\* CHCS II Dependent

# DOEHRS DATA REPOSITORY

## INTERNET ACCESS

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- Provide World-Wide Tri-Service Access
- Provide Secure Transactions
- Automate Data Calls
- Automate Software Version Control
- Web Access to Required References
- Web Access to Licensed Resources



# DOEHRS DATA REPOSITORY

## DESIGN METHODOLOGY

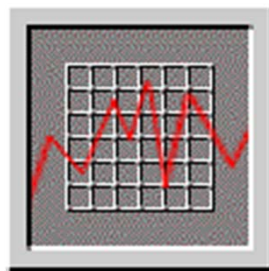
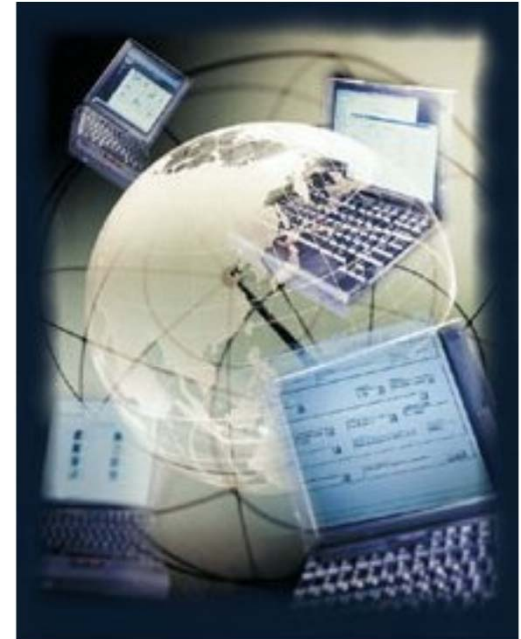
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- **Operational Data Store (ODS)**
  - Houses tactical data from production systems and is subject-oriented and integrated to address operational needs
  - Detailed, current information of a transactional nature, refreshed frequently, and only held for a short period of time (normally)
  - Goal is to provide a tactically-structured, efficient information processing environment to satisfy analysis and reporting capabilities required for the **day-to-day operations** of the business.
- **Data Repository (DR)**
  - Stores data from operational data sources, using structures organized around major subject areas such as person, MACOM, DOD component, and sample.
  - Goal is to provide an **enterprise** structured, efficient information processing service through increased accessibility, standardization and reliability of timely information.

# DOEHRS DATA REPOSITORY

## REPORTING TOOLS

- Pre-Defined Periodic Reports
- Ad-Hoc Queries
- Trend Analysis
- Statistical and “What If” Analysis



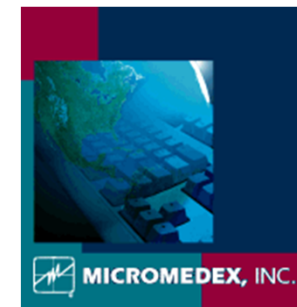
# DOEHRS NET RESOURCES

## CURRENT LICENSED INTERNET ACCESS

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- **Micromedex TOMES Consolidated Point Solution System**

- **MEDITEXT (Medical Management)**
- **HAZARTEXT (Hazard Management)**
- **INFOTEXT - Regulations, Standards and General Information**
- **CHRIS - Chemical Hazard Response Information System**
- **HSDB - Hazardous Substance Data Bank**
- **IRIS - Integrated Risk Information System**
- **NAERG - North American Emergency Response Guidebook Documents**
- **New Jersey Hazardous Substance Fact Sheets**
- **NIOSH Pocket Guide**
- **OHM/TADS - Oil and Hazardous Materials/Technical Assistance Data System**
- **RTECS - Registry of Toxic Effects of Chemical Substances**
- **REPROTEXT System**
- **REPROTOX System**
- **TERIS - Teratogen Information System**
- **1st Medical Response Protocols**
- **RegsLink with Federal Register.**
- **LOLI – Lists of Lists**







# QUESTIONS



# CONCLUSION

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The DOEHRS will provide accurate and complete Occupational and Environmental Health information by supplying automated data collection tools and comprehensive information access tools at deployed and fixed facilities worldwide.