



# Coast Guard Exposure & Health Data



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U.S. COAST GUARD



# Coast Guard Response



## Assets & Personnel:

- 34 response locations
- ~ 5000 CG responders
- ~ 40 CG, medical, safety and work-life personnel
- 15 air assets
- 13 afloat assets





# Coast Guard Job Categories



- Administrative
- Air Over-Flight
- Badge / Check-In Process
- Beach/Marsh Cleaning
- Booming Ops
- Controlled Burn Group
- Distribution Center
- Federal On-Scene Coordinator
- ICS Support / Command Post
- Law Enforcement
- Medical / Dental
- Pollution Investigator
- Rescue Swimmer
- Safety
- Search & Rescue
- Shoreline Cleanup Assessment
- Skimming Operations
- SMART Group
- Spill Clean Up / Decontamination
- Staging
- Subsea Containment Group
- Wildlife Rehabilitation
- Work-Life





# Coast Guard Responders Exposure Data



- Time & Place of response
  - MRTT
  - Inventory (survey)
- Mission/task
  - MRTT (Requirement Title Number – general job description)
  - Inventory (survey)
- Exposure type, frequency
  - Inventory (survey)





# Coast Guard Responders Exposure Data



- Quantitative exposure measurements<sup>1</sup>
  - Benzene, cyclohexane, ethyl benzene, petroleum distillates, propylene glycol, toluene, trimethyl benzene, xylene, oil mist mineral, 2-butoxyethanol
  - 293 samples of Coast Guard responders
  - Non-detect / Low levels found
  - In accordance with OSHA sampling methodology
  - Could be used by study IH team

*1 - Personal monitoring on sample of responders*





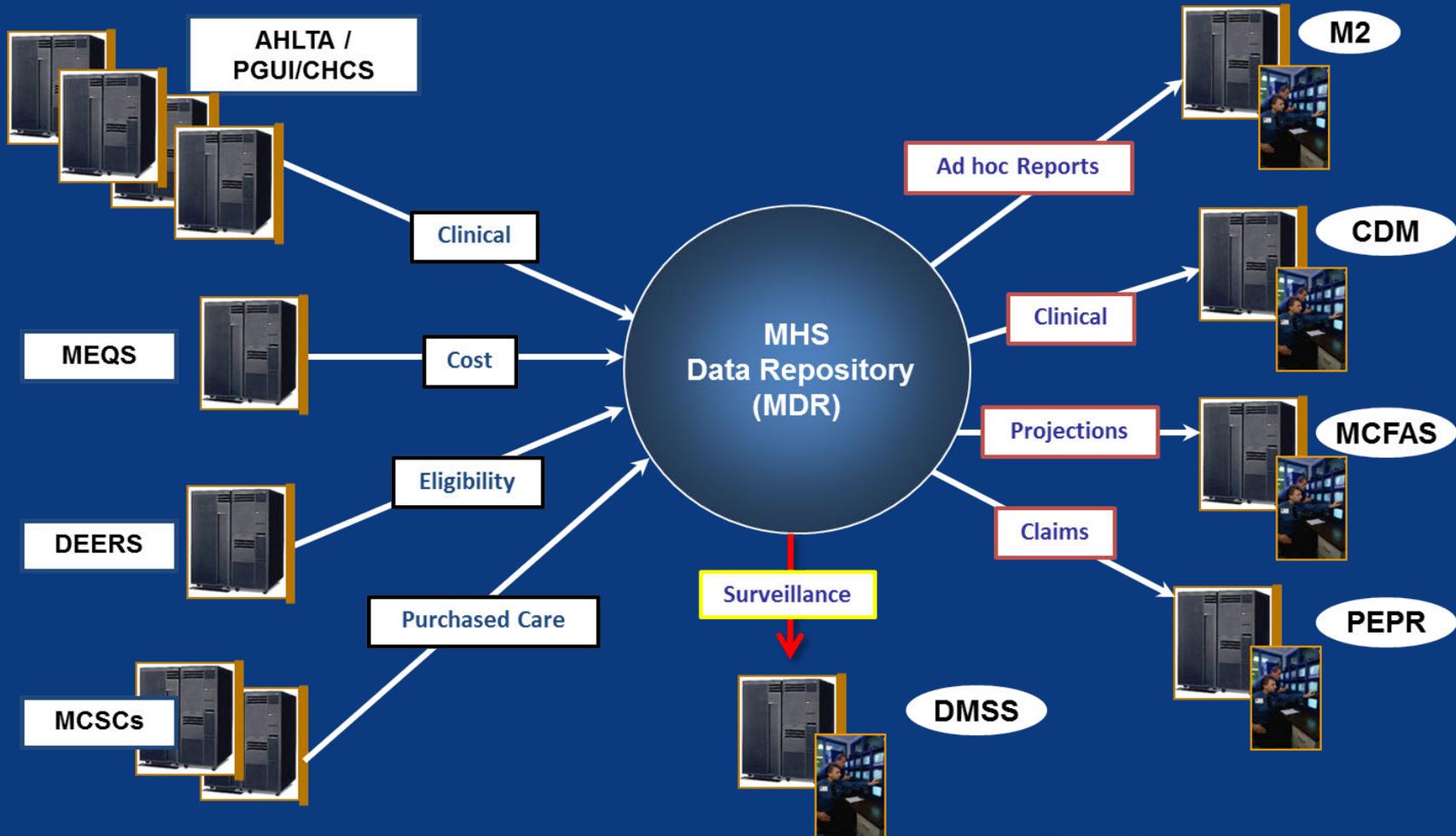
# Military Health System Data



## SOURCES

## REPOSITORY

## DATA MARTS





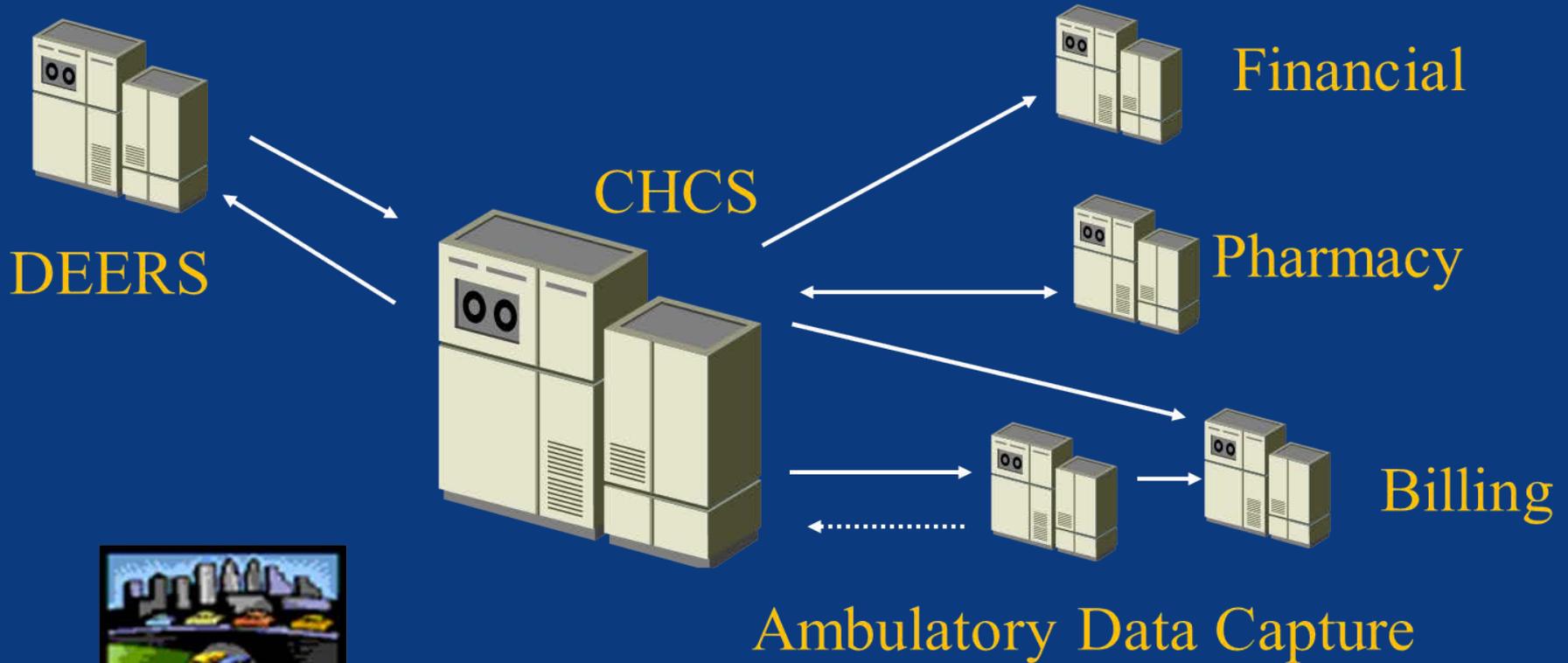
# How Much Data?

- More than 1.6 billion records on-line
  - 33 billion records archived
  - 10 years of data





# Military Health System Data Flow





# Military Health System Data Flow



- Provider enters patient encounter data into PGUI / CHCS (AHLTA – DoD)
- CHCS data pushed to the MHS Data Repository (MDR)
- Defense Medical Surveillance System (DMSS) pulls data from MDR





# Defense Medical Surveillance System (DMSS)



**MEPS**  
11.4 million persons  
24.2 million records



**Personnel Data**  
9.1 million persons  
105.8 million records



**Hospitalizations**  
2.8 million records

**Ambulatory Data**  
176 million records



**HIV test Results**  
37.9 M



**Immunizations**  
73.3 million records



**Pre-Induction**

**Service Member Life Cycle**

**Post-Discharge**

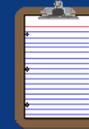


**Serum Specimens (DoD Serum Repository)**  
49.6 million specimens

**Deployments**  
4.3 million records



**Reportable Diseases**  
241,000 records



**Pre / Post-Deployment Health Assessments**  
6,826,314 forms



**Casualty Data**  
40,600 AD Deaths

**Active Duty & Reserve Components**





# DoD Serum Repository

- World's largest serum repository
- Unrivaled potential for sero-epi studies (~ 40 sample request per year)
- ~ 50 million serial serum specimens from over 9.1 million individuals
- Linked to demographic, military & medical information via DMSS





# Coast Guard Medical Surveillance

- Medical Surveillance
  - Obtain ICD-9 codes from DMSS (AFHSC)
  - Comparison of CG responder population
    - All military population
    - All other non-responder CG population
  - Various responder sub-group comparisons
- Periodic Health Assessments
- Electronic Health Record (near-future)





# Questions?



[http://www.eoearth.org/article/Deepwater\\_Horizon\\_oil\\_spill](http://www.eoearth.org/article/Deepwater_Horizon_oil_spill)





# Back-Up Slides





# Defense Medical Surveillance System (DMSS)

Data Type	Source	Frequency
Personnel	DMDC	Monthly
Demographic	DMDC	Monthly
Military Entrance Processing Stations	MEPCOM	Monthly
Deployment	DMDC	Monthly
Inpatient	MDR	Monthly
Deployment Assessment Forms	AFHSC	Daily
Outpatient	MDR	Daily
Immunization	DEERS	Daily
Serum	Testing Labs	Weekly
Casualty	AFIP	Monthly
Health Risk Appraisals	USAPHC	Quarterly
Reportable Events	MTFs	Daily





# Military Health System

## Data Flow

Monthly

