Military Deployments And Emergency Management

Outline
- Introduction
- Periodical Health Assessments (PHA)
- Occupational Environmental Health Site Assessment (OEHSA)
- Emergency Responder Health Monitoring and Surveillance (ERHMS) Program
- Best Practices
- Conclusion

Introduction
- Lessons Learned by the Military
  - Vietnam Conflict (1950-1974)
  - Desert Shield/Storm (1990-1991)
  - Iraq and Afghanistan Campaigns (2001-Present)
- Lessons Learned by Emergency Responders from September 11, 2001
Military Health Assessments

- Currently the Army conducts three types of health assessments:
  - Periodic Health Assessment (PHA)
  - Pre-Deployment Health Assessment (PDHA)
  - Post-Deployment Health Reassessment (PDHRA)
- All assessments are stored in an online data base (mods.army.mil) for Health Care providers and Soldier to view.

Medical Operational Data System (MODS)

Periodical Health Assessment (PHA)

- All Soldiers are required to have a Periodical Health Assessment (PHA) by regulation annually.
- This gives a baseline for the Primary Care Mangers (PCM) to identify any changes in the overall health of the Soldier throughout their career.
Pre/Post-Deployment Health Assessment (PDHA)

- Medical Assessment for all pre/post deployments outside the Continental United States (CONUS) or areas without fixed medical facilities greater than 30 days.
- The pre PDHA is conducted 30 days prior and ensures that Soldier is healthy enough to perform duties in the area.
- The post PDHA is conducted 30 days prior or immediately upon return and compares the Soldier’s health to their pre health care screening.

Post-Deployment Health Re-Assessment (PDHRA)

- A follow up health assessment is conducted between 90-180 days upon returning to ensure that all items identified have been rectified as well as follow up on any unforeseen factors.
- For example:
  - Post Traumatic Stress Disorder
  - Behavioral Health
  - Conditions with long incubation periods

Components of PDHA/PHA

- Phase 1 is conducted by Service Member
  - Online Questionnaire covers three topics
    - Current/Overall Health
    - Preventive Health
    - Behavioral Health
- Phase 2 is a review of current status within MODS
  - Height and Weight
  - Medical Conditions
  - Deployment Related Health
Components of PDHA/PHA

- Phase 3 is conducted by Primary Care Provider
  - Reviews all medical history with service member
  - Inputs referrals to any issues identified during visit

PDHA and PHAs

- Medical professionals use this information to ensure that no short term or long term illnesses were identified from exposures due to deployment or occupational hazards.
- The information gained from these assessments are placed permanently into the individual's medical records.
- Once in the medical records this information can be linked with information gained from Occupational Environmental Health Site Assessments (OEHSA).
Preparedness Workforce Management System (PWMS)

- The current capabilities are used for data collection, identification and notification.
- Currently managed by the Center for Disease Control and Prevention (CDC).
- This online data based could be used as an initial start up to conduct the same processes as MODS.

Occupational Environmental Health Site Assessments (OEHSA)

- A risk assessment tool that is used to identify possible Disease and Non-Battle Injuries (DNBIs) that can be associated with an area.
- A comprehensive analysis of the air, water, soil, site history, current use and hazards, and any other information that can be gathered.
- Conducted by Theater Level Preventive Medicine (PM) Assets
  - Medical Detachments (PM)

OEHSA

- OEHSA are conducted in four phases
  - Pre-deployment Activities
  - Deployment Activities
  - Additional Data Collection
  - Occupational and Environmental Health (OEH) Risk Assessment
OEHSA- Pre-Deployment Activities
- Preventive medicine personnel identify as much information concerning potential Occupational and Environmental Health (OEH) threats before arrival on site.
- Prepare preliminary Conceptual Site Model (CSM).
- Gather site background.
- Historical use.
- Surrounding industrial facilities.
- Obtain intelligence information.
- Military Importance.
- Medical Importance.

OEHSA- Deployment Activities
- Theater preventive medicine personnel will build upon the information (e.g., preliminary CSM and Preliminary Hazard Assessment (PHHA)) ascertained from Phase I by performing interviews, site reconnaissance, and pathway screenings using direct reading instruments and/or professional judgment.

OEHSA- Deployment Activities
- Site interviews and reconnaissance.
- Update CSM.
- Screen exposure points.
- Finalize CSM.
- Rank hazards.
- Control acute hazards.
- Information management.
OEHSA - Additional Data Collection

- Prepare Occupational and Environmental Health (OEH) Sampling and Analysis Plan (SAP)
- Sample exposure points or points along CSM exposure pathways
- Monitor environmental conditions
- Improve characterization of population activities and exposures
- Sampling, analysis, and data generation
- Information Management

OEHSA - OEH Risk Assessment

- OEH data management is ongoing throughout the OEHSA process and across multiple deployments.
- Data management for a particular site begins with the OEHSA report.
- Continue to fill data gaps by executing the SAP and revise the SAP based on new information.

OEHSA - OEH Risk Assessment

- Perform health risk assessment
- Recommend/refine control measures
- Repeat phase II and III as necessary
- Information management
The current and subsequent reassessments are documented in the Defense Occupational and Environmental Health Readiness System (DOEHRS).

The comprehensive water, soil, and air samples collected are sent to certifying labs in Europe or the United States.

The data from the OEHSAs are then placed into DOEHRS.

A comprehensive report is then provided to the PM assets in a few weeks from Public Health Centers.

A preliminary report can be obtained in a few days through DOEHRS.

PM personnel provide area commanders with the data for risk mitigation for exposed personnel.

EMERGENCY RESPONDER HEALTH MONITORING AND SURVEILLANCE (ERHMS)
EMERGENCY RESPONDER HEALTH MONITORING AND SURVEILLANCE (ERHMS)

- The purpose is to monitor emergency responders and assets
- System screens the responders during all three phases of disaster response
  - pre-deployment, deployment, and post deployment.
- ERHMS ensures the monitoring the health and surveillance

ERHMS

- ERHMS was established because of lessons learned from 911 and other hazardous events where first responders responded.
- The ERHMS implements:
  1. Medical screening to ensure responders can effectively deploy to a response.
  2. Proper training and protective measures pertaining hazards that are anticipated.
  3. Tracking or roster of the responders in the area.
  4. Surveillance and monitoring for exposures.
  5. Out-processing assessments on completion.
  6. Follow-up health surveillance or monitoring for potential delayed adverse effects of the deployment.

Best Practices

- The ERHMS has the basis for a great plan; however it is missing a couple of key tools.
  1. OEHSA data base similar to DOE HRS
  2. PHAs and PDHA data base similar to MODS
  3. PWMS currently operated by CDC
- Benefits of having these data bases:
  1. Pre Determined Risk Mitigation
  2. Long term health care monitoring
  3. Historical data
  4. Preventive Health
Conclusion

- Lessons Learned
- Military Conflicts
- 9/11
- PHA and PDHA
- Health monitoring tools
- Historical data
- OEHSA
- Risk mitigation tool
- Historical data
- ERMS
- Medical and training screening enhancement
- Tracking tool of personnel and assessments

Best Practices

- PWMS

Questions

Resources

Resources