Emergency Responder Health Monitoring and Surveillance (ERHMS) and its Implementation during 2014 Ebola Response
Prior to an emergency event: which responders are “ready,” credentialed, and available to respond?

During an emergency event: who are the responders on-site, what are the exposures? How is their health?

Post-event: what did the responders do, how is their health now, what they were exposed to?

How do we document this information to ensure their health and safety later on......
ERHMS is a health monitoring and surveillance framework which addresses all phases of a response, including pre-deployment, deployment, and post-deployment.

The ultimate ERHMS goal is to prevent short- and long-term illness and injury in emergency responders.
Objectives

Participants in this training will:

1. Learn a **system** designed to capture **exposures** and **health data prior to and during an emergency response**

2. Learn about **organizing, sharing and communicating data from monitoring and assessing** emergent events and the health of responders

3. After a response, to use this data to **identify** responders who would benefit from **medical referral**, **long-term health surveillance**, or **need no follow-up**.
Origin of ERHMS

• Dr. John Howard, Director of NIOSH, and head of the World Trade Center Health Program, along with key NIOSH personnel, initiated a program to address health monitoring and surveillance of emergency responders.

• Wanted to learn from what happened with WTC workers
ERHMS Workgroup Members

- NIOSH (coordinator)
- National Response Team
- American Red Cross
- Army
- Center to Protect Workers’ Rights
- Coast Guard
- Dept of Homeland Security
- Env Protection Agency
- Fed Emerg Mngt Agency
- HHS, Asst Sec for Prep and Response
- InterAgency Board
- International Assoc of Firefighters
- Natl Inst for Env Health Sciences (NIEHS)
- Occupational Safety and Health Administration
- US Army Corps of Engineers
- State Health Depts: OR, CA
ERHMS Product

- NRT Technical Assistance Document
- Approved by the National Response Team (17 Federal agencies)
- Available at: ERHMS.nrt.org and www.cdc.gov/niosh/topics/erhms

The BEST thing about ERHMS is that it contains “TOOLS,” examples & forms that have been used in other events...
• Published March 2011
• For the first time, Responder Safety and Health is addressed as part of public health emergency preparedness (Capability 14)
• Capability 14: Responder Safety and Health
  – Function 1: Identify responder safety and health risks
  – Function 2: Identify safety and personal protective needs
  – Function 3: Coordinate with partners to facilitate risk-specific safety and health training
  – Function 4: Monitor responder safety and health actions
• There are also tasks under each function with links to resources.
• Full document available at: http://www.cdc.gov/phpr/capabilities/index.htm
Pre-deployment

• Medical screening that focuses on assessment of fitness and ability to safely and effectively deploy to a response
• Training regarding hazards to be anticipated and protective measures to mitigate them
• Approaches to centralized tracking and rostering of responders
Surveillance and monitoring for exposures and adverse health effects, including supporting efforts in environmental monitoring and assessment.
• Out-processing assessments on completion of response duties and deployments
Follow-up or long-term surveillance or monitoring for potential delayed or long-term adverse effects of the deployment experience.
  - CEU: 0.1

• WB2254: Emergency Responder Health Monitoring and Surveillance (ERHMS):
  http://cdc.train.org/DesktopModules/eLearning/CourseDetails/CourseDetailsForm.aspx?courseId=1045755
  - CME: 3.0
  - CNE: 2.9
  - CPE: 0.3
  - AAVSB/RACE: 3.5
  - CECH: 3.0
  - CEU: 0.3
Pre-existing Responder Readiness Program

• Pre-deployment
  – Medical clearance and vaccinations
  – Respirator fit testing
  – Deployment roles selection
  – Tiered training depending on type of role

• Deployment
  – Report injuries and illnesses to team lead
  – Exposure assessment and health monitoring and surveillance is focused on general public

• Post-deployment
  – After action
Early in Ebola Response

• First CDC responders came back with serious concerns about health and safety in West Africa

• 5 workgroups were formed and made health and safety recommendations
  – Pre-, During and Post-Deployment
  – Mental Health
  – Medevac

• Lead to creation of Deployment Risk Mitigation Unit (DRMU) to implement ERHMS
  – Analogous to ERHMS Unit
  – Pre-, During, and Post-Deployment Coordinators
  – Health communications to address stigma
  – Support Safety Officers in Liberia, Sierra Leone, and Guinea
• Mental health screening added
• Pre-deployment briefing: Health and safety
• Improved staffing process: matching CV’s to deployment roles
Improvements: In-country Safety Officers

- Personal safety and security
  - Interact with Regional Security Officer in-country
- Ebola risk assessments (Medevac)
- Injury and illness surveillance
- Food and water safety
- Vector/rodent control
- Lodging assessments
- Resiliency
- Accountability
Improvements:
Post-Deployment

• Post-deployment debriefs
  – Resiliency, Employee Assistance Program (EAP)
  – After action
  – Security
  – Team-specific

• Active monitoring
  – CDC did active fever monitoring for all deployed staff and reported to all states and territories
Summary

• ERHMS more fully implemented in CDC Ebola Response than ever before and these improvements are being made permanent
• Deployment Risk Mitigation Unit (DRMU) a model for others to use: pre-, during, and post-deployment coordinators
• Importance of Safety Officers and post-deployment debriefs
• Case study illustrates how to evaluate an existing program, identify gaps, and implement ERHMS
Renée Funk  
404-498-2499  
rfunk@cdc.gov  
Michael Heumann  
503-880-2226  
heumannhealth@gmail.com

Bruce Bernard  
513-841-4589  
bbernard@cdc.gov  
Katie Head  
724-452-7381  
kheadpa@aol.com

ERHMS Trainee Community:  
https://partner.cdc.gov/SiteDirectory/DECoP/default.aspx
Thank You!