Logistics for Rapid Disaster Research Response

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Enabling Public Health Research During Disasters
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Disaster Response System: Focus on the Event

Preparedness: Infrastructure, Resiliency, Baseline Health, Baseline Environment

Disaster: Acute care, Surveillance, Stabilize Critical Needs

Recovery: Long-term Health Needs, Rebuilding, Lingering Info Gaps, Contamination & data needs

Most incidents wholly managed locally

Small number require Federal support

State Governor must request Federal support
National Response Basics

• The Robert T. Stafford Disaster Relief and Emergency Assistance Act
  – Programs and processes by which the Federal Govt. provides disaster & emergency assistance to State and local Governments. “Declared major disaster or emergency”
  – The Stafford Act covers all hazards, including natural disasters and terrorist events.
  – DHS / FEMA Lead
  – *Example: Hurricane Katrina*

• National Oil & Hazardous Substances Pollution Contingency Plan (NCP)
  – Blueprint for responding to both oil spills and hazardous substance releases.
  – Promote overall coordination among the hierarchy of responders and plans.
  – EPA & Coast Guard Lead
  – *Example: Gulf Oil Spill*

EPA Superfund Emergency Responses
Emergency Support Functions (ESF)

- ESF #1 - Transportation
- ESF #2 - Communications
- ESF #3 - Public Works and Engineering
- ESF #4 - Firefighting
- ESF #5 - Emergency Management
- ESF #6 - Mass Care, Emerg. Assistance, Housing & Human Services
- ESF #7 - Logistics Management and Resource Support
- **ESF #8** - Public Health and Medical Services (HHS LEAD)
- ESF #9 - Search and Rescue
- **ESF #10** - Oil and Hazardous Materials Response (EPA Lead)
- ESF #11 - Agriculture and Natural Resources
- ESF #12 - Energy
- ESF #13 - Public Safety and Security
- ESF #14 - Long-Term Community Recovery
- ESF #15 - External Affairs
Worker Education and Training Program (WETP) was created in 1986 by the Superfund Amendments and Reauthorization Act of 1986 (SARA), Section 126(g).

SARA authorizes a competitive grants program for training in hazardous waste removal & containment, and emergency responses involving toxic substances.

WETP Emergency Support Activation Plan (ESAP) is built on the protocols of the Worker Safety and Health Annex of the National Response Framework (NRF).
Phases of Response: Impact on Safety

- Extending rescue extends risks for workers
- Chaotic, Risk-taking, Short, Frenetic for Rescue
- Planning, No risking lives, Longer than rescue, Paced for Recovery
- Normal cleanup, Risks assessed and understood for Clean-up

Keeping Workers Safe During Oil Spill Response and Cleanup Operations
Site Specific Training Development

- Input
- Output
- Outcome

Priorities
- Mission
- Local dynamics
- Mandates
- Resources
- Collaboration

Intended outcomes

Situation
- Site Characterization
- Hazard Assessment

Job Hazard Analysis

Curriculum identification/development

Training Delivery

Trained/Protected Worker

Continuous Evaluation, Reassessment, and Reinforcement
Site Specific Training Materials

- Hurricane Response Orientation
- Protecting Yourself While Helping Others
- Flood Response Orientation
- Protecting Yourself While Helping Others
- Awareness for Radiological Dispersion Device (RDD) Preparedness
- Protecting Yourself During a Dirty Bomb Response
- Avian Influenza: Worker Safety & Health Awareness for Responders to Wildfires
Environmental Contamination Concerns?
NIEHS Disaster Response to the World Trade Center

Supplemental funding to support WTC training response efforts:
- On-site training > 7,000 response workers
- Provision and fit-testing of respirators
- Worker exposure monitoring
- Responder training course
- Consultation on the site safety plan
NIEHS WETP Spring 2006 Technical Workshop

Learning from Disasters:
Katrina Response Safety and Health Training
Field Training for Vessels of Opportunity (VOO) workers in Venice, LA
DWH Worker Education & Training Response

- Training materials for workers developed with BP, NIOSH & OSHA
- 150,000 responders trained in short courses
- Over 35,000 guides distributed
- Front-line responders, instructors, and safety officials
- English, Spanish, & Vietnamese trainers deliver training
- Creation of responder rosters for subsequent long term research study
Lessons Learned Meeting in Mobile, Alabama

WETP Partners: awardees, federal partners, community-based organizations, workers and other stakeholders

- Surveys & group discussions to assess pre-incident & deployment training

- Goal: Improve training for future responses and large-scale clean-ups

-Example: training in appropriate language and literacy levels before deploying
• Coordinated with OSHA and other agencies to provide site hazard assessments and develop site specific training for workers conducting cleanup activities.

• Grantees provided in-classroom & site specific health & safety training to:
  – > 3000 cleanup workers
  – hundreds of hours of technical assistance, training, & briefings.

On-Site
Tail gate talks
Briefings
Assessments
Lessons: Improving Research During a Response

- Research group process outside of acute response structure
- Connections to the Incident Command Process
- Research should be “Ready to Go” with pre-trained responders
- Acute response should help provide foundation for research
  - Surveillance activities help provide information for research
  - Samples for later use critical to research
- Financial & logistical support
- Community & Academic involvement
- Health Care Connectivity
Thank you!