Disaster Preparedness Training
Lessons Learned and Preparing for
Climate Change

John S. Morawetz
International Chemical Workers Union
NIEHS Disaster Activity

**Goal:** Providing health & safety support and training to prevent injury, illness, and fatalities during cleanup and recovery.

- 9/11 World Trade Center
- Hurricane Katrina
- BP Oil Spill
- Super Storm Sandy
9/11

* Relatively small area
* Intentional act
* Primary exposure in days/weeks
* Work went on for months
* Primary work within a defined perimeter
Katrina

* Large area
* Category 4 Hurricane
* Failed levees
* Flooded city for 2 weeks
* Evacuated urban area
* Failure for weeks
BP Oil Spill

* Large area
* One complex hazardous substance
* Federal and BP response structures
Sandy

* Large area
* Super Storm
* Tidal Surge
* Intact large urban area
* History of 9/11- hazard awareness, volunteers
NIEHS Hurricane Booklet

National Institute of Environmental Health Sciences

Hurricane Response Orientation

Safety Awareness for Responders to Hurricanes:

Protecting Yourself While Helping Others

(FEMA/LJ RoI)
Peligro: Quemaduras solares

- Evite sobreexponer la piel y los ojos a la luz solar y al viento.
- Use loción antisolar y protección labial.
- Use gafas protectoras.
- Limite la exposición.

Las quemaduras solares no le permiten a la persona actuar con prontitud y aumentan la probabilidad de cáncer de la piel.
HướngĐẫnAnToànChoCôngNạnThuDọnSauCơnBão
BảoVệChínhMìnhkhíGiúpĐỗiNgườiKhác

WORKER EDUCATION & TRAINING PROGRAM
Hazard: Cold Stress (continued)

Workers Are at Increased Risk When...

- They have predisposing health conditions such as cardiovascular disease, diabetes, and hypertension.
- They take certain medication (check with your doctor, nurse, or pharmacy and ask if any medicines you are taking affect you while working in cold environments).
- They are in poor physical condition, have a poor diet, or are older.
Training

1) Very limited access to workers and volunteers

2) Explore any requests/opportunities for training

3) Assess hazards

4) Design curriculum: implement training

5) Build ties to any active organizations
Dover Beach, Tom’s River, NJ
March 2013

Extensive structural damage over wide area
Training

Opportunities for training
  NYCHA, AmeriCorps

Muck and Gut operations
  AmeriCorps, NY Cares, new organizations

Assess hazards
  Mold, Carbon Monoxide, Asbestos, Sewage
  Lead
  Demolition/Construction
Overall Assessment

Super Storm
  Flooding largely high tide/storm related

Significant overload of regional capacity
  Aid becomes political question

Diverse workforce for Muck and Gut
  Homeowners, volunteers, non profit, government

Volunteers
  Large intact urban area with history of 9/11
Mold Clean-up and Treatment Orientation

National Institute of Environmental Health Sciences
NIEHS Disaster Recovery

Health and Safety Essentials for Workers, Volunteers, and Homeowners

June 2013
Driving Hazard Awareness

Developed by HMTRI through cooperative agreement # 2 U45 ES006177-14 with NIEHS under the Worker Safety and Health Training Support Annex of the National Response Plan
Work Zone Safety

Developed by HMTRI through cooperative agreement # 2 U45 ES006177-14 with NIEHS

WORKER EDUCATION & TRAINING PROGRAM
March 2013
Gerritsen Beach, Brooklyn
AmeriCorps success story

- Adopted half face respirators with a P-100 cartridges
- 2 to 3 hour H&S training by NIEHS grantees
Work Practices for AmeriCorps workers

General awareness of many hazards
Inconsistent for Confined spaces, asbestos

Safety briefings

Half face respirators - no disposable masks
No medical evaluation, fit testing, filter change out questions
Muck and Gut Curriculum

NYCOSH, NJ WEC Factsheets
OSHA fatalities
Confined Spaces

Work and hazard photo slides
Two Small Group activities

Icebreaker - Awareness of Sandy hazards

Four factsheets – Mold, Asbestos, CO, Sewage

Common reference

NIEHS Hurricane Booklet

Resources developed - NIEHS Mold Booklet

Organizational ties – various responses
Respiratory protection

• No medical screening, fit testing, or training

Important to have volunteers to actually don and doff respirators they will be using
Other Organizations

Other funding
Future activities

Continue training – Muck and Gut, Mold AmeriCorps, volunteers

Train the Trainer Classes
Identify presenters of Safety briefings
Prepare for future disasters
Muck and Gut Trainer’s Guide

To be done
Fatalities
PPE
Respirators
Work slides
Confined Sp.

TRAINER'S GUIDE
Hurricane Sandy Recovery
Protecting Yourself While Mucking and Guttering
Mold Remediation Guidance

Trainer’s Resource
Prepare for next disaster and next hazard

Strengthen Infrastructure/Capacity

  Educational materials
  Staffing: staff, trainers
  Space/Office

100 year storm/flood?
  Climate change is normal
  One question is why?
NIEHS Flood Booklet

National Institute of Environmental Health Sciences
Flood Response Orientation

Safety Awareness for Responders to Floods:
Protecting Yourself While Helping Others
How to respond?

“Do you need assistance?”
   Is there an office we can work out of?

Outreach, outreach, outreach
   Mutual aid, build local organizations

Consistent material
   NIEHS booklets, local factsheets

Be flexible, listen
Epilogue: Next Storm or Flood? When? Where? Will we be better prepared?
Not a miracle: Plan, Equip and Practice