

Safety Training for Recovery Workers

The National Institute of Environmental Health Sciences (NIEHS) is part of the FEMA federal recovery mission.

If you are involved in employing hurricane clean-up and recovery workers, you may access health and safety technical and training resources from the National Institute of Environmental Health Sciences through its National Clearinghouse for Worker Safety and Health.

Click here to request training (<http://bit.ly/WTP-Florence-training-request-form>).

What are the needs?

Protection of clean-up and recovery workers is a legal requirement. Experience from previous disasters has proven the importance of protective programs and training.

Essential requirements include development of a health and safety plan (HASP), hazard assessment, and training. OSHA standards require a specific assessment for personal protective equipment (PPE) and respiratory protection. Once the hazards are determined, workers must be trained on how to avoid them and how to obtain, use, maintain, store and replace PPE.

It is essential that workers are trained to avoid exposure to toxins and hazardous materials such as asbestos, lead, raw sewage, fuel and flammable substances, diesel fumes and particulates, and mold if they are present at the site. If workers are cleaning up hazardous materials, more extensive training is needed because exposure to these materials can cause serious illness.

What resources are available?

NIEHS can provide a basic four-hour safety and health awareness training program for clean-up and recovery workers. A booklet, presentations, and trainers are available to deliver the program in both English and Spanish.

Upon request, representatives of NIEHS will meet with organizations to help identify needs and plan training. Below is a list of training that may be provided through NIEHS and its Clearinghouse:

1. Hurricane Site Specific Hazard Awareness
2. Mold Hazard Awareness and mitigation techniques
3. Respirator Protection Training
4. Workzone Safety
5. Asbestos and lead awareness
6. Defensive driving
7. HAZWOPER Operations and Refresher
8. OSHA 10 Construction
9. First Aid/CPR/AED
10. Violence in the Workplace

ATTENTION:
All organizations and employers
involved in deploying
hurricane clean-up and recovery workers
Health and safety technical and
training resources are available free of charge!

Many of the hurricane training materials and additional information about the Clearinghouse is available at the website: <http://tools.niehs.nih.gov/wetp/index.cfm?id=2472>

The basic booklet order form: <https://tools.niehs.nih.gov/wetp/booklets/index.cfm>

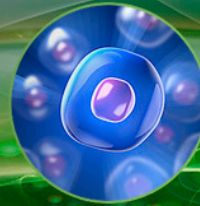
The National Clearinghouse for Worker Safety and Health Training supports the National Institute of Environmental Health Sciences' Worker Training Program (WTP). WTP has trained more than 2 million emergency responders and hazardous waste workers since 1987 to do their jobs safely. WTP is a part of the Department of Health and Human Services, which is a cooperating agency under the Worker Safety and Health Support Annex of the National Response Plan.



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National Institute of Environmental Health Sciences
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NIEHS Worker Training Program - Training and Response to Hurricane Harvey

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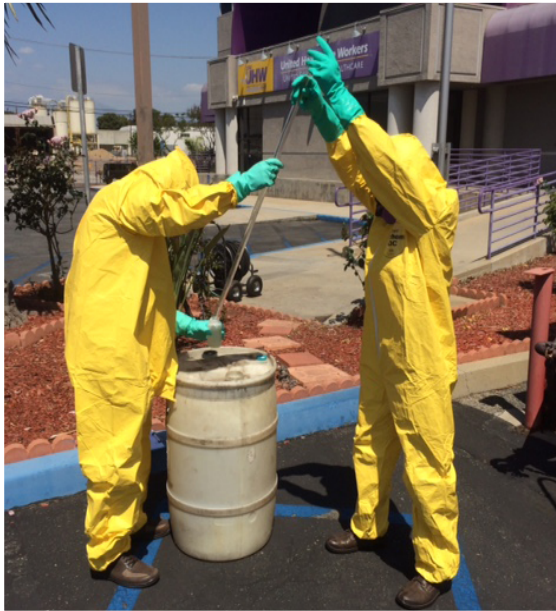
September 2018



NIEHS Worker Training Program (WTP) Mission

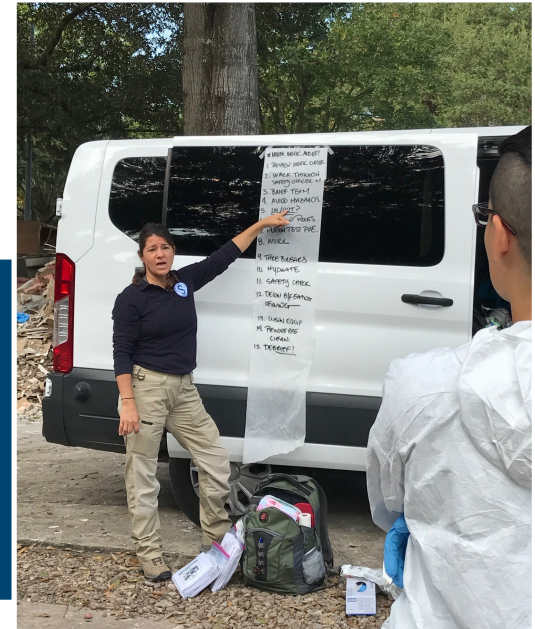
*Support the development of a **network of nonprofit organizations and universities** that are committed to **protecting workers and their communities** by **delivering high-quality, peer-reviewed safety and health curriculum** to target populations of **hazardous waste workers and emergency responders***

WTP: Dynamic, Responsive Health and Safety Training



Core,
fundamental
topics

Disaster
response &
recovery



New
hazards

Overview

- Background on the NIEHS WTP
- Previous Responses to Disasters and Events
- Hurricane Harvey Response
- Training Resources and Materials





Hazardous Materials Worker Health and Safety Training (U45)

Includes **three** programs: Hazardous Waste Worker Training Program; HazMat Disaster Preparedness Training Program, and the Environmental Career Training Program



NIEHS/Department of Energy Nuclear Worker Training (UH4)

Focuses on training workers engaged in environmental restoration, waste treatment, and emergency response activities at sites in the U.S. DOE nuclear weapons complex



SBIR E-learning for HazMat (R43/R44)

Focuses on development of e-learning products that support health and safety training of hazardous materials workers, emergency responders, and skilled support personnel



Biosafety & Infectious Disease Response Training (UH4)

WTP: Preparing workers since 1987

Increasing **worker safety and health** across the country

Trained approximately **3.8 million workers** since 1987

Helps **businesses and municipalities** meet worker training needs; helps keep worksites and communities safer

Increasing the country's capacity for **disaster preparedness and emergency response**

Trained thousands of workers in response to many of the worst **natural and manmade disasters** in the U.S., including:

- World Trade Centers
- Hurricanes Katrina, Sandy, Harvey, Irma, and Maria
- Deepwater Horizon Gulf Oil Spill
- Ebola/Biosafety Response

Providing a **job and life skills training program** to unemployed and underemployed individuals

Reached over **11,352 individuals** in 30 communities across U.S., with **average job placement rate of 70%**

Annual federal investment of **\$3.5M** generates a **\$100M return**

Hazardous Waste Worker Training Program (HWWTP)

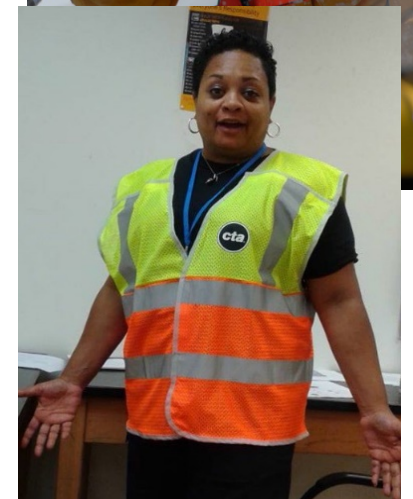
- **Since 1987**, the NIEHS WTP has trained workers in every state and territory – a total of **3.1 million workers training**
- **Annually** 110,000 to 172,000 workers trained since 2010
- **Where:** Training in all 50 states, Washington D.C, and U.S. territories
- In **2017**: 7,382 courses were held for 112,622 workers resulting in 1,057,864 contact hours of training



National Network
17 awardees/consortia
with 100 organizations
supported by HWWTP

WTP: Saving Lives, Preventing Injury Everyday

- The goal is the worker who comes home safely every day
- Workers trained across industries, including:
 - Firefighter and emergency medical technicians
 - Laborers and building trades workers
 - Law enforcement officers
 - Manufacturing employees
 - Healthcare employees (patient care and non-patient care)
 - Crane and bulldozer operators
 - Public utility employees
- Courses provide required, ongoing training for workers
 - Trained for safety around hazardous materials such as chemicals, asbestos, lead, and radiation
- Employment for workers at hazardous waste sites such as Superfund National Priorities List sites, and work for private and public employers who use hazardous materials



Natural Disaster Response



- Trained thousands of workers in response to many of the worst U.S. natural and man-made disasters:
 - World Trade Centers: Over 7,000 workers
 - Hurricane Katrina: Over 8,500 workers
 - Hurricane Sandy: Over 155,000 workers
 - Deepwater Horizon Gulf Oil Spill: Over 130,000 workers
 - Ebola Infectious Disease Response: Over 7,000 workers



HazMat Disaster Preparedness Training Program (HDPTP)

- Create materials and deliver training to prepare workers responding to local HazMat events and disasters
- Emphasize site-specific hazards
- Prepare a core of experienced workers for prevention and response to future disasters



Ron Snyder, PETE/Community College Consortium --Hurricane Harvey Toolbox training

13 awardees/consortia
supported by HDPTP

HDPTP in action: Preparing workers for safe response and clean-up

Since 2005,
130,000 workers have received disaster preparedness training

In 2017,
approximately **839 courses** were offered for **12,238 workers**

Past major responses:

- Hurricanes Harvey, Irma, Maria, Sandy, Rita, Katrina
- Wildfires in California
- World Trade Centers
- Flint water crisis
- Floods in Louisiana (2016)
- Deepwater Horizon Gulf Oil Spill



Where is your harness/tie off?
Houston Worker in 5th Ward at
Apt near Kashmere Center

HDPTP: A national resource in disaster preparedness and response

- **Wildfires and mudslides:** Training workers and volunteers to cleanup disaster debris and ash, with concerns for lead, asbestos, flammable liquids, and other hazards
- **Supporting local preparedness:** Providing emergency preparedness training in English and Spanish to residents living near refineries in Richmond, CA following recent refinery explosions
- **2017 Hurricanes:** Disaster safety training delivered in TX, FL, PR, and U.S. Virgin Islands in response to Hurricanes Harvey, Irma, and Maria



HDPTP: Success story



SERTs deploy to provide training for workers and communities in devastated areas



Deployed to Texas, Puerto Rico, and the U.S. Virgin Islands in response to Hurricanes Harvey, Irma, and Maria

Target populations:

- Community-based organizations
- Day laborers
- Homeowners
- Disaster volunteers
- University staff members and students

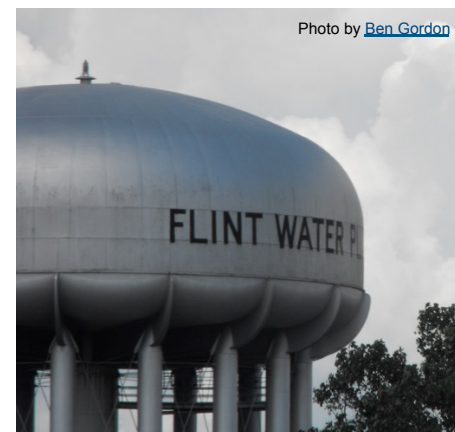
Training topics/courses:

- General disaster preparedness
- Mold awareness
- PPE
- Resiliency

WTP Network: National Resource During Emergencies

- **Past Responses:** World Trade Center, Hurricanes Katrina and Rita, Super Storm Sandy, the Gulf Oil Spill, 2016 Louisiana Floods, and Far West Wildfires.

- **Flint, MI Response:** Four grantees implemented lead awareness and safety training for workers preparing to replace pipes and other construction and plumbing needs, workers and volunteers distributing water testing kits, and other exposed workers.



- **Local Emergencies, Local Impact:** A training recipient at Blount Hospital in Marysville, Tennessee, received training through University of Tennessee (UT) (part of the grantee Midwest Consortium) and stated:

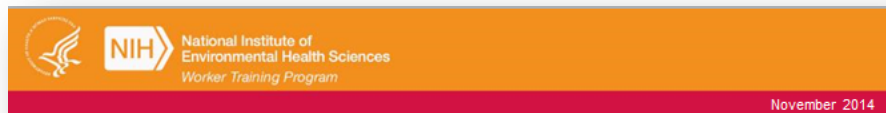
*“The training provided through UT greatly enhanced my leadership ability during a **recent train derailment and evacuation**. Our facility decontaminated over 80 patients. No staff members were exposed to the chemical, and we were able to keep the contaminants outside our buildings.”*

Learning from Disasters is Key in Preparing for Disasters

- Disaster Research Responder Project
- Engaging stakeholders through local disaster exercises:
 - Storm and flooding disaster, Boston, 2016
 - Hurricane disaster in Houston ship channel, Houston, 2015
 - Tsunami catastrophic event, Los Angeles, 2014



WTP Training Resources



Ebola Awareness Orientation

National Institute of Environmental Health Sciences
Flood Response Orientation

Safety Awareness for Responders to Floods:



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

WORKER EDUCATION & TRAINING PROGRAM



Providing Worker Health and Safety Training to Prepare for and Respond to Disasters

The National Institute of Environmental Health Sciences (NIEHS) Worker Training Program (WTP) has responded to numerous disasters in its 30-year history. It provides support for health and safety training of workers engaged in hazardous waste removal, containment, transportation, or emergency response on an ongoing basis. And it has played key roles in the recovery efforts following such major disasters as Hurricanes Sandy and Katrina.

Perhaps in no other disaster has the need to ensure recovery workers can safely deal with harmful substances been greater than in the aftermath of Hurricanes Harvey and Irma. From cleaning up chemical spills to hazardous waste removal, the need for training is substantial.

WTP grantees provide just-in-time awareness training through on-site training courses they build local capacity to workers and communities. WTP's National Clearinghouse for Worker Safety and Health Training provides training materials for disasters that can be used in a variety of ways.

For technical assistance WTP can provide

and safety training to worker and community instruction related to particular hazards, such as mold, and general hurricane and flood hazards. WTP also has curriculum-development experts, and subject-matter experts who can provide technical assistance to address the unique needs of specific populations and cultural and language needs and tasks.

For more information on the use of essential Personal Protective Equipment (PPE) and safety gear, including respirator-fit testing, contact the Clearinghouse. For more information on vulnerable worker populations, such as day laborers and migrant citizens, through community organizations, contact the Clearinghouse for resources for workers and responders.



Training Tools and Resources

WTP's National Clearinghouse has a wealth of training tools and pocket booklets that can be used in special courses or as guides by on-site frontline workers. Examples of topics covered include:

- Hurricanes
- Floods
- Chemical incidents
- Oil spills
- Mold cleanup
- Debris removal

A disaster preparedness mobile app puts a full suite of training courses at the fingertips of workers exposed to hazards. And the Clearinghouse *Hurricanes and Floods* website provides access to these resources.

A Track Record of Responses

For three decades, WTP has played a critical role in responses following disasters. In the aftermath of Hurricane Sandy, for example, it prepared and trained cleanup workers, homeowners, and volunteers on the hazards they faced working in debris removal, gutting, mucking, and mold remediation. Special mold guidelines and training were developed then. Nearly 1,000 people were trained through WTP awardees in just the first six months of its post-Sandy work.

Following Hurricane Katrina, WTP was designated as the coordinating agency for OSHA's health and safety response plan and set up a field office in Baton Rouge. Its hurricane response training booklet was developed during this period.

For more information, contact the National Clearinghouse at 202-331-7733 or wetpclear@niehs.nih.gov.

WTP Response to the 2017 Hurricane Season



Overview of NIEHS WTP 2017 Hurricane Response

Training needs
assessment,
implementation, and
long-term planning

Local capacity-
building

PPE cache

Key partnerships at
federal, state,
county, and local
level

Inclusion of
vulnerable
populations



NIEHS WTP 2017 Hurricane Response Activities

- Harvey: HHS Mission Assignment to do a training needs assessment
 - Staff, contractors, and trainers on the ground
 - Implementing Train-the-Trainer and worker/volunteer safety trainings
 - Coordinating with Federal Joint Field Office, State Public Health, Local Public Health, Non-Profits, and Foundations
- Irma and Maria: Similar Plans
 - Making connections at federal, state, and local levels
 - Planning for a Disaster Train-the-Trainer course in FL





FEMA

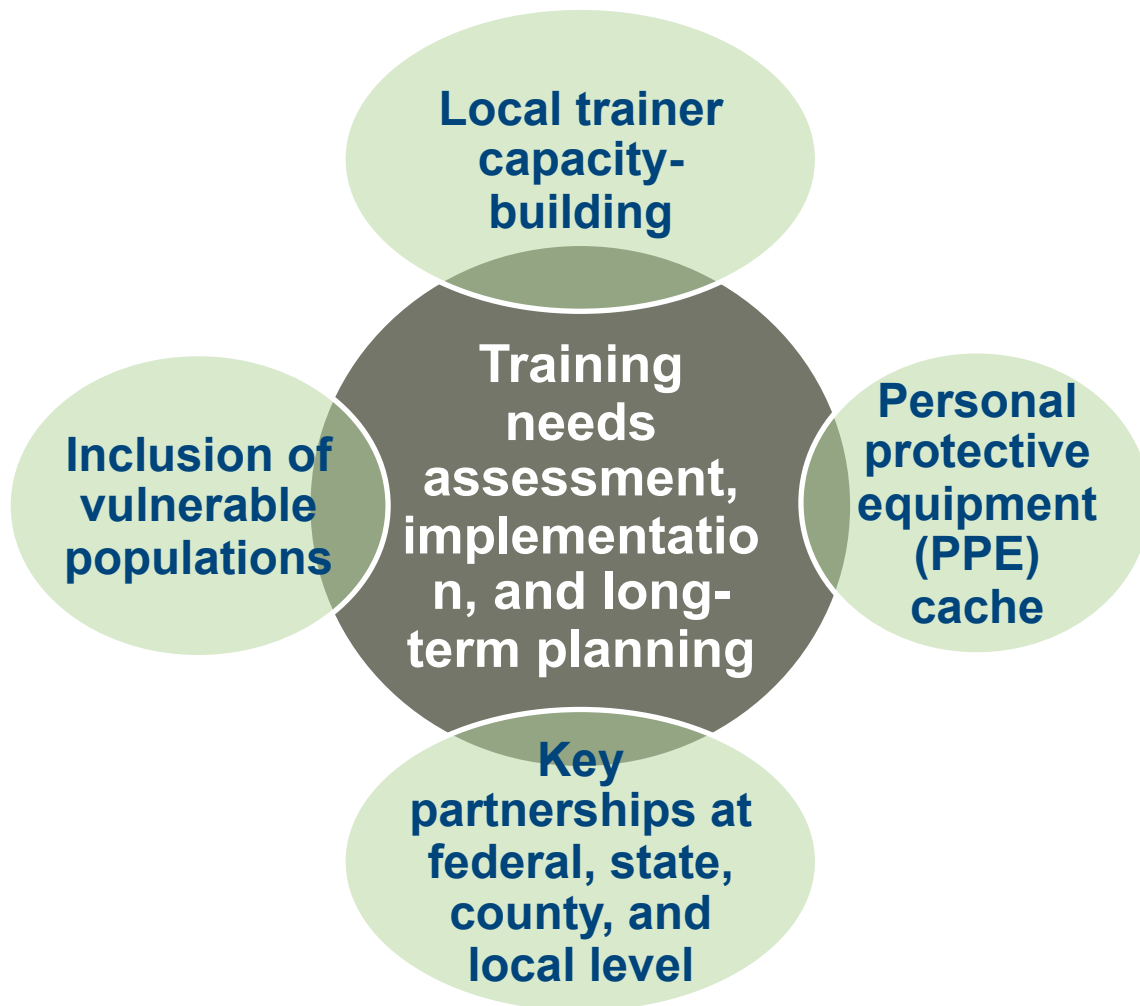


National Institutes
of Health

HOMEOWNER'S AND RENTER'S GUIDE TO MOLD CLEANUP AFTER DISASTERS



Overview of NIEHS WTP 2017 Hurricane Response



Training for AmeriCorps Volunteers after Hurricane Harvey in Houston, TX

Hurricane Harvey Deployment

- NIEHS Staff Rotation- Hughes, Remington, Wright and Beard
- NIEHS National Clearinghouse – Logistics and Support
- 6 NIEHS Grantees – ICWUC, PETE, UAW, Texas-Utah Consortium, TSU/HBCU Consortium and USW
- Local Partners –Fe Y Justicia Worker Center, TSU and Texas-Utah Consortium



Over 36,000 NIEHS Hurricane-Related Booklets have been ordered from the National Clearinghouse for Worker Safety and Health Training since August 23, 2017.

(as of 10/10/17)



Fe Y Justicia Bilingual Train-the-Trainer in Houston: *Training and PPE Ensemble*



Deployment and Training Activities for Hurricane Harvey- Safety and Resilience Training for AmeriCorps Volunteers at Houston Job Sites

Lisa Orloff, World Cares-NJ/
NY Consortium right, has
long experience

training volunteers to help
out after disasters, such as
these Americorps workers
in Houston.

Photo courtesy of Demia
Wright ([http://
worldcares.org/](http://worldcares.org/)) (WCC) -
MUCK and GUT Toolbox
training



Bilingual Disaster Train the Trainer Course

The bilingual Disaster Train-the-Trainer course in Houston, Texas was delivered by ICWUC in collaboration with Fe y Justicia on Sept. 13. (Photo courtesy of Demia Wright)





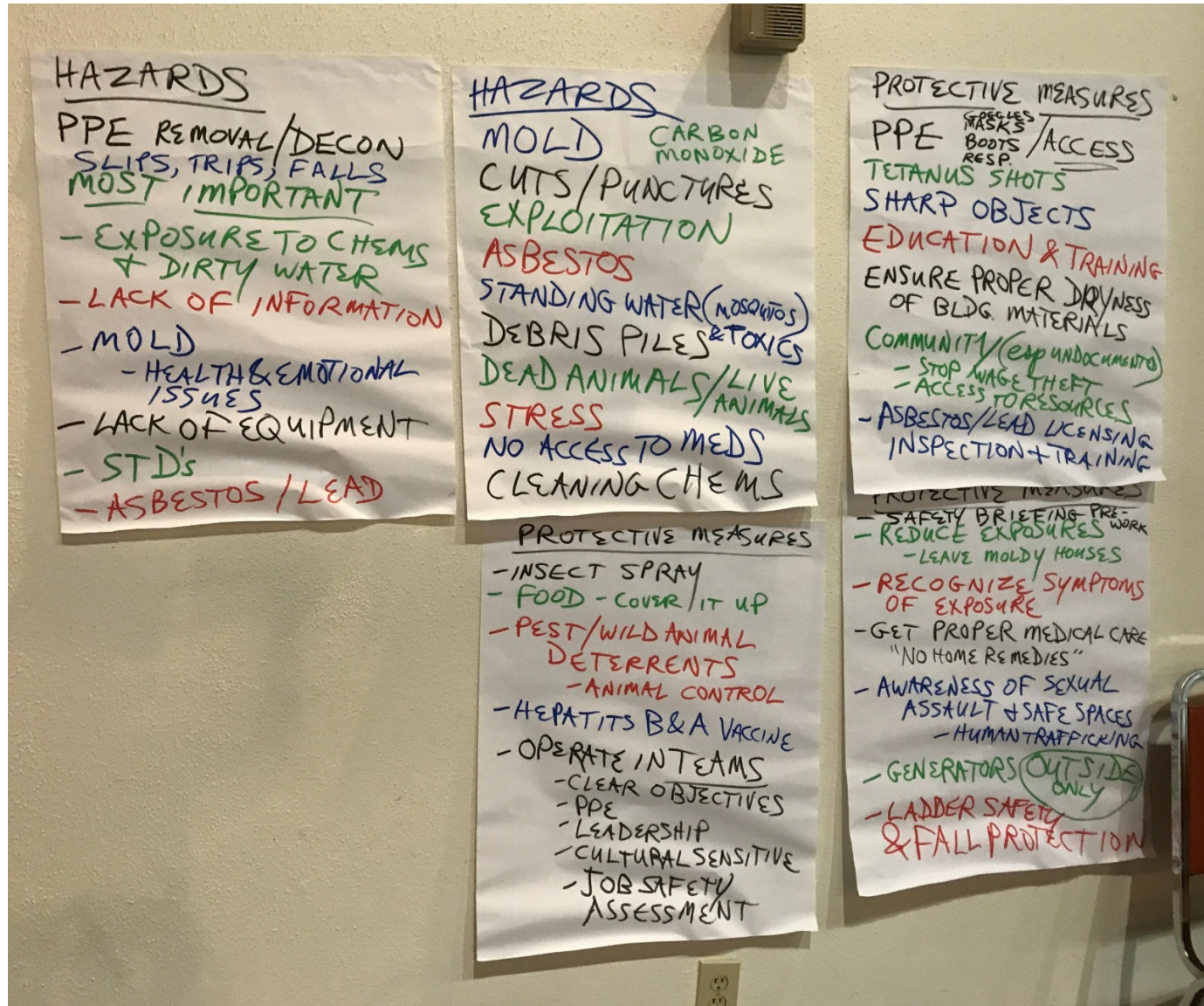
Debris lined up in Houston and the anything goes during disaster – hauling materials and goods when no enforcement occurs



Big shoutout to Fe y Justicia workers center in Houston, TX. Delivering safety training to the day laborers on the frontlines of the Harvey storm cleanup!!



Fe Y Justicia Bilingual Train-the- Trainer: Hazards and Protective Measures Identified



Safety Briefings and PPE Distribution at Houston-area Worker Corners



American Federation of Teachers (AFT) Packing Booklets and PPE for Teachers in Puerto Rico and U.S. Virgin Islands



“On behalf of our members and our officers, please know how much we appreciate your support and guidance in disaster response activities.”

– AFT Assistant Director, Department of Health, Safety and Well-being





NIEHS Diversity Supplements and Fellowships

- **Supplements Program Targeted to Special Populations**
- Principal investigators holding NIEHS research grants may request supplemental funds for a variety of programs targeted towards attracting targeted populations within the research workforce in the U.S. and internationally, and providing reentry opportunities to the research workforce.
- Supplement programs are used to offer laboratory experience to a wide array of individuals including high school students, science teachers, undergraduate students in health-related sciences, underrepresented minorities, persons with disabilities, scientists re-entering the work force after taking time off for family responsibilities, etc.
- NIH Loan Repayment Program

- NIEHS Worker Training Program
 - <http://www.niehs.nih.gov/careers/hazmat/index.cfm>
- National Clearinghouse for Worker Safety and Health Training
- - <https://tools.niehs.nih.gov/wetp/>
- Sharon D. Beard: beard1@niehs.nih.gov
- Chip Hughes: hughes3@niehs.nih.gov
- James “Jim” Remington: remingtonj@niehs.nih.gov



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Additional Assets of the NIEHS Worker Training Program

Ebola Biosafety and Infectious Disease Response

- 8 awardees for new 3-year program (2016 – 2019), training hospital employees, emergency first responders, transportation workers, and other worker populations with potential exposure.
 - \$10M transferred to NIEHS WTP via CDC using Ebola emergency supplemental appropriations
- As of March 31, 2017: Approximately 200 courses offered to over 3,700 participants, including hands-on operations training and trainer development courses.
- Highlights:
 - Training thousands of **healthcare providers and first responders** in awareness, operations, and trainer development to increase capacity to safely respond to an outbreak (*Most awardees*)
 - Collaborating with **Stericycle** for tailored curriculum and training on worker safety in medical waste handling (*Laborers' International Union of North America*)
 - Trainings for **U.S. Customs and Border Protection** in Raleigh, Albuquerque, and Norfolk (*Duke Univ.*)
 - Operations and trainer development courses for **Federal Prison staff** (*American Federation of Government Employees, through International Chemical Workers Union Council*)
 - Awareness training for over 200 **physicians and nurses from Exxon Mobile Occupational Health Service Units** across the country (*Indiana Univ. Bloomington*)





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Training for Native American Tribes

- FY16: WTP trained over 1,500 Native Americans through various grantees.
- Develops relevant and culturally appropriate training.
- Trains many rural tribal populations, providing:
 - Needed skills for workers and first responders.
 - Employment opportunities for the individual and larger community.
- Grantee: Alabama Fire College
 - FY16: trained members of 32 tribes, such as MS Band of Choctaw, Navajo, Yakama Nation, and Rosebud and Oglala Sioux
 - FY17 Supplemental funding allowing for 2 trainings of 40-hour Hazardous Waste Site Worker in remote areas, building capacity to assess and remediate actual or potentially contaminated tribal lands.



Recent training for Fort Peck Assiniboine and Sioux Tribes in Montana

ECWTP in action: Creating new job opportunities

- **Success:** Over 11,352 workers trained with an average 70% job placement rate with long term employment for workers.
- **Economic impact analysis:** \$100M return on \$3.5M investment
 - Increases probability of employment by approximately 59%
 - \$1.6M in higher earnings for graduates (from increased likelihood of employment, more hours worked, and higher wages)



What is CERT?

The Community Emergency Response Team (CERT) program helps train people to be better prepared to respond to emergency situations in their communities. When emergencies happen, CERT members can give critical support to first responders, provide immediate assistance to victims, and organize spontaneous volunteers at a disaster site. CERT members can also help with non-emergency projects that help improve the safety of the community.

