

Ensuring Worker Safety and Health in the Aftermath of Disasters

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The National Institute of Environmental Health Sciences (NIEHS) [Worker Training Program](#) (WTP) has responded to numerous extreme weather events, man-made and weather-related natural disasters, and public health emergencies throughout its 30-year history. WTP funds nonprofit organizations, or award recipients, to provide health and safety training for workers who may be exposed to hazardous materials and waste at work or while assisting with disaster or emergency response.

Since 1987, the program has supported the training of more than 5 million emergency responders and hazardous waste workers across the country. This training has played a critical role in response to a variety of natural and man-made disasters, as well as public health emergencies. This document provides an overview of the disaster preparedness and response activities completed by WTP, which includes WTP staff, contractors, award recipients, trainers, and subject matter experts.

Available Resources

The WTP [network](#) has thousands of health and safety trainers across the country. Many of these trainers are available to provide training to workers who will be called upon during or in the aftermath of a disaster or public health emergency. WTP award recipients, or organizations funded by WTP, provide a wide range of training to prepare workers for post-disaster cleanup and emergency response. Additionally, through train-the-trainer courses, award recipients help develop new trainers and build local capacity for workers and communities to provide disaster-specific and health and safety training in the future.

WTP's [National Clearinghouse for Worker Safety and Health Training](#) develops and maintains training materials for disasters and public health emergencies. Many of these materials can

*Photo
courtesy of WTP*

Our Role in Disaster Response and Recovery

Under the National Response Framework's Worker Safety and Health Support Annex, NIEHS can be tasked to provide the following:

- Technical assistance for training such as instructional staff, curriculum-development experts, subject matter experts, and professional staff.
- Assistance and support in the development and delivery of site-specific health and safety training through qualified instructional staff from WTP award recipient organizations.
- Safety training to worker target populations on the nature, location, and hazards related to the incident.
- Safety training to workers regarding mental health and stress, including recognizing signs and symptoms.
- Other assistance such as respirator fit-testing and distribution of personal protective equipment.

Similar tasks can be performed under the National Contingency Plan and the [National Disaster Recovery Framework](#). Over the years, WTP has been tasked to support the safety and health training of workers involved in disaster response and cleanup. Tasks have included creating a site-specific safety and health training curriculum; conducting training needs assessments; and deploying trainers to provide training to responders, cleanup workers, and volunteers.



be modified and tailored for immediate use by organizations. Resources available on the Clearinghouse website include:

- A [disaster preparedness mobile app](#) that puts a full suite of training courses at the fingertips of workers exposed to hazards.
- An [online catalog](#) of hazardous waste and emergency response training curricula produced by WTP award recipient organizations.
- Awareness-level training tools and pocket booklets that address a [variety of disasters and public health emergencies](#) (e.g., chemical and biological terrorism, earthquakes, hurricanes, infectious diseases, and wildfires).
- Links to disaster-related resources from the federal government and other agencies.
- Reports, guidance documents, and research articles on disaster-related topics.
- Tools available in multiple languages.¹

A Track Record of Responses

WTP has been a national leader in training workers to respond safely to man-made and natural disasters, and infectious disease outbreaks.

Man-Made Disasters

East Palestine Train Derailment (2023)

- WTP provided training to communities affected by the train derailment and subsequent fire and developed custom training programs and hazard recognition courses for rail workers.
- WTP developed guidance to inform cleanup workers about possible chemical exposures they may take home to their families.

Deepwater Horizon Oil Spill (2010)

- WTP provided resources, trainers, and subject matter experts and coordinated with the U.S. Department of Labor's Occupational Safety and Health Administration (OSHA) to develop an awareness-level [oil spill response training tool](#) and an oil spill response pocket booklet. WTP also provided training to approximately 150,000 cleanup workers.



Workers helping with cleanup following the Deepwater Horizon Oil Spill. (Photo courtesy of Deep South Center).

Terrorist Attacks (2001)

- WTP developed the official safety and health training for site workers involved in the [World Trade Center cleanup](#) and delivered that training to the thousands of workers who toiled at ground zero. WTP also worked with OSHA to produce its Disaster Site Worker course.
- WTP developed the first course to train remediation workers to safely cleanup the anthrax contamination created by the mailing of spore-laden letters.
- Learn more about WTP's awareness-level training materials on [chemical and biological terrorism](#) and [radiological dispersion devices](#) (dirty bombs) developed for skilled support personnel and other responders.

Disaster Resilience Training

With support from the U.S. Department of Health and Human Services' Substance Abuse and Mental Health Services Administration, WTP launched the Gulf Responder Resilience Training Project in 2012 to develop [mental health and resiliency training](#) for disaster-impacted communities. Training resources and materials developed under the program include:

- **Disaster Worker Resiliency Training:** Awareness-level training designed for disaster-impacted workers, including those working in disaster response, recovery, and rebuilding.
- **Disaster Supervisor Resiliency Training:** Awareness-level training for disaster supervisors, including managers, field coordinators, team leaders, and other personnel who supervise work or voluntary teams doing disaster rescue, recovery, or rebuilding work.
- **Disaster Care Provider Training:** Awareness-level training designed for community care centers, clinics, health care offices, hospitals, or disaster recovery centers.

¹ Resources are translated into different languages as funding is available, with many discussed in this document already available in Spanish and other languages. This work supports WTP's commitment to provide resources in a language that is relevant, suitable, and easy to understand for target audiences. This expands the program's reach and ensures that workers from various backgrounds and cultures are protected in the aftermath of disasters.

Weather-Related Natural Disasters

Los Angeles Wildfires (2025)

- WTP mobilized to provide training on wildfire smoke exposure prevention and proper use of respirators for workers who were being hired for cleanup and rebuilding after the fires.

Hurricane Helene (2024)

- WTP award recipients partnered with local organizations to deliver site-specific health and safety training to workers, volunteers, and residents in impacted areas.
- WTP offered assistance to western North Carolina residents by providing personal protective equipment, providing mental health and resiliency training, and informing people about how to protect themselves while assessing damage to their home or workplace.

Hurricanes Harvey, Irma, and Maria (2017)

- WTP provided technical training assistance—including site-specific health and safety training—to organizations employing hurricane response and recovery workers.
- WTP distributed hurricane response booklets to on-site workers and local organizations.



Resident looks at damage left by hurricane in Puerto Rico.
(Photo courtesy of WTP).

Debris removal: WTP developed a [debris removal training tool](#) and a [fact sheet](#) for small business owners, residents, and community and faith-based volunteer groups. These materials provide awareness-level information on post-disaster hazards associated with cleanup activities.

Hurricane Sandy (2012)

- WTP updated the hurricane response training tool and booklet to include cold weather hazards.
- WTP developed a mold remediation guidance document, as well as an awareness-level mold remediation training tool and a pocket booklet for workers, volunteers, and homeowners participating in hurricane response and cleanup activities.
- WTP supported training outreach coordinators in New York and New Jersey to make connections with target populations and provide training support.

Iowa Floods (2008)

- WTP developed a flood response safety awareness booklet that was distributed to emergency responders in Iowa.

California Wildfires (2007)

- WTP developed an [awareness-level training tool](#) highlighting the hazards workers face when responding to wildfires.



Fire in Mt. Baker-Snoqualmie Forest located in Washington State.
(Photo courtesy of Western Region Universities Consortium).

Hurricanes Katrina and Rita (2005)

- WTP deployed trainers to the Gulf region to conduct training needs assessments, develop site-specific training programs, and establish relationships with other federal agencies involved in the response.
- WTP developed an awareness-level hurricane response training tool and a hurricane response pocket booklet in multiple languages and provided safety training to 35,000 responders and cleanup workers.
- The program also established a Katrina field office to provide on-site support to award recipients and federal agencies.

Infectious Disease Response

- WTP has created a range of health and safety curricula and resources to protect workers during infectious disease outbreaks. For example:
 - WTP created [Ebola awareness- and operations-level training tools](#) for workers who may be at risk of exposure to the virus.
 - WTP developed an [H1N1 \(swine flu\) awareness-level training tool](#) for workers who may be exposed to the virus.
 - In collaboration with the U.S. Department of Agriculture's Animal and Plant Health Inspection Service, WTP developed an [avian influenza awareness-level training tool](#) for those who may be exposed to the virus.



Firefighters taking a HAZMAT operations course during a recent infectious disease outbreak. (Photo courtesy of International Association of Fire Fighters).

Pathogen safety data guide: WTP developed a [pathogen safety data guide](#) and [training module](#) for award recipients and other occupational safety and health groups involved in infectious disease response. The module includes a PowerPoint presentation, a participant worksheet, a glossary, four case studies, and an instructor guide.



First responders receive training on use of personal protective equipment. (Photo courtesy of Universidad Metropolitana).

Lessons Learned Workshops

The WTP network provides essential on-the-ground safety and health training in the aftermath of disasters, and their curricula are distributed to and used by organizations throughout the country. But what happens after the disaster? How can we use what we learned during response and recovery operations to improve future responses?

WTP understands the importance of learning from past disasters. The program holds semi-annual technical workshops that bring together program award recipients and other stakeholders to discuss current and emerging training issues, and to share best practices and lessons learned. Workshops cover a variety of topics, including chemical disaster preparedness, disaster cleanup, weather-related natural disasters, and infectious disease outbreaks. These workshops also provide a valuable opportunity for networking and collaboration.

For More Information

For more information about WTP's disaster response and preparedness efforts and program contacts, please visit the following pages:

- **NIEHS Worker Training Program**—https://www.niehs.nih.gov/careers/hazmat/about_wetp/index.cfm
- **NIEHS HAZMAT Disaster Preparedness Training Program**—https://www.niehs.nih.gov/careers/hazmat/training_program_areas/hdpt/index.cfm
- **NIEHS Worker Training Program Disaster Preparedness and Response**—<https://tools.niehs.nih.gov/wetp/index.cfm?id=556>
- **National Clearinghouse for Worker Safety and Health Training**—<https://tools.niehs.nih.gov/wetp/>