



Activities funded by the Disaster Relief Act, 2019

Summary of funding allocations through WTP grantee supplemental awards and contract mechanisms

January 2022

Overview

NIEHS Worker Training Program (WTP) received \$1 million from Public Law 116-20 - Additional Supplemental Appropriations for Disaster Relief Act, 2019. The funding supported the training of workers and communities affected by a variety of natural disasters. NIEHS WTP used the funding in two ways:

1. \$950,000 for training delivery grants
2. \$49,991 for contract support

A summary of these activities is below. Information about NIEHS WTP can be found using the following links:

NIEHS WTP: <https://niehs.nih.gov/wtp>

NIEHS WTP Disaster Preparedness and Response: <https://tools.niehs.nih.gov/wetp/index.cfm?id=556>

Grantee Training Summary

A total of seven grantee organizations received funds for training course delivery under the Disaster Relief Act of 2019. Six organizations were funded to complete work in the 2020 program year (August 1, 2019 – July 31, 2020), and three were funded to complete work in the 2021 program year (August 1, 2020 – May 31, 2021). Proposed training topics covered wildfires, floods, hurricanes, and typhoons (Table 1).

Table 1. Funded Grantee Organizations and Focus

Grantee Organization	Grant Number	WTP Program Year	Principal Investigator (PI) Name(s) All	Focus
Deep South Center for Environmental Justice and Texas Southern University/Historically Black Colleges and Universities Consortium	5U45ES010664-21S1	2020	Wright, Beverly/ Bullard, Robert	Floods in Texas and Louisiana
International Brotherhood of Teamsters	5U45ES014084-15S1, 5U45ES014084-16	2020, 2021	Byrd, Lamont	Wildfires in California; hurricane and flooding disaster response and resilience in the Gulf Coast
International Chemical Workers Union Council	5U45ES006162-28S1	2020	Glines-Allen, Shari	Hurricanes in Texas, North Carolina, and Florida
National Partnership for Environmental Technology Education/Community Colleges Consortium for Health and Safety Training	5U45ES019337-10S1	2020	Nash, William	Typhoons in Pacific Islands
University of California Los Angeles/Western Region Universities Consortium	5U45ES006173-28S1, 5U45ES006173-29	2020, 2021	Riley, Kevin	Wildfires in California
University of Minnesota/Midwest Consortium	ES006184-29	2021	Raynor, Peter	Flooding disaster response and resilience in the Midwest
University of Texas Health Science Center at Houston/Prevention, Preparedness, and Response Consortium	3U45ES019360-10S2	2020	Rios, Janelle	Flooding disaster response and preparedness in Public Health Regions 5 and 6

Training Delivery: Courses

Over the 2020 and 2021 program years (August 1, 2019 – May 31, 2021), 60 courses were delivered to 1,236 workers, with 6,558 contact hours (Figure A). These courses provided workers with increased knowledge and skills to help them safely respond to and cleanup after a disaster. For example:

- The highest number of workers were trained in **respiratory protection**. These courses were all delivered in California to support safety for workers responding to wildfires or those exposed to the smoke and ash as part of their jobs. Fact sheets in [English](#) and [Spanish](#) were provided to responders and the community to support this effort.
- Courses such as **Disaster Site Safety Awareness and Emergency Response Awareness** gave workers information on hazards to avoid and protect themselves at a disaster site following events such as hurricanes, flooding, and wildfires.
- **General Construction Safety** provided workers with a certification card for knowledge of safety at construction sites, which is important for cleanup and rebuilding after a disaster.
- **Mold and Mildew** classes helped workers address moisture damage with safe and proper cleanup after floods or hurricanes.
- **Superfund Site Worker** and **Hazardous Waste Operations** taught students how to safely handle hazardous waste, such as the waste remaining after a structure fire or hurricane.
- **Adult CPR** provided workers with increased knowledge about life-saving skills that can be used during a future disaster.
- **Training Methods/Trainer Development** instructed students how to become peer teachers, increasing the number of local trainers available to deliver disaster safety courses in the future.

Previous articles in the NIEHS Environmental Factor describe how these classes help workers and communities before and after [wildfire](#), [hurricane](#), and [flooding](#) events.

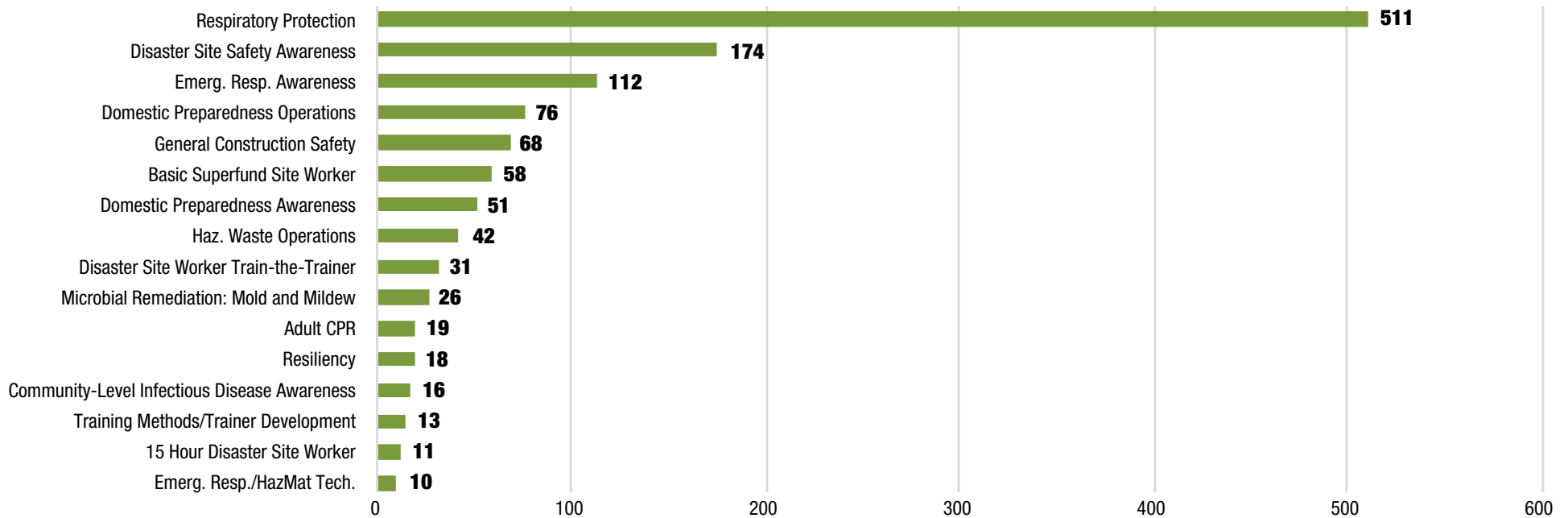


Figure A. Number of workers trained in NIEHS WTP courses through the Disaster Relief Act of 2019 (August 1, 2019 – May 31, 2021)

Training Delivery: Locations

The most workers were trained in **California** (640 workers in 27 courses). These courses were held in various locations throughout northern and southern parts of the state, including El Dorado, Los Angeles, Orange, and Riverside counties. Ten courses were delivered to 131 workers in Escambia County, **Florida**. Additionally, one course was given to nine workers in Rapides Parish, **Louisiana**; five courses were delivered to 116 workers in Terrebonne Parish, **Louisiana**; and four courses were delivered to 53 workers in Robeson County, **North Carolina**. Additionally, seven virtual courses were held for communities in various parts of the U.S., training an additional 242 workers.

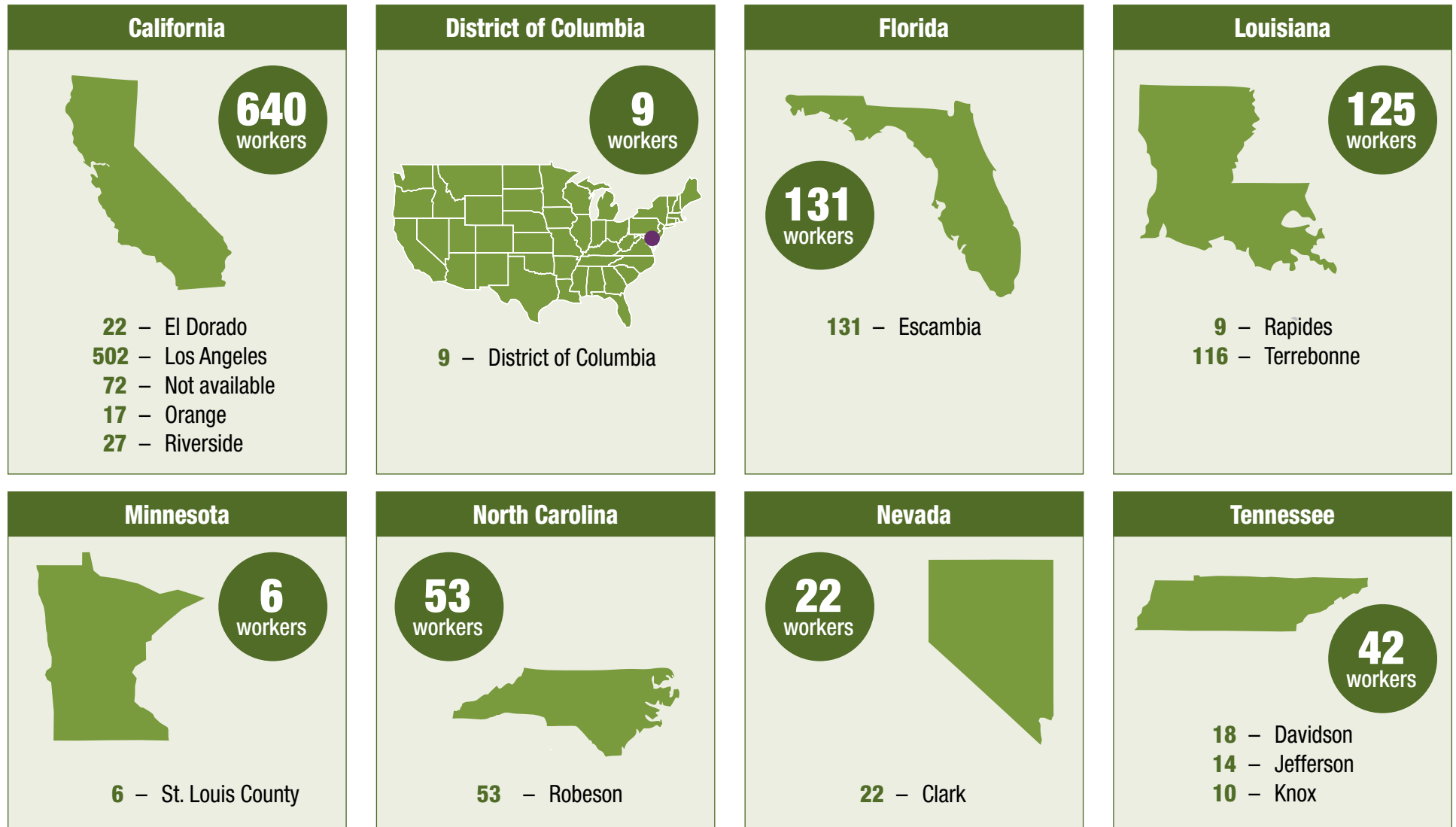


Figure B. Numbers of workers trained by location of course through the Disaster Relief Act of 2019 (August 1, 2019 – May 31, 2021)

Effects of COVID-19

While WTP grantees were able to deliver 35 health and safety courses in the 2020 program year, 27 of the 35 (77%) occurred prior to mid-March 2020, before stay-at-home orders were issued around the country due to COVID-19. COVID-19 travel restrictions, limits on in-person gatherings, building closures, and quarantine requirements led to a general decrease in grantees' ability to deliver training, particularly in-person training. Additionally, the immediate health and safety training needs of COVID-19 took priority for many worker populations. However, grantees delivered virtual, instructor-led training when appropriate for the content and worker population, or in-person training using appropriate safety measures. The training needs and challenges experienced by our grantees during the early months of COVID-19 are outlined in a [needs assessment report](#).

Overall, most grantees delivered less disaster training than planned, and two grantees were not able to deliver their intended training due to the need to travel to their intended populations. One grantee reported the inability to deliver many of their projected programs, with the effects of the pandemic accentuated by the need for the grantee's training organizations to establish relationships in locations where they had not previously delivered training. The ability to establish these new relationships in disaster-impacted areas has proven difficult due to COVID-19. In the 2021 program year, grantees reported on the course delivery method. Of the 24 courses, nine were in-person, 13 were synchronous online only, and the others used a combination of methods.

Under separate funding, NIEHS WTP partnered with the American Industrial Hygiene Association to develop "[Guidance to Protect Volunteers From COVID-19 During Natural Disaster Response and Recovery](#)," released November 2020. This guidance document, along with [other COVID-19 resources](#) developed by NIEHS WTP, supports the delivery of disaster training while still in the pandemic.

Grantee Summaries of Training Implemented and Planned, 2020 and 2021 Program Years

International Chemical Workers Union Council (ICWUC)

ICWUC trained 62 workers and community members in five courses for 704 contact hours. They delivered training with community organizations, primarily the Robeson County Disaster Recovery Committee in Lumberton, North Carolina where they had [previously conducted mold and hurricane train-the-trainer programs](#). Under the 2019 Disaster Relief Act funding, ICWUC staff taught an adult CPR/First Aid and an OSHA 10-hour General Construction Safety class. Additionally, trainers in Robeson County delivered two mold awareness classes. ICWUC's new partner, the American Federation of State, County, and Municipal Employees, conducted a Disaster Train-the-Trainer course in Louisiana.

University of California Los Angeles/Western Region Universities Consortium (WRUC)

WRUC trained 612 workers and community members in 24 courses for 559 contact hours. WRUC delivered courses through two of its consortium members.

University of California, Los Angeles Labor Occupational Safety and Health Program (UCLA-LOSH) as the lead consortium institution, engaged in several activities related to protecting workers from the danger of wildfire smoke.

- In the 2020 in program year, UCLA-LOSH prepared staff and community health *promotoras* from the Instituto de Educación Popular del Sur de California (IDEPSCA) to teach about wildfire smoke and the hazards of wildfire recovery work, using fact sheets in [English](#) and [Spanish](#). The staff and *promotoras* were then able to train domestic workers and day laborers at various hiring sites and food distribution events across the region, which led to a training for workers at the Pasadena Jobs Center in February 2020. This work continued during the 2021 program year as day laborers and domestic workers in Southern California were directly impacted by the September Bobcat Fire. Additionally, the August Complex Fire, Creek Fire, North Complex Fire, and other large wildfire events spread smoke, ash, and fine particulate matter that resulted in prolonged days of poor air quality throughout the state. UCLA-LOSH's partners IDEPSCA and the National Day Laborer Organizing Network responded to these events in August and September 2020 by providing educational materials and short tailgate-style trainings to day laborers and domestic workers. This helped them take adequate safety precautions for both wildfires and COVID-19.

- In the 2021 program year, UCLA-LOSH provided a Train-the-Trainer course in Spanish on hazards of wildfire smoke hazards for 12 additional health *promotoras* in Southern California. Course participants in turn provided direct awareness-level training to 52 workers and community members, and these course participants have continued to conduct outreach and education through various community forums. Training was conducted in partnership with Esperanza Community Housing (Los Angeles), IDEPSCA (Los Angeles), and Pueblo Unido CDC (Coachella Valley).
- UCLA-LOSH and the Mixteco Indigena Community Organizing Project (MICOP) delivered awareness courses in Ventura County, providing information about respirators and safety regulations to farmworkers affected by smoke and ash while working in the fields during massive wildland fires. UCLA-LOSH is working with partners to create educational materials for agricultural workers in multiple languages (Spanish, Mixteco, Purepecha, etc.).
- UCLA-LOSH's partnership with the Ventura Farmworker Resource Program and the University of California (UC) Davis led to the development of an infographic on COVID-19 in [English](#) and [Spanish](#) for agricultural workers. The tool has been adapted and distributed to workers in five counties to date, with a wallet-card version of the tool to follow.
- On April 7, 2021, UCLA-LOSH reached 149 participants of the [Environmental Justice and Natural Disasters training event](#) for the Western U.S.; training was sponsored by NIEHS and the Interagency Working Group on Environmental Justice. WRUC staff and partners presented during the main session of the training, while WRUC trainers facilitated two workshops on wildfire smoke hazards and general emergency preparedness (in Spanish) for a total of 18 participants. Training participants came from a variety of backgrounds including academic institutions, government agencies, community organizations, and labor unions.

One consortium member, the UC Berkeley Labor Occupational Health Program, had several meetings with staff from the California Office of Emergency Services (CalOES) and other stakeholders to establish partnerships in Butte and Lake Counties. They also conducted needs assessment interviews with the Hmong Cultural Center of Butte County, North Valley Community Foundation, and California Rural Legal Assistance. These activities were intended to inform plans and offer a regional workshop model for community and business organizations, jointly sponsored with CalOES. All planned activities were put on hold due to COVID-19.

Deep South Center for Environmental Justice (DSCEJ) and Texas Southern University (TSU)/Historically Black Colleges and Universities Consortium

DSCEJ-TSU trained 360 individuals in 17 courses for 1,782 contact hours. Training courses occurred in Terrebonne Parish, Louisiana and Escambia County, Florida. In Terrebonne Parish, four courses were delivered in Houma, Louisiana between February and May 2021. The courses taught disaster preparedness skills to more than 100 people with information shared to prepare participants for possible hurricanes and floods, especially during the hurricane season that begins June 1 annually. Individuals received training on how to prepare for a disaster and return safely to their businesses and homes after a disaster. Other information included proper handling of mold contaminated materials and how to wear personal protective equipment (PPE). Because of the compounded impacts experienced by residents and businesses due to disasters and COVID-19, training included disaster preparedness during a pandemic.

In Escambia County, training included community members from areas near Pensacola, including Santa Rosa County. The courses helped workers prepare for hurricanes and floods and the hazardous environments that follow during cleanup. The courses included emergency and disaster preparedness and hazardous materials safety.

Outreach was performed in Escambia and Santa Rosa counties in Florida, as well as Terrebonne Parish, Louisiana and Mobile County, Alabama. DSCEJ partnerships with faith-based organizations and community leaders in Escambia and Santa Rosa Counties and Terrebone Parish helped facilitate outreach efforts. These partnerships also allow DSCEJ to better address training needs and quickly and efficiently serve communities and small businesses, especially after a disaster.

International Brotherhood of Teamsters (IBT)

In the 2020 program year, IBT delivered nine courses to 154 workers with 3,219 contact hours. The training included three 40-Hour Hazardous Waste Operations and Emergency Response (HAZWOPER) courses that trained workers involved in cleanup operations in response to the Mendocino, Carr, and Camp wildfires in California. The training allowed workers to gain employment on wildfire recovery operations and provided them with necessary skills to assist with future disaster response in the area.

A follow-up survey conducted by IBT found that many of the students were able to obtain temporary and permanent work in the hazardous materials field. One student stated, *“These classes are a blessing in helping people to obtain knowledge and certifications to obtain a new career field or to expand what they might already be doing, while improving their lives. I have referred a good number of people to these classes and they were always grateful for the new learning opportunities through these training classes.”*

In the 2021 program year, IBT delivered a Disaster Response and Recovery Train-The-Trainer program to shop stewards, business agents, and other union officials affiliated with the Teamster Local Unions who will in turn deliver training to both Teamster members and other residents in the Gulf Coast region. Many of the participants who attended Train-the-Trainer were from areas affected by disasters including Hurricane Michael in Florida and Alabama, Hurricane Florence in North Carolina, and flooding in Nebraska.

Midwest Consortium for Hazardous Waste Worker Training (MWC)

MWC delivered five courses to 48 participants with 294 contact hours. MWC is based out of the University of Minnesota and has several consortium members. Three groups reported the following activities:

- University of Minnesota (UM): In February and May 2021, the UM training center provided two 16-hour Mold Remediation training programs to St. Louis County, Minnesota residents and workers. Trainees included Duluth Area Schools District employees, University of Minnesota Extension employees, and personnel from the U.S. Environmental Protection Agency based in St. Louis County. There is a need for more and longer-term training on flood response and recovery and home water mitigation due to climate change effects experienced in this region.
- University of Tennessee (UT): To support the development of UT’s disaster resiliency program materials, two pilot programs were delivered under the disaster supplement with an approximate class size of 12 students per program. Overall student satisfaction was high. Topics of particular interest included the Federal Emergency Management Agency Building Marking System, electrical safety, and water safety.
- Fisk University: In March 2021, Fisk conducted a breakout session on Family and Community Emergency Preparedness for the Environmental Justice and Natural Disasters training event for Coastal Communities in the Southeast U.S., sponsored by NIEHS and the Interagency Working Group on Environmental Justice.

National Partnership for Environmental Technology Education (PETE)/Community Colleges Consortium for Health and Safety Training (CCCHST)

PETE/CCCHST was scheduled to deliver courses at Guam Community College in March 2020 and planned on sending three instructors from their Disaster Preparedness Instructor Institute to disaster relief sites. This would have given the instructors up to one week of hands-on experience at a response site. Due to COVID-19 travel restrictions, building closures, and quarantine requirements, all activities were postponed until COVID-19 restrictions are lifted.

University of Texas Health Science Center at Houston/Prevention, Preparedness, and Response (P2R) Consortium

The P2R Consortium was funded to deliver training across several sites: counties in Texas, Arkansas, Ohio, Minnesota, and Oklahoma; parishes in Louisiana; and the Navajo Nation Reservation in Arizona. Training was proposed for two topics: 1) Selection and use of PPE among workers and volunteers who respond to disasters; and 2) Emergency management planning for laboratories and facilities where hazardous materials are stored. This supplemental grant began in June 2020 and was immediately affected by COVID-19 related travel restrictions and PPE shortages. The Consortium has been unable to deliver in-person training in the proposed counties or deliver PPE-based response kits but planning for future activities is underway.

Contract Support Summary

To support the work on disasters, \$49,991 was awarded as part of the WTP Technical Support for the COVID-19 Pandemic Disaster Response in Disadvantaged Communities and Disaster Response Coordination Center. The primary task under the 2019 Disaster Relief Act funding was the development and implementation of [Environmental Justice \(EJ\) and Natural Disasters Virtual Town Hall Meetings \(Southeast, Gulf Coast, and West and Southwest\)](#). These were coordinated with the Interagency Federal Working Group on Environmental Justice. The contractor provided administrative support for the planning and coordination of three virtual town hall meetings. The town halls assisted NIEHS WTP in gaining a better understanding of how natural disasters and COVID-19 impact minority, low-income, overburdened, and underserved communities, and how the federal government can support these communities to better prepare and respond to their needs before, during, and after natural disasters. The sessions gathered lessons learned and best practices from on the ground voices, as well as action steps which the federal government can work on to better assist overburdened and underserved communities.

Town hall meetings had real-time translation in English and Spanish for all participants. The virtual town halls were on the following dates:

- **Southeast Town Hall Meeting** (Florida, Georgia, Carolinas, Caribbean Basin (including Puerto Rico)), **January 27, 2021**
Theme: Hurricanes, Major Floods, Tornadoes, and Earthquakes amidst COVID-19 and Impacts of Natural Disasters on Farm Workers
- **Gulf Coast Town Hall Meeting** (Texas, Louisiana, Mississippi), **February 24, 2021**
Theme: Hurricanes and Major Floods amidst COVID-19
- **West and Southwest Meeting** (California, Arizona, New Mexico), **March 31, 2021**
Theme: Impacts of Wildfires and COVID-19 on EJ Communities

Summaries of each town hall are available below. A full report will be available early 2022.

Southeast Region and Caribbean Basin

A total of 163 people attended. Some of the key discussion points included:

- The federal government needs to reach out to the community, and not wait for the community to reach out to them.
- The federal government must properly and effectively communicate with communities as many distrust the government.
- The federal government needs to engage with communities and provide information on how to access training and resources.
- Communities should be involved in all emergency response exercises and be trained on the incident command system. Communities should also understand the processes that take place after a disaster, such as evacuating and locating shelters.
- Nonprofit organizations, faith-based organizations, private sectors, and small businesses should be involved in the emergency management planning process.
- Response should be localized as local companies and businesses understand their community, know where the resources are, and how to best respond to emergencies.
- Funding must be made easily available to those who need it the most.

Gulf Coast Region

A total of 157 people attended. Some of the key discussion points included:

- Injustices confronting color and class are still very real and prevalent factors in our society and our governments need to be educated on environmental justice.
- The federal government should focus on prevention by looking at our environmental housing and health policies.
- The federal government should listen to and partner with frontline, grassroots, and faith-based communities and engage in periodic, strategic disaster response planning and training with community stakeholders.
- Funding needs to be distributed and tailored to environmental justice communities, and the creation of grants for building local infrastructure.
- There is a need to formalize disaster preparation into risk management plans so that it is not an afterthought.

West, Southwest, Rocky Mountains, and Plains Regions

A total of 180 people attended. Some of the key discussion points included:

- Government agencies should be equal partners with community groups to understand the unique issues from each community and invest in community organizations before disasters hit to build capacity and relationships. Preparedness should be done before all disasters.
- Neighborhood level mapping and vulnerability assessments for those neighborhoods (block-by-block) is key to understanding local issues and existing resources. Work with academia to use tools such as mapping programs to understand specific needs for each community.
- Consider methods used to capture and disseminate information, taking into consideration language, delivery methods, etc. A clear pathway for communication should be established.
- Create a central hub where all preparedness, response, and recovery information can live — especially in communities that need it the most.
- There is a need for more trainings and resources for vulnerable communities.
- Revisit evacuation plans and have communities involved in developing disaster plans to make sure they are feasible for vulnerable communities.
- There is a need to empower communities to help them recover after disasters.
- Mental health is a major issue for community members. Consider creating “safe spaces” for people to talk about issues they face and how to support each other with respect and mindfulness.