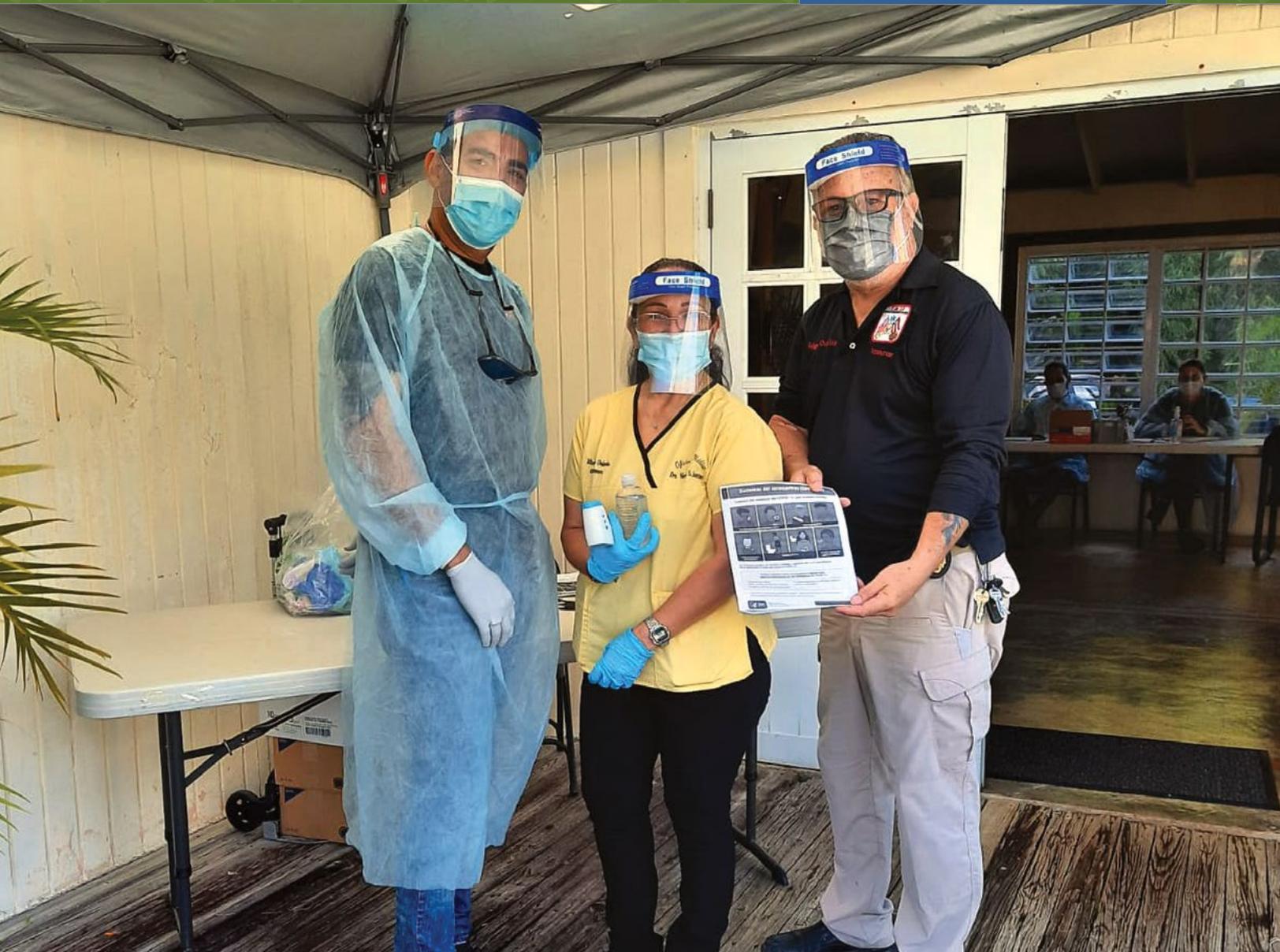




National Institute of  
Environmental Health Sciences  
*Worker Training Program*

# Evaluation of NIEHS Worker Training Program COVID-19 Activities

December 2021



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The COVID-19 pandemic presented new challenges for United States (U.S.) workers and occupational health and safety standards. The National Institute of Environmental Health Sciences (NIEHS) Worker Training Program (WTP) leveraged Congressional funds to develop COVID-19 training tools and resources, provide funding to nonprofit organizations, and provide both technical and collaborative support.

**This document summarizes the evaluation of WTP's grant-funded COVID-19 activities, including data from training courses, progress reports, survey findings, and focus groups. The activities discussed were funded by WTP primary grants under all training program areas and supplemental grants funded under the Coronavirus Preparedness and Response Supplemental Appropriations Act, 2020. Further background is available at the end of this document.**

**On the cover:** Covid-19 training activities in Puerto Rico. Photo courtesy of Sustainable Workplace Alliance

## Evaluation Findings

### **NIEHS WTP support and resources provided grantees with the necessary tools to deliver trainings during the COVID-19 pandemic**

The evaluation demonstrated that NIEHS-developed resources and funding were helpful to grantees in delivering much needed occupational health and safety training during COVID-19, even in the early days of the pandemic.

Survey results showed that 97% or more of respondents strongly agreed or agreed that:

- NIEHS WTP developed helpful resources for our organization's COVID-19 training programs (100%).
- Funding from NIEHS WTP helped increase our program or consortium's ability to train during the COVID-19 pandemic (97.1%).

Grantees began delivering courses about COVID-19 as early as Jan. 30, 2020, and then rapidly trained 34,741 workers in 1,004 courses focused on COVID-19 through either July or August 2020, depending on training program.



Essential worker COVID-19 training activities in Chicago, Illinois.  
Photo courtesy of OAI, Inc.

### Top Courses by Number of Workers Trained, Jan-Aug 2020, all WTP funding sources

**13,814** Infectious Disease Awareness

**10,977** Community-level Infectious Disease Awareness

**3,951** Hazardous Waste Operations Awareness

**1,782** Infectious Disease Operations

**1,537** Infection Control Risk Assessment

**2,680** Other Courses\*

\* “Other courses” included various occupational safety and health topics related to protecting workers from COVID-19 and instructor development, such as resiliency, airborne transmission standard, general construction or industry safety, personal protective equipment, emergency response, and train-the-trainer.

The focus groups supported the grantee survey findings. Participants described how useful the COVID-19 curriculum, webinars, and national calls had been for their organization or consortium. Some participants mentioned how partnerships were developed and helpful in responding to COVID-19 and how NIEHS supported these partnerships through webinars and national grantee calls.

“I also think it was helpful that NIEHS did these national calls about this when it was first starting up and we were all first at home, it gave us access to a national network of people to see what was going on and what was the new guidance that was coming out.”

## Evaluation Data Sources

Evaluators collected and analyzed qualitative and quantitative data to inform the evaluation process, across *WTP training programs*. Data came from a variety of sources, including:



### Training Course Data:

Grantees submit data on each course delivered. For this evaluation, the data were analyzed from the 2020 program year (August 2019 – July or August 2020, depending on training program).



### WTP Progress Reports:

Grantees submit these reports that describe training activities and accomplishments under WTP training programs. An evaluator reviewed progress reports and identified common themes for each metric by comparing findings across grantees. For this evaluation, the reports were analyzed from the 2020 program year (August 2019 – July or August 2020).



**Focus Groups:** Six focus groups were held over Zoom for one hour each. Participants included grant leadership, staff, and partners. (n=26 participants, March – April 2021)



**Grantee Survey:** An evaluator emailed a survey link to all grantee program investigators who were asked to share the survey for a snowball sampling. Participants included grant leadership, staff, and partners. (n=36 respondents, March – April 2021)

“Because of the training we were doing and getting these testing sites up and going, that increased the capacity for the COVID-19 testing in our communities and really throughout Alabama. If we did not have this consortium available, we would not have had the expertise to do that and to do that really quickly, we were able to contribute to that.”

**Grantees trained a large variety of sectors, adapted their curricula as needed, and worked to ensure vulnerable populations were reached**

The shift to virtual trainings and outreach provided grantees with more access to difficult-to-reach populations. Additionally, grantees were able to broaden their reach to workforces and industries outside their typical participant population. For many grantees this was the most rewarding aspect of shifting to virtual platforms during the pandemic.



COVID-19 educational outreach in a Texas community. Photo courtesy of National Day Laborer Organizing Network.

# Occupations Trained

-  Airline/airport workers
-  Construction workers
-  Disaster and Community Volunteers/workers
-  First responders/emergency medical service
-  Healthcare workers
-  Teachers/students
-  Food service workers
-  Agriculture workers
-  Nail salon worker
-  Laboratory workers
-  Maintenance professionals
-  Waste Haulers

Other occupations trained were, painters, attorneys, maritime workers, transport workers, oil and gas workers, parks and recreation workers, wastewater treatment workers, day laborers, casino workers, management and supervisors, and acupuncturists.

Survey results showed that 91% or more of respondents strongly agreed or agreed that:

- Our NIEHS-funded program or consortium provided COVID-19 outreach programs (such as developing informational videos or factsheets) in addition to training courses (91.4%).
- Our NIEHS-funded program or consortium trained essential workers and populations with high-risk of exposure to COVID-19 (97.1%).



Example slide, “Are these safeguards safe?”, from the NIEHS Building Programs to Protect Workers from COVID-19 in the Workplace resource tool, adapted for Spanish language, 2021.

Grantees adapted to the COVID-19 pandemic in several ways that included, practicing infection control and prevention measures, utilizing existing WTP materials, and expanding outreach to vulnerable populations including Spanish-speaking workers and American Indians and Alaskan Natives.

Also, grantees expanded learning tools by incorporating content into various formats such as YouTube, virtual learning platforms, and podcasts.

In focus groups, participants mentioned how they were able to reach vulnerable and difficult-to-reach populations through in-person and virtual platforms.

“We were able to push for language equity through our outreach to immigrant and refugee populations offering classes in Spanish, Vietnamese, Chinese, Polish, and Arabic.”

“Not only being able to reach our members, through this virtual challenge, but also being able to reach many more folks than we normally do. Folks who may not have had the opportunity in the past has been an accomplishment for us.”

### **Grantees’ perspectives indicate NIEHS WTP COVID-19 resources had positive impact for their consortium and helped support changes in workplace policies, plans, and programs.**

Grantees discussed some outcomes, such as infection control policies developed for in-person training, increased organizational capacity for delivering infectious disease training, and putting an infection control plan into place. However, not enough time had passed to fully assess impact, particularly in the review of progress reports. Impact findings will be updated with the review of 2021 progress reports.

“We developed a set of recommendations for training centers to adopt as they plan to re-open. The purpose of the plan is to outline the steps that every training center employee and trainee can take to reduce the risk of exposure to COVID-19.”

“One of the questions we ask is did you take the training and apply it to the jobsite, and we were able to get responses that show workers were using the information on the jobsite. When I go back and read this 13 months later, I got to remember we were doing this in March-April when we were asking things if you even have hand sanitizer and hand washing stations on site. We were happy to see workers 6-months later, supervisors were making that available on site.”



In-person training at a firehouse in Mahwah, New Jersey with social distancing and respiratory protection. Photo courtesy of International Association of Firefighters

Survey results showed that 97% or more of respondents strongly agreed or agreed that:

- Our NIEHS-funded program or consortium, contributed to changes in workplace infection control policies, plans, and programs.

**NIEHS WTP grantees prepared trainers to deliver courses on infectious disease health and safety and integrated infectious disease training into other courses, creating a network even more ready for the next infectious disease event or pandemic**

Trainers across the country were able to deliver courses on COVID-19 from the beginning of the pandemic. Some grantees built on prior infectious disease programs to inform their COVID-19 actions and quickly adjust curricula for COVID-19. Other grantees quickly developed infectious disease trainers using curricula and expertise that

were available from NIEHS and the grantee community generally. The prevention of occupational exposure to infectious disease is now a topic available for all grantees to add into courses when needed.

Survey results showed that 97% or more of respondents strongly agreed or agreed that:

- Our NIEHS-funded program or consortium prepared instructors to deliver COVID-19 training programs (100%).
- Our NIEHS-funded program or consortium integrated infectious disease training into broader curricula (e.g., HAZWOPER or OSHA courses) (97.1%).



[One consortium member] carried out Train-the-Trainer sessions for organizations across the U.S., using materials and information adapted from the NIEHS COVID-19 training program. Organizations were then able to disseminate the information through workshops, social media platforms, Zoom, outreach on corners, and emergency response work in the community.

“We were able to go in and do a lot of this personal protective training, the donning and doffing, able to take that Ebola checklist we had created for donning and doffing, and able to adjust that and train on that and really helped increase worker confidence in healthcare at that time.”

“Over the years the funding we received has been able to develop a cadre of instructors, and the different types of disasters over the years has enabled us to come up with core curricula that could be customized to different types of disasters. And the other infectious disease training developed over the years has been the framework for what we developed this year, including the previous Ebola training. As you develop training it scaffolds, and that has been an important lesson over the years.”

“The fact that this infrastructure was in place was amazingly helpful. If that had not been there, there was no way to pull it that quickly. We were able to pull it together quickly. Not because we were ready, but because the larger picture of grantees was ready.”

“What we tried to do was embed our COVID-19 presentation in anything we could, haz-waste refreshers, to put in any kind of training. To find that 45 minutes to put it in there.”

# Recommendations

Based on findings, the following set of recommendations may improve NIEHS WTP COVID-19 response and prepare NIEHS WTP for other occupational safety and health training and future disasters or pandemics.

## Recommendations from COVID-19 Training Program evaluation results

Issue	Recommendation
<b>Training Delivery and Support</b>	
<b>COVID-19 program</b>	COVID-19 and infectious disease training program and materials should continue to be used, updated, and incorporated into a sustained training program to protect workers from occupational exposure to infectious diseases.
<b>Infectious disease training program</b>	Based on experiences of Ebola and COVID-19, identify sustained funding for infectious disease preparedness and response.
<b>Virtual learning</b>	Continue to dedicate program resources to assist instructors on the use of synchronous training platforms, incorporating interactive sessions, identifying ways to use technology in a virtual classroom, and use of hybrid training models.
<b>Vulnerable and High-risk Populations</b>	Continue to focus on providing training and education to vulnerable populations. For American Indians and Alaska Natives, organize discussion with those populations' leadership on how to better provide training during times of social distancing and disaster.
<b>Mental health and resilience</b>	Continue to incorporate mental health and disaster resilience materials into future curricula and discussions on disaster responses.
<b>Train-the Trainer (TTT)/Leadership</b>	Continue use of TTT and leadership programs in future disaster response curricula by WTP.
<b>Resource Development and Communication</b>	
<b>Partnerships</b>	Continue to focus on developing and reinforcing partnerships among grantees and other stakeholders.
<b>WTP National Clearinghouse Curriculum</b>	Continue to use curriculum, materials, and logistical support by WTP and the National Clearinghouse in disaster responses to develop and disseminate timely and relevant information.
<b>Webinars and weekly calls</b>	Continue to use outreach to grantees during disasters to help disseminate timely and accurate information and share across grantees, partner organizations, and subject matter experts.
<b>Social media</b>	Use NIEHS social media platforms to provide timely information during disasters.
<b>Vaccination</b>	WTP should continue to produce vaccination information and resources.
<b>Consistency of guidance</b>	In training resources, include acknowledgements of WTP's position of providing guidance that prioritizes worker safety and health, which may be more protective than some federal or state guidance.
<b>Evaluation</b>	
<b>Ebola evaluation</b>	Perform evaluation to understand impact of and future directions for infectious disease training.
<b>Recovery centers</b>	Evaluate COVID-19 recovery centers for continued lessons learned and effectiveness.
<b>Evaluation</b>	Continue to support the Evaluation Community of Practice and dissemination of <i>evaluation tools and tips</i> .
<b>NIEHS Data Management System (DMS)</b>	Revise DMS to better capture accomplishments not easily placed in the current format, such as asking what are one or two of a grantee's greatest accomplishments and allowing grantees to report their outreach activities (plans underway for both). Continue to use other mechanisms to capture activities and accomplishments, such as technical workshops.

## Background

In response to the COVID-19 pandemic, the U.S. federal government issued an emergency declaration in March 2020. The National Institute of Environmental Health Sciences (NIEHS) Worker Training Program (WTP) received Congressional appropriations to fund nonprofit organizations who would then deliver worker-based training to prevent and reduce exposure to coronavirus.

NIEHS WTP requested an evaluation of their COVID-19 training program for effectiveness, outcomes, and impact. The evaluation aimed to better understand how funding was used by grantees to support the development, implementation, and dissemination of occupational safety and health and infection control within their worker training programs, including what outcomes resulted from the training activities.

NIEHS WTP organized stakeholders and an existing community of evaluators to prepare an evaluation plan for COVID-19. A first draft of the plan was prepared by NIEHS WTP staff and then shared for review and feedback with evaluators in April 2020. The plan was revised throughout the COVID-19 pandemic to include evaluation focus, questions, intended outcomes, and a methodology for capturing such data and analyzing results to draw conclusions and future response recommendations.

The full evaluation report includes data and results provided by WTP-funded organizations, or grantees, through annual progress reports and describes findings from a survey and focus group of grantee leadership and staff. The report provides lessons learned, supports program accountability, and prepares for future occupational health and safety training infectious disease responses.



Training for emergency responders in Alabama. Photo courtesy of Alabama Fire College Workplace Safety Training.

The full WTP COVID-19 evaluation report is available at [https://tools.niehs.nih.gov/wetp/public/hasl\\_get\\_blob.cfm?ID=13421](https://tools.niehs.nih.gov/wetp/public/hasl_get_blob.cfm?ID=13421).

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

NIEHS WTP COVID-19 resource page: <https://tools.niehs.nih.gov/wetp/covid19worker/>

WTP Coronavirus Activities: Results from 2020 Funding: [https://www.niehs.nih.gov/careers/assets/docs/wtp\\_report\\_coronavirus\\_results\\_2020.pdf](https://www.niehs.nih.gov/careers/assets/docs/wtp_report_coronavirus_results_2020.pdf)

WTP Coronavirus Activities: U45 2021 Program Year Funding: [https://www.niehs.nih.gov/careers/assets/docs/wtp\\_accomplishments\\_supplementalfunding\\_covidu45.pdf](https://www.niehs.nih.gov/careers/assets/docs/wtp_accomplishments_supplementalfunding_covidu45.pdf)



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