



National Institute of Environmental Health Sciences
Your Environment. Your Health.

NIEHS Worker Training Program Reflects on COVID-19 Response, Plans Ahead for Future Infectious Disease Threats

Overview

Take a “look back” to describe the WTP COVID-19 program and showcase some of the materials produced.

It will also look ahead to determine how we can collaboratively plan, prepare, and build workforce capacity to prevent future infectious disease threats, especially among worker populations that face the greatest risks and disparities.

Panelists

- **Sharon D. Beard.** Director, NIEHS Worker Training Program
- **Amber Mitchell, DrPH.** Contractor WTP
- **Michael Flynn.** Coordinator, Occupational Health Equity Program; Lead, Translation Research Team; NIOSH
- **Christopher Brown, Ph.D.** Director, Division of Emergency Operations; CDC Center for Preparedness and Response
- **Amy Liebman.** Chief Program Officer: Workers, Environment and Climate; Migrant Clinicians Network
- **Panel Discussion and Q&A**

NIEHS Worker Training Program (WTP) oversees and administers:

Hazardous Materials Worker Health and Safety Training (U45)

- Hazardous Waste Worker Training Program
- Hazmat Disaster Preparedness Training Program
- Environmental Career Training Program

Small Business Innovation Research (SBIR) E-Learning for HAZMAT & Emergency Response (R43/R44)



NIEHS/U.S. Department of Energy Nuclear Worker Training (UH4)

Infectious Disease and Biological Hazards Training (various mechanisms)

History

- Superfund Amendments and Reauthorization Act of 1986 (SARA), Section 126(g).
- WTP established in 1987 to provide training and education of workers engaged in activities related to hazardous waste and emergency response.
- 4 million workers trained since 1987 under NIEHS Superfund-related activities appropriations.
- Another 800,000 workers trained under other funding streams for the NIEHS WTP, for a total of approx. 4.5 million workers.



WTP's Role in Infectious Disease Response

HAZMAT and biological safety training provided to workers during infectious disease outbreaks and public emergencies. NIEHS WTP uses an all-hazards approach.

- H5N1 outbreak
- Anthrax attacks (2001)
- H1N1 Avian influenza outbreak (2009)
- Mold remediation training following severe storms (Hurricane Katrina, 2005; Sandy, 2012; Harvey, 2018)
- Ebola virus disease (2013)
- COVID-19 pandemic (2020)

NIEHS WTP awardees deliver training that integrate:

- Bloodborne Pathogens standard (29 CFR 1910.1030)
- OSHA's Respiratory Protection standard (29 CFR 1910.134)
- OSHA's Personal Protective Equipment (PPE) standard (29 CFR 1910.132)
- Section 5(a)(1) of the Occupational Safety and Health (OSH) Act of 1970 (General Duty Clause)
- OSHA Best Practices for Hospital-Based First Receivers of Victims From Mass Casualty Incidents Involving the Release of Hazardous Substances

NIEHS Ebola Biosafety & Infectious Disease Response Worker Training Program (June 1, 2016 – May 31, 2019)

- Built federal capacity for biosecurity, biopreparedness, and rapid response to emerging infectious diseases
- Developed an infrastructure of trainers and organizations who can be a resource during emergencies
- Launched in collaboration with:
 - Centers for Disease Prevention and Control
 - HHS Office of the Assistant Secretary of Preparedness and Response
 - National Institute of Occupational Safety and Health
 - Occupational Safety and Health Administration



Ebola Biosafety and Infectious Disease Training Response Program Achievements

Wide Variety of Occupational Sectors Trained

IDR WTP, 2017-2019



Health Care Workers,
Faculty, and Students



Emergency First
Responders



Construction Trades and
Workforce Development



Death Care



Military



Disaster Preparedness,
Response, and Recovery



Airline and Airport
Workers



Public Health
Workers



Environmental Service Workers,
Sanitation Workers, and
Domestic Cleaners



Occupational Health and
Safety Professionals



Nail Salon
Technicians

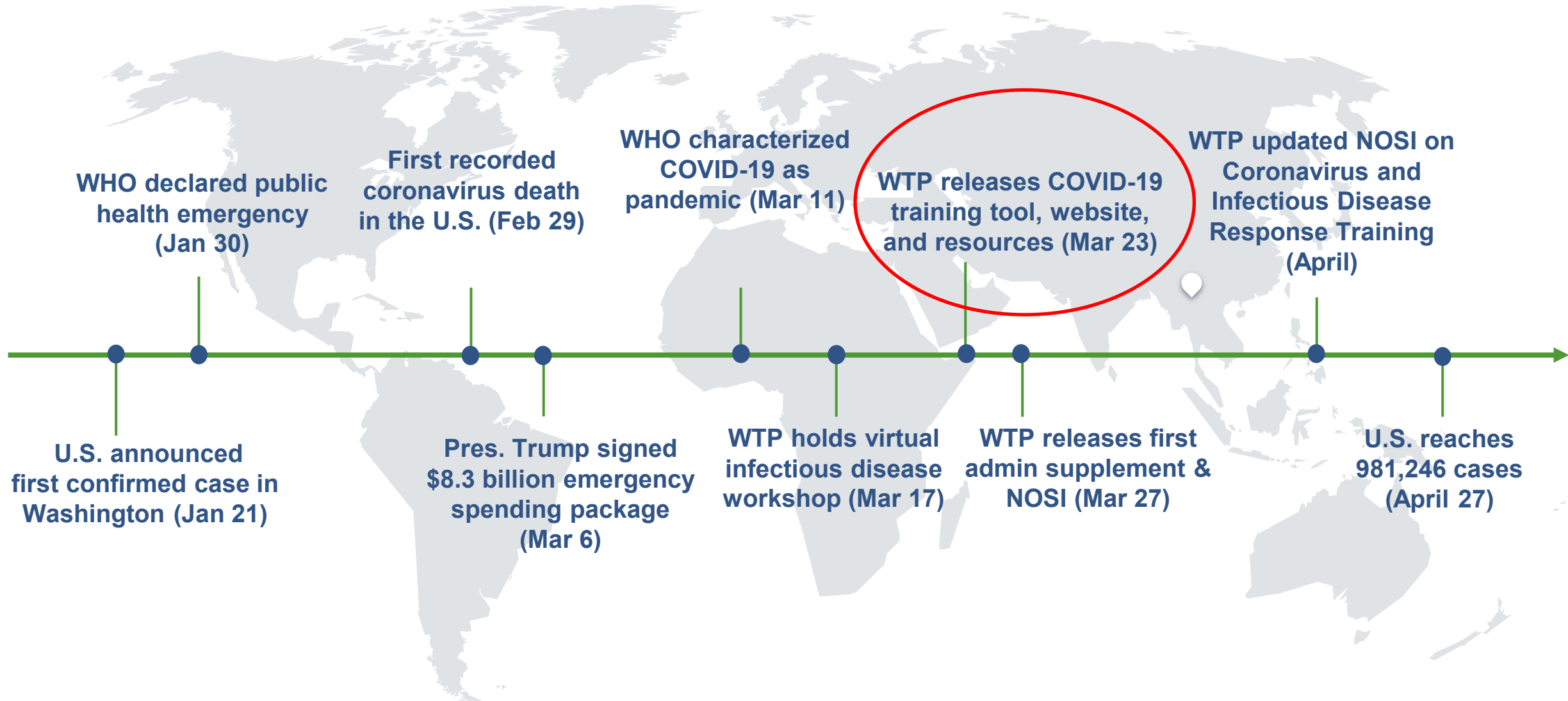


Homeless Outreach and Substance
Abuse Prevention Workers

“We also had one of the biosafety grants, and because we had that expertise in place, we were able to quickly gear up to increase training in the area of infectious disease, in particular COVID-19 and in the health and safety requirements due to COVID-19. I also think having this existing consortium in place gave us quick access to subject matter expertise.”

Participant in one of six focus groups held between May-June 2021 to evaluate WTP's COVID-19 Biosafety Training and Infectious Disease Response.

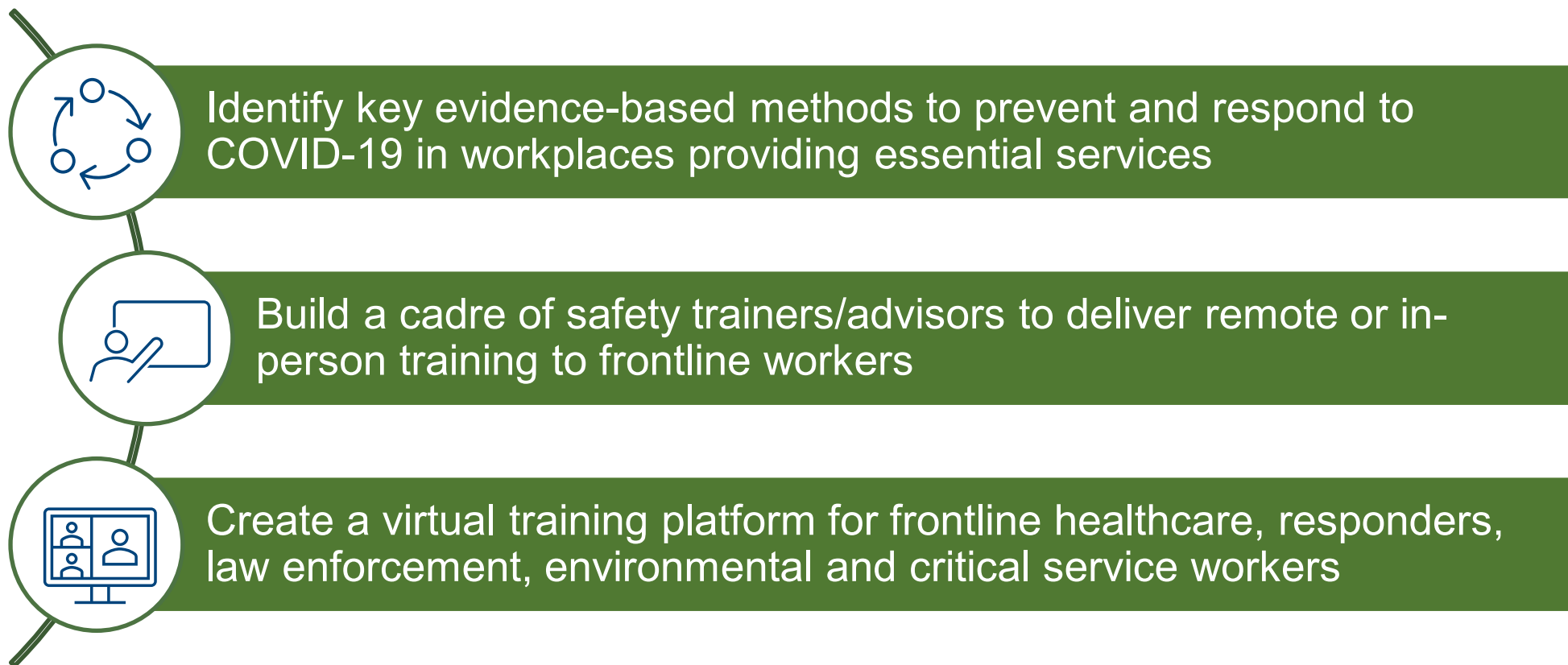
Timeline of WTP Activation for COVID-19 Training: 2020



NIEHS WTP COVID-19 Safety Training Initiative

Goal: To increase health and safety awareness for responders and workers who face potential exposure to COVID-19

Key Training Objectives



Activities Funded through Supplemental Grants

Supplemental funds allowed grantees to deliver training specific to COVID-19 health and safety, which included:

- Development of curricula tailored to worker population, often adapting NIEHS WTP training tools
- Delivery of online, blended, or in-person training for COVID-19 or ongoing hazardous materials training
- Reaching populations most vulnerable to COVID-19 or least likely to receive on-the-job health and safety training
- Innovative use of technologies to include skills development on virtual platforms (e.g., virtual reality)



Scene from an e-sim short module on the proper procedure for donning and doffing personal protective equipment (PPE) from Alabama Fire College. Funded by NOT-ES-20-017.

Booklet Quantity Desired

Please enter the quantity desired for the booklets indicated below.

<input type="text" value="0"/>	Avian Influenza booklet (English) <i>Protecting Yourself from Avian Influenza</i>
<input type="text" value="0"/>	Avian Influenza booklet (Spanish) <i>Cómo protegerse de la gripe aviar</i>
<input type="text" value="0"/>	Flood Response Orientation booklet (English) <i>Safety Awareness for Responders to Floods</i>
<input type="text" value="0"/>	Flood Response Orientation booklet (Spanish) <i>Safety Awareness for Responders to Floods: Protecting Yourself While Helping Others</i>
<input type="text" value="0"/>	Hurricane Safety and Health booklet (English) <i>Safety Awareness for Responders to Hurricanes</i>
<input type="text" value="0"/>	Hurricane Safety and Health booklet (Spanish) <i>Safety Awareness for Responders to Hurricanes</i>
<input type="text" value="0"/>	Hurricane Safety and Health booklet (Vietnamese) <i>Safety Awareness for Responders to Hurricanes</i>
<input type="text" value="0"/>	Mold Clean-up and Treatment booklet (English) <i>Health and Safety Essentials for Workers, Volunteers, and Homeowners</i>
<input type="text" value="0"/>	Mold Clean-up and Treatment booklet (Spanish) <i>Health and Safety Essentials for Workers, Volunteers, and Homeowners</i>
<input type="text" value="0"/>	Oil Spill Safety and Health booklet (Spanish) <i>Safety Awareness for Oil Spill Cleanup Workers</i>
<input type="text" value="0"/>	Wildfire booklet (English) <i>Health and Safety Essentials for Workers, Volunteers, and Homeowners</i>

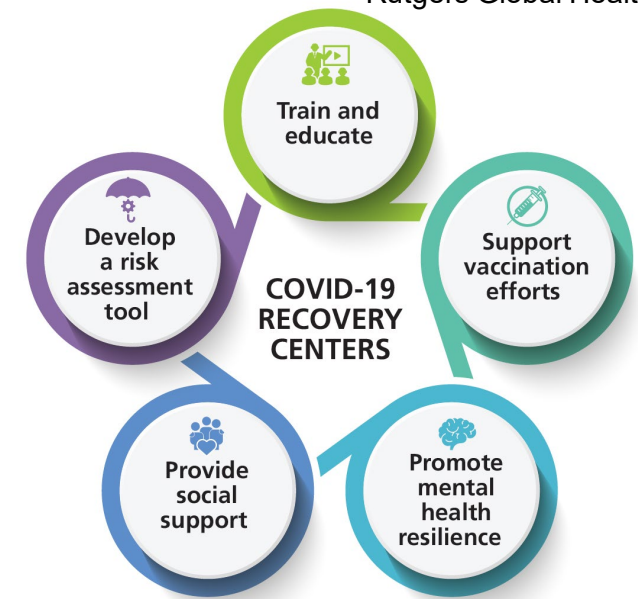
- ~ 9,500 booklets in English distributed
- ~ 7,500 booklets in Spanish distributed

COVID-19 Recovery Centers

- COVID-19 Recovery Centers promote health, safety, and recovery training for essential workers and communities impacted by high rates of COVID-19 by partnering with local businesses, community organizations, and worker centers.
- Recovery Centers support a diverse workforce by providing multi-lingual educational materials, education about vaccines, and connecting COVID-vulnerable communities to local resources including housing and job assistance.



Rutgers Global Health Institute



COVID-19 Recovery Center: Sustainable Workplace Alliance

- The Sustainable Workplace Alliance is one of 8 Recovery Centers across the country.
- Training targets youth, the elderly, and essential workers.
 - Essential workers include health care workers, first responders, business operations workers, transportation workers, environmental cleanup workers, and water and sewage treatment workers.
- SWA has done outreach to communities with higher-than-average COVID-19 transmission rates in Puerto Rico and Florida .



Sustainable Workplace Alliance trainers joined events in Puerto Rico to teach residents how to better protect themselves, their families, and communities during the pandemic. (Photo courtesy of SWA)

Grantee Target Populations for COVID-19 Training



**Emergency Medical
Service**



**Food Service
Workers**



**Maintenance
professionals**



Construction



**Healthcare
Workers**



**Waste
Haulers**



**Agriculture
Workers**



**Airline/Airport
Workers**



Teachers/Students



Careers & Training

HAZMAT Safety & Training

Clearinghouse

Disaster Preparedness &
Response

Infectious Diseases

COVID-19

Webinars and
Presentations

Ebola Virus Disease

H1N1 (Swine), Pandemic,
and Avian Influenza

MUSTID

Webinars

COVID-19

➤ Table of Contents

The NIEHS Worker Training Program (WTP) has been tracking information about the coronavirus disease 2019 (COVID-19) as it pertains to protecting workers involved in emergency response and cleanup activities performed in the United States. This page contains health and safety resources for workers who may be at risk of exposure to COVID-19.

Training Resources

The National Clearinghouse creates training tools to aid in the development of awareness-level courses or other awareness-level materials. These tools provide health and safety guidance to workers who work in industries with the potential for exposure to COVID-19.





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NIEHS COVID-19

Building Programs to Protect Workers from COVID-19 in the Workplace





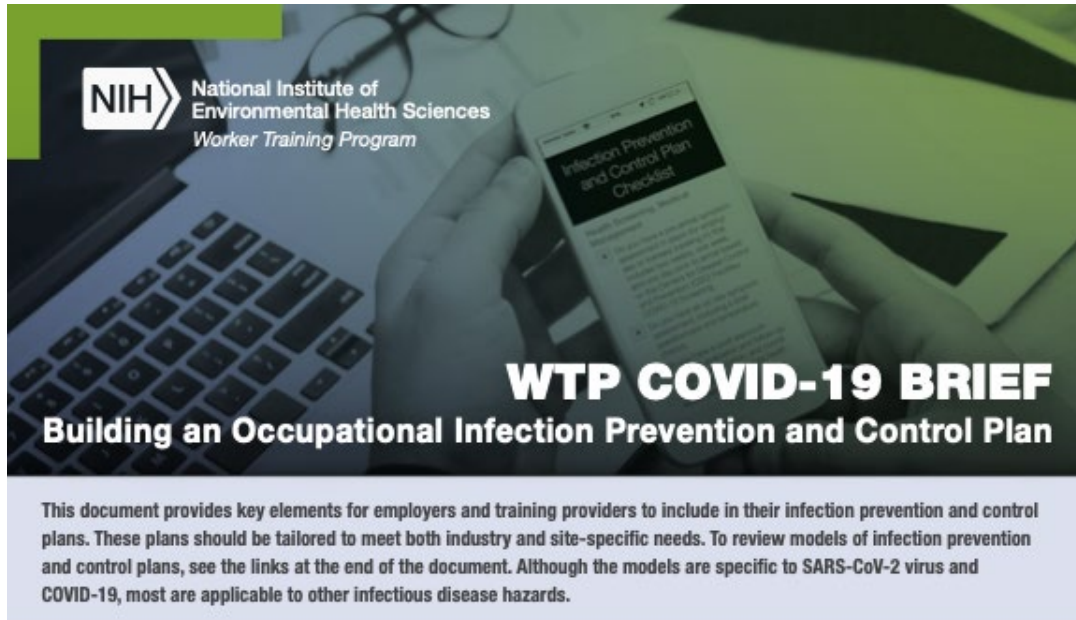
Building Programs to Protect Workers Training Tool (replaces the Essential and Returning Workers Training Tool)

In English:

- [Building Programs to Protect Workers from COVID-19 in the Workplace](#)  (29.7MB)
Updated April 2021
- [Building Programs to Protect Workers from COVID-19 in the Workplace](#)  (10MB)
Updated April 2021

En Español:

- [Desarrollo de programas para proteger a los trabajadores del COVID-19 en el lugar de trabajo](#)  (35.5MB) *Actualizado en abril de 2021*
- [Desarrollo de programas para proteger a los trabajadores del COVID-19 en el lugar de trabajo](#)  (11.3MB) *Actualizado en abril de 2021*



COVID-19 Toolbox

- Best Practices in Training
 - Evaluation of WTP COVID-19 Activities: [Summary Report](#) (2.2MB) and [Full Report](#) (342KB)
 - [Evaluation Tip Sheet and Resources](#) (222KB)
 - [Technology Tips for Virtual Meetings and Interactive Online Sessions](#) (171KB)
 - [WTP COVID-19 Training Needs Assessment](#) (1.4 MB)
- COVID-19 Briefs
 - [WTP COVID-19 Brief: Addressing Occupational Exposure to SARS-CoV-2 Variants](#) (224KB)
 - [WTP COVID-19 Brief: Building an Occupational Infection Prevention and Control Plan](#) (196KB)
 - [WTP COVID-19 Brief: Key Information for Workplace and Training Providers: Policies for Fully Vaccinated People](#) (161KB)
 - [WTP COVID-19 Brief: Selection and Use of Portable Air Cleaners to Protect Workers from Exposure to SARS-CoV-2](#) (233KB)
 - [WTP COVID-19 Brief: Workplace Respiratory Hazard Assessment: Preventing Inhalation of the SARS-CoV-2 Virus](#) (379KB) **NEW**
- COVID-19 Prevention Fact Sheets
 - [Preventing SARS-CoV-2 Eye Exposures and Infection](#) (299KB)
 - [Protecting Yourself from COVID-19 in the Workplace Fact Sheet](#) (870KB)



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Workplace Checklist for Prevention of Exposure to SARS-CoV-2 Virus in Non-Healthcare Industries

CONTENTS

- 2 COVID-19 Exposure Control Plan**
- 3 Measures to Maintain Social Distancing**
- 4 Engineering Controls**
- 5 Work Practices**
- 6 Enhanced Cleaning and Disinfection**

Introduction

This checklist is a tool to help employers, unions, and workers in non-healthcare facilities assess workplace exposure, and identify prevention and control measures for SARS-CoV-2, the virus that causes COVID-19 disease. Key exposure risk factors include working within 6 feet of people who are known to be or are potentially infected with the virus and working with equipment, materials, and/or surfaces that are potentially contaminated with the virus.

This document may be completed collaboratively by employer and worker representatives or individually by each party. The checklist uses a yes/in progress/no format. If a question is not applicable, users should select the N/A button. The "Note" box should be used to list the checklist item number and provide details for follow-up actions.

After completing the checklist, be sure to:

1. Review each item.
2. Develop an action plan that lists each item, who is responsible, what needs to be done, and by when.



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COVID-19 Vaccine Information for Workers

Protect Yourself and Others

COVID-19 infection threatens everyone's health and wellbeing. COVID-19, the disease caused by the SARS-CoV-2 virus, was the leading cause of death in the U.S. in 2020. To defeat this virus, we need to use several approaches.

Top 5 reasons to get vaccinated

1. To curb the spread of the virus and help stop the pandemic.
2. To prevent your family, friends, and coworkers from getting sick.
3. To develop personal immunity and establish herd immunity.
4. To help make sure there are enough medical therapies and hospital beds for those who need them.
5. To avoid shutdowns and social isolation.



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Injection Safety for COVID-19 Vaccinators & Vaccine Administrators

Preventing Needlesticks and Blood Exposures



Introduction

COVID-19 vaccines play a critical role in history, saving countless lives. Widespread participation in the vaccination program is needed for it to be fully effective. Delivering COVID-19 vaccines to millions of Americans will be challenging and worker safety and health during the vaccination campaign must be a top priority.

Given that two doses are required for the current vaccines, millions of syringes and needles will be used, increasing the risk of needlestick and other sharps injuries and blood exposure.

EPINet 2021 Needlesticks, Mucocutaneous from US Hospitals

Top 3 Injuries	Percent	Location
Suture	20.7%,	34% in OR
Disposable Syringe	24.5% Insulin,	30.1% Patient Room
	20.9% 24/25g	Vaccines, IM
Scalpel Blade	5.4%	

Top 3 Exposures	Percent	PPE
Eyes	73%	11.2% all eye protection
Skin	30.8%	0% gown, 0.3% apron
Head	80%	73% surgical mask 0% respirator



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Upcoming Webinars

NIEHS Webinar Series | Opioids and the Workplace: Prevention and Response

COVID-19: Impact on Worker Mental Health and Substance Use, Workplace Solutions

Introduction and Use of New Worker Training Module

Thursday, August 25, 2022

2:00 - 5:00 p.m. EDT

Event registration: [Zoom meeting link](#)

Simultaneous interpretation from English to Spanish will be provided

- [8-25-2022 Opioids Training Flyer - English](#) (420KB)
- [8-25-2022 Opioids Training Flyer - Spanish](#) (390KB)

Meetings & Workshops

Worker Training Program

➤ [Table of Contents](#)

Each year, the Worker Training Program (WTP) holds technical webinars, meetings, and workshops. These events address scientific, administrative, and regulatory issues related to training workers who work with and clean up hazardous materials and who respond to emergencies involving hazardous substances, including viruses like SARS-CoV-2.

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- [Alabama Fire College](#)
- [Atlantic Center for Occupational Health and Safety](#)
- [CPWR-The Center for Construction Research and Training](#)
- [Historically Black Colleges and Universities Consortium](#)
- [International Association of Fire Fighters](#)
- [International Brotherhood of Teamsters](#)
- [International Chemical Workers Union Council Center for Worker Health and Safety Education](#)
- [International Union, United Auto Workers](#)
- [LIUNA Training and Education Fund](#)
- [Midwest Consortium for Hazardous Waste Worker Training](#)
- [Nova Southeastern University](#)
- [OAI, Inc.](#)
- [Partnership for Environmental Technology Education](#)
- [Prevention, Preparedness, and Response Consortium](#)
- [Sustainable Workplace Alliance](#)
- [The New England Consortium-Civil Service Employees Association](#)
- [The Steelworkers Charitable and Educational Organization](#)
- [Western Region Universities Consortium](#)

WTP Awardee Resources

- Cell Podium
 - [COVID-19 Safety Awareness Training](#) ↗
 - [COVID-19 Vaccine Course for Workers](#) ↗
 - [Workplace Checklist for Prevention of Exposure to SARS-CoV-2 Virus in Non-Healthcare Industries](#) ↗
- CPWR – The Center for Construction Research and Training
 - [COVID-19 Construction Clearinghouse](#) ↗
- Emory University
 - [Emergency Medical Services Biosafety Transport-Operator Course](#)
 - [Clinical Biosafety Awareness Course](#)
 - [Public Health Biosafety Awareness Course](#)
- Indiana University Bloomington
 - [Community Level Training: Ebola and Infectious Diseases of Public Health Significance – Health and Safety Essentials for All Workers and Communities](#)
- International Brotherhood of Teamsters
 - [90-Min COVID-19 - Safety and Health Awareness Virtual Classroom](#) ↗
- Laborers' International Union of North America Training and Education Fund
 - [Infectious Disease Awareness](#)
 - [Infectious Disease Operations](#)

Panelists

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- **Panel Discussion and Q&A**