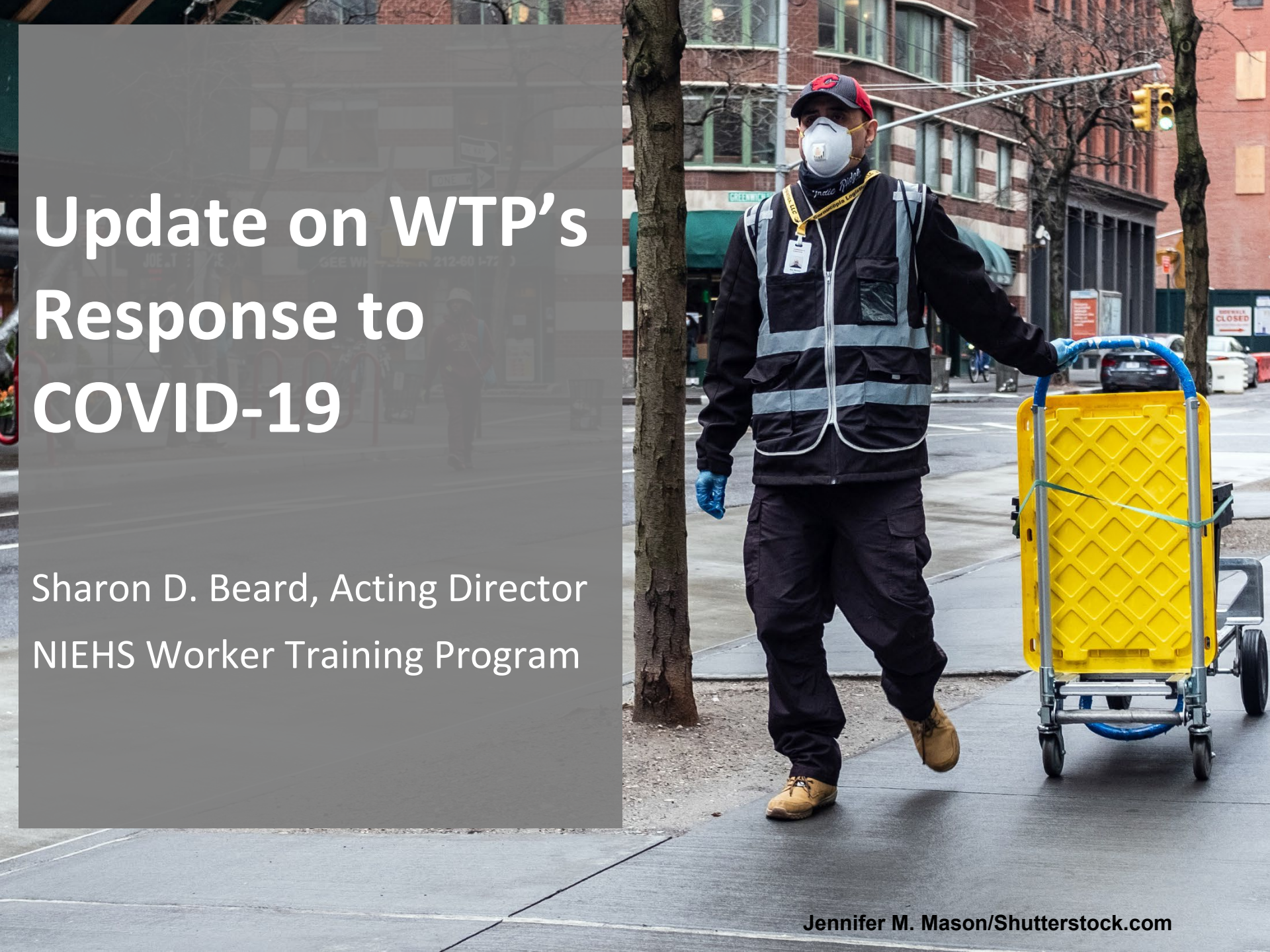
Update on WTP's Response to COVID-19

Sharon D. Beard, Acting Director

NIEHS Worker Training Program



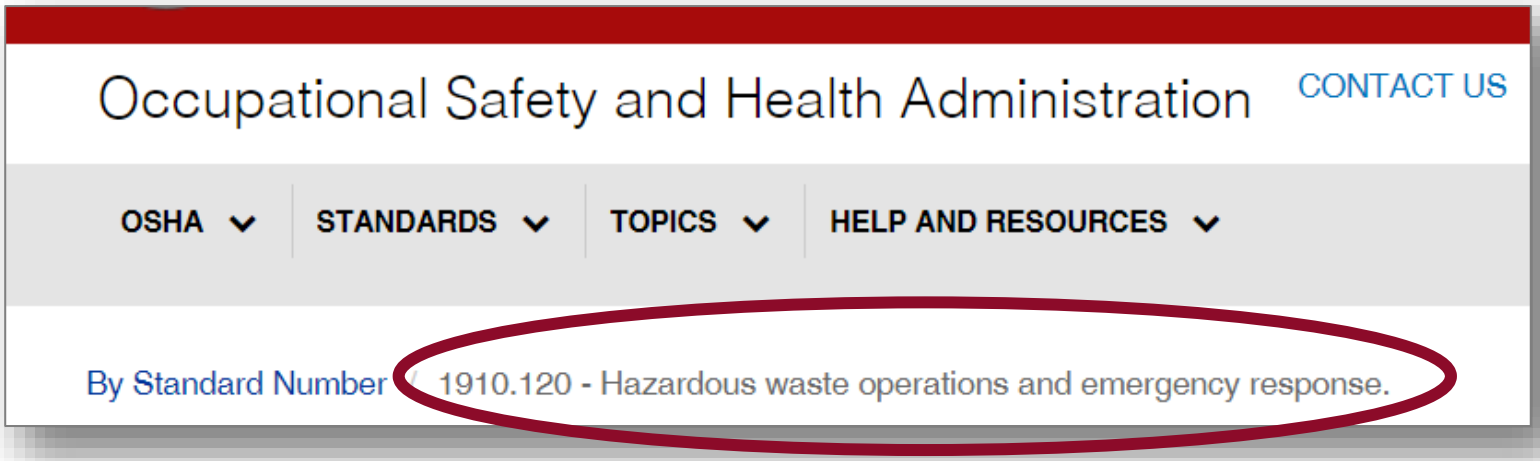
Jennifer M. Mason/Shutterstock.com

WTP: Saving Lives and Preventing Injury Across Industries

- Training across industries, e.g.:
  - **California:** Hazardous Waste Operations and Emergency Response (HAZWOPER) for laborers (LIUNA Training and Education Fund)
  - **Kentucky:** Control of hazardous energy (lockout/tagout) for manufacturing employees, (International Union, United Automobile, Aerospace and Agricultural Implement Workers of America/UAW)
  - **Outreach to Army Personnel – KS/OK/WA/:** 11-day Haz Mat worker training for 200 Army personnel leaving service. (The Partnership for Environmental Technology Education (PETE), Community College Consortium for Health and Safety Training (CCCHST).

- Industries also include: Building trades workers, law enforcement officers, healthcare employees, crane and bulldozer operators, rail workers

HAZardous Waste Operations and Emergency Response (HAZWOPER) Standard: Basis of the NIEHS WTP



- ***Hazardous substance*** **means any substance designated or listed under (A) through (D) of this definition,** exposure to which results or may result in adverse effects on the health or safety of employees:
- [B] **Any biologic agent and other disease causing agent** which after release into the environment and upon exposure, ingestion, inhalation, or assimilation into any person, either directly from the environment or indirectly by ingestion through food chains, will or may reasonably be anticipated to cause death, disease, behavioral abnormalities, cancer, genetic mutation, physiological malfunctions (including malfunctions in reproduction) or physical deformations in such persons or their offspring.

https://www.osha.gov/laws-regs/regulations/standardnumber/1910/1910.120

Protecting workers from infectious diseases falls under other regulations integrated into our programs

Federal Law

Section 5(a)(1) of the Occupational Safety and Health (OSH) Act of 1970 (General Duty Clause)

OSHA Standards

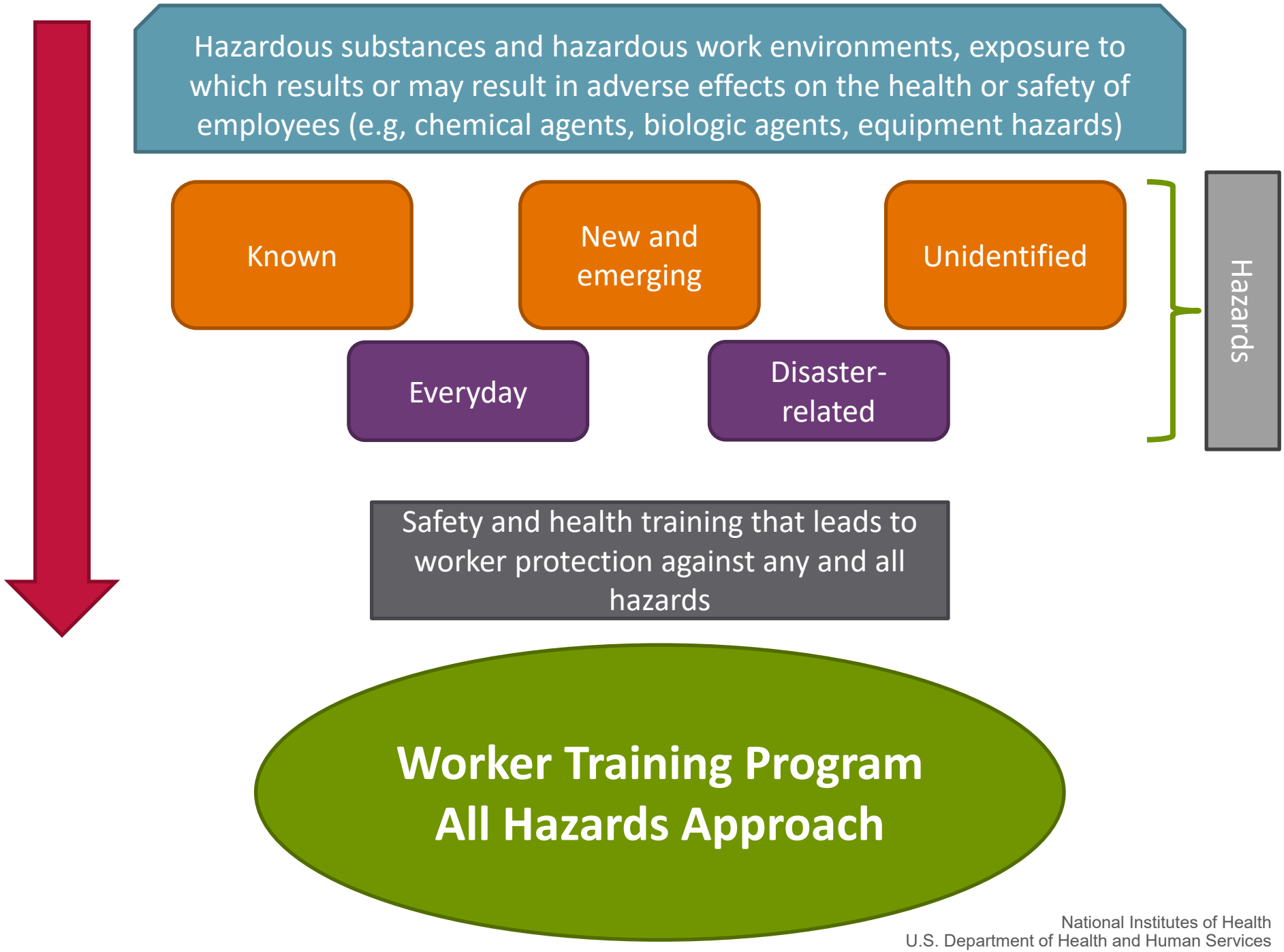
Bloodborne Pathogens (29 CFR 1910.1030)

Respiratory Protection (29 CFR 1910.134)

Personal Protective Equipment (PPE) (29 CFR 1910.132)

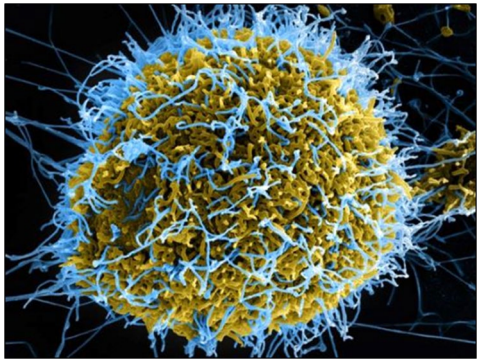
OSHA Guidance

Best Practices for Hospital-Based First Receivers of Victims From Mass Casualty Incidents Involving the Release of Hazardous Substances.



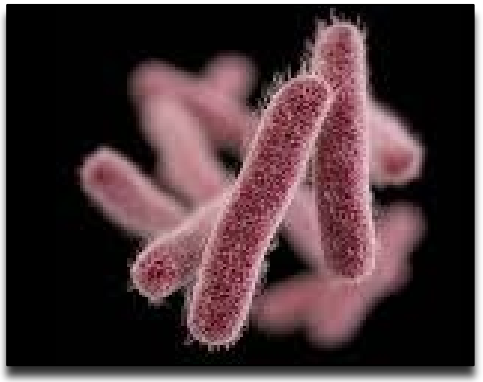
National Institutes of Health
U.S. Department of Health and Human Services

WTP Role in Infectious Disease Response



Provided HazMat and occupational biological safety training to workers during:

- H5N1 outbreak
- Anthrax attacks (2001)
- H1N1 Avian Influenza outbreak (2009)
- Mold remediation from multiple hurricanes
- Ebola Virus Disease Preparedness (2013)
- Coronavirus (2020)



NIEHS WTP: Overview of Programs

Hazardous Materials Worker Health and Safety Training (U45)

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

Department of Energy/NIEHS Nuclear Worker Training (UH4)

Ebola Biosafety & Infectious Disease Response Training (UH4)

(2016-2019) Ended

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

NIEHS Ebola Biosafety and Infectious Disease Response Worker Training Program (IDR WTP)

- Build federal capacity for biosecurity, biopreparedness, and rapid response to emerging infectious diseases.
- Develop an infrastructure of trainers and organizations who can be a resource during emergencies.

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

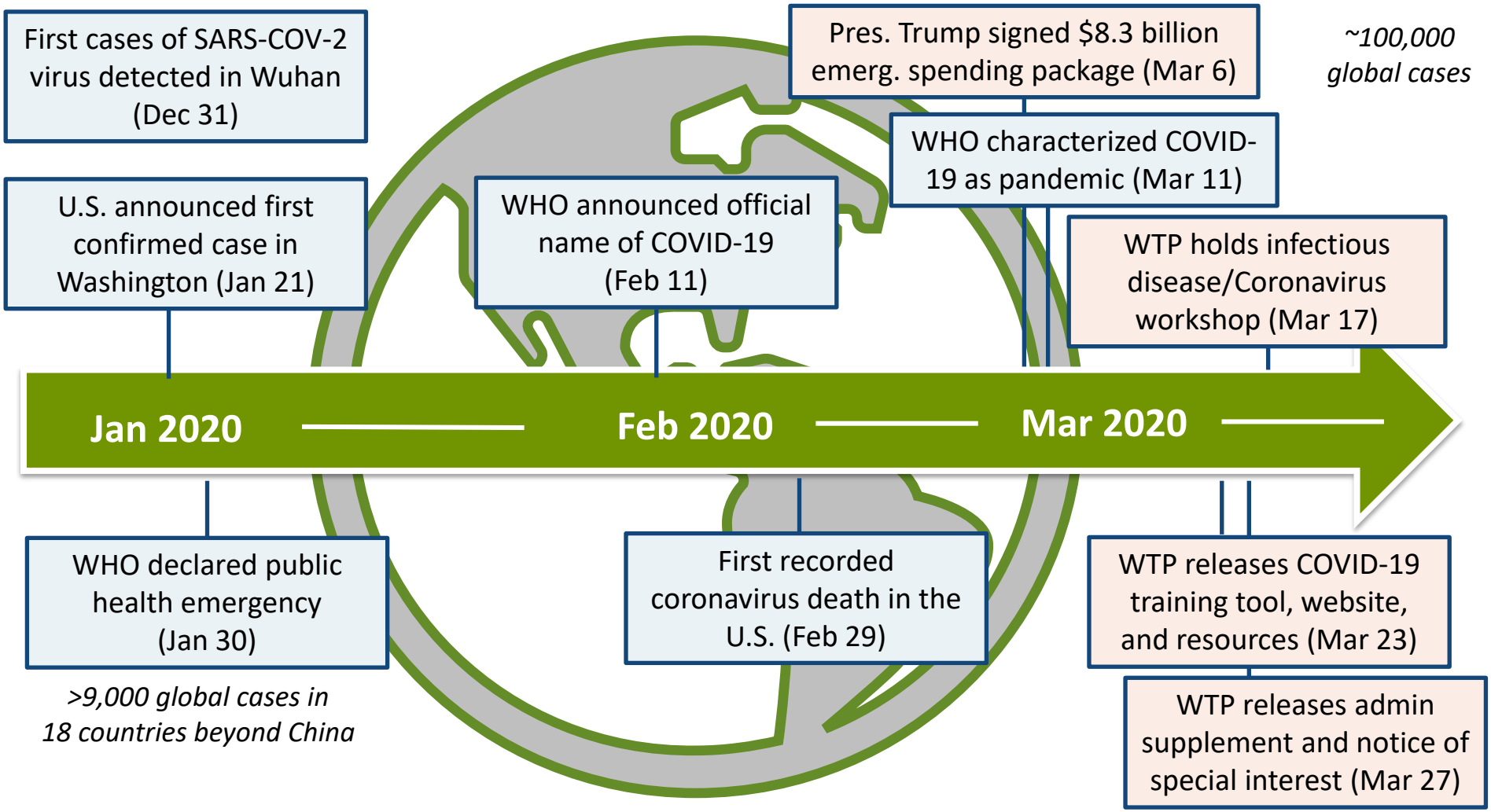
Nail Salon Technicians

Homeless Outreach and Substance Abuse Prevention Workers

National Institutes of Health
U.S. Department of Health and Human Services

So then… Coronavirus

Timeline of Events: WTP Activation for COVID-19 Training



National Institute of Environmental Health Sciences
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NIH/NIEHS WTP COVID-19 Virtual Safety Training Initiative

WTP received $10 million from the Coronavirus Preparedness and Response Supplemental Appropriations Act, 2020

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

Training Initiative Objectives:

- Identify key **evidence-based methods** to **prevent and respond to COVID-19 in workplaces** providing essential services
- **Create a virtual training platform** for frontline healthcare, responders, law enforcement, environmental and critical service workers
- **Build a cadre of virtual safety trainers/ advisors** to **deliver remote training** via advanced training technology to frontline workers

WTP COVID-19 Webinar Participation (Mar. 20 – May 15)

Monday Grantee Updates

422 attendees

Grantees share updates about training:

- Progress
- Gaps and challenges
- Outcomes (# trained, populations reached, etc.)

Wednesday Technical Topics

1,102 attendees

Topics to date included:

- Training for frontline
- Evaluation
- Best practices in protecting healthcare workers
- Respirator use in healthcare

Friday Week-in Review

968 attendees

Topics to date included:

- How to move forward
- Updates on vaccine testing
- COVID-19 and mental health
- Updates from National COSH

Note: *This excludes numbers from the Wed. TTT webinar sessions (shown on an earlier slide)*

COVID-19 Virtual Safety Training Platform

WTP and VIVID Learning Systems

- Developed COVID-19 general awareness training tool into an asynchronous, e-learning package
- Grantees are:
  - Using the tool as is, or
  - Incorporating it into their own learning management systems
- Categories of workers trained: Management, construction, first responder, healthcare, military, science, and others

2,600 sign-ups

1,200 completions

90% indicate training is useful

Training data as of 5/15/2020

https://niehstraining.vividlms.com/

Top Line Challenges for WTP Grantee Training

- **Uncertainties** with novel pathogen, with **misinformation** circulating
- **Reliance on PPE** as primary form of prevention (not engineering and administrative controls), yet scarcity of PPE
- **Building capacity of trainers** to pivot from in-person to virtual trainings and work through technology issues
- Safely carrying on/returning to physically distanced, **face-to-face training**
- **Reaching essential & returning workers and vulnerable populations,** especially with limited time to deliver training

NIEHS WTP Coronavirus and Infectious Disease Response Training (NOT-ES-20-017)

- 14 applications being funded ($1.8 million total)
  - 8 U45 (Superfund Hazardous Waste)
  - 1 UH4 (DOE)
  - 6 R43/R44 (SBIR E-Learning)
- Applicants plan to deliver COVID-19 training and technology development, e.g.:
  - Development of curricula tailored to their worker population, some adapting NIEHS training tools
  - Beginning or increasing their organizational capacity to deliver on-line/blended/technology-enhanced training for COVID-19 and their ongoing hazardous materials training
  - Innovative use of technologies to include skills development on virtual platforms, mobile-friendly training modules, virtual simulations, and virtual reality
  - Creating methods for safe in-person training using physical distancing and infection control procedures as people return to work

Grantee Target Populations for COVID-19 Training

Responders, Public Safety

Service Providers

Community

Healthcare Providers

Government Employees

Other

National Institute of Environmental Health Sciences
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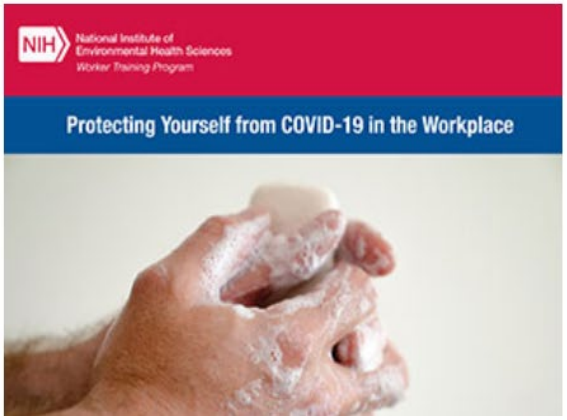
COVID-19 Website and Toolbox

Website features COVID-19 training tool and several resources

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

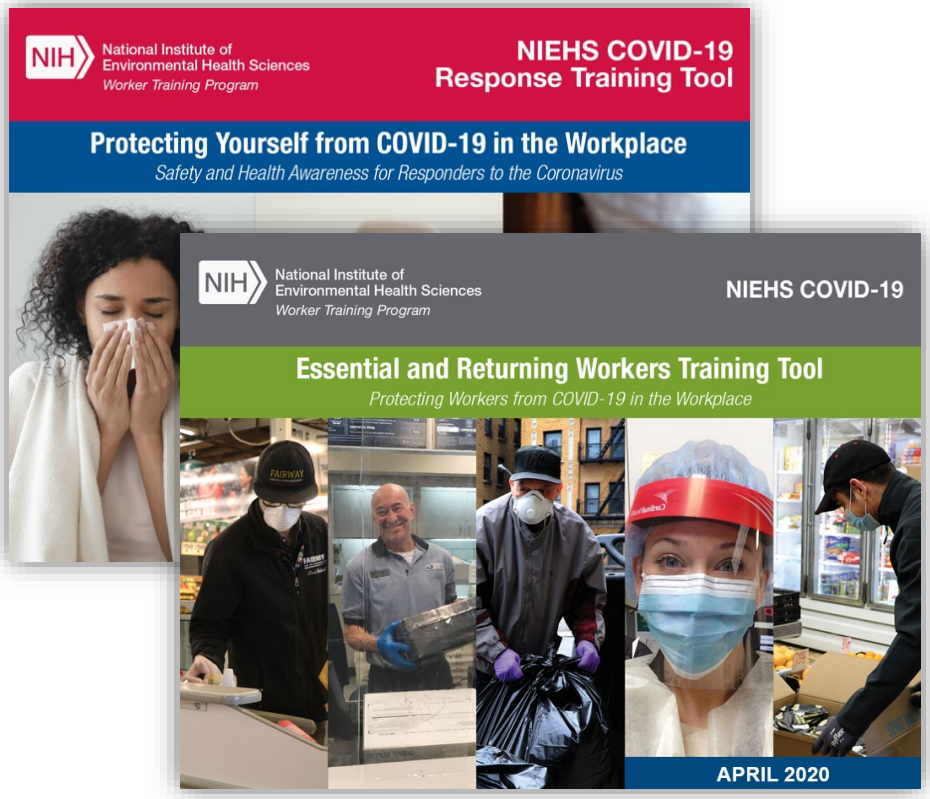
COVID-19 Toolbox

- Can SARS-CoV-2, the Virus that Causes COVID-19 Disease, Be Spread by Bl (150KB) NEW
- COVID-19 Resource List (264KB)
- Evaluation Tip Sheet and Resources (222KB)
- Preventing SARS-CoV-2 Eye Exposures and Infection (299KB) NEW
- Protecting Yourself from COVID-19 in the Workplace Fact Sheet (380KB)
- Technology Tips for Virtual Meetings and Interactive Online Sessions (171
- Workplace Checklist for Prevention of Exposure to SARS-CoV-2 Virus in Non-Healthcare Industries (923KB)

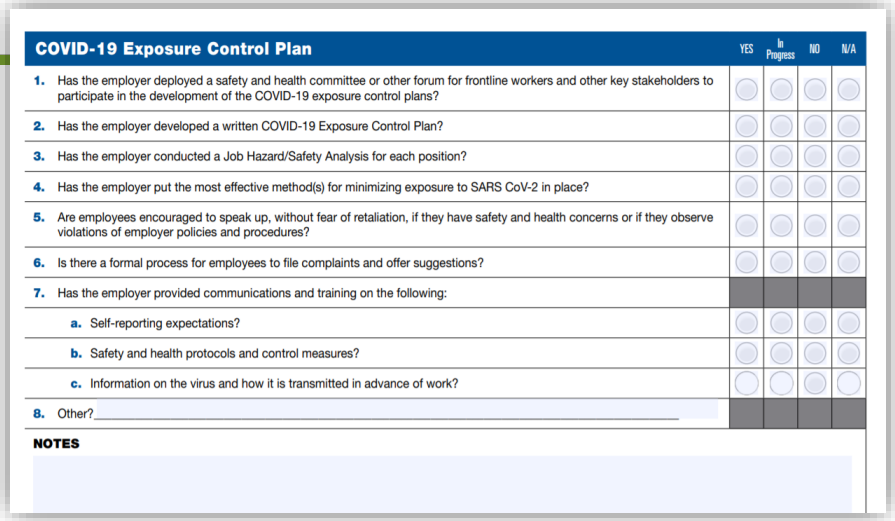
Toolbox features a Resource List, Fact Sheet, Workplace Checklist for Non-Healthcare Industries, and more!

https://tools.niehs.nih.gov/wetp/covid19worker/

WTP and COVID-19



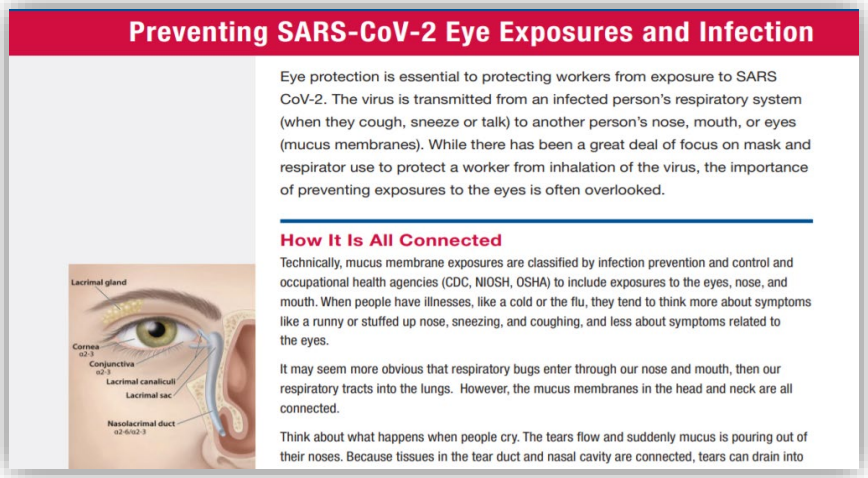
Available as **PDF, PPT,** and **Booklet** in **English and Spanish**



COVID-19 Exposure Control Plan	YES	In Progress	NO	N/A
1. Has the employer deployed a safety and health committee or other forum for frontline workers and other key stakeholders to participate in the development of the COVID-19 exposure control plans?				
2. Has the employer developed a written COVID-19 Exposure Control Plan?				
3. Has the employer conducted a Job Hazard/Safety Analysis for each position?				
4. Has the employer put the most effective method(s) for minimizing exposure to SARS CoV-2 in place?				
5. Are employees encouraged to speak up, without fear of retaliation, if they have safety and health concerns or if they observe violations of employer policies and procedures?				
6. Is there a formal process for employees to file complaints and offer suggestions?				
7. Has the employer provided communications and training on the following:				
a. Self-reporting expectations?				
b. Safety and health protocols and control measures?				
c. Information on the virus and how it is transmitted in advance of work?				
8. Other?_____				

NOTES

Workplace Checklist for Non-Healthcare Industries



Prevention of Eye Exposures and Infection

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

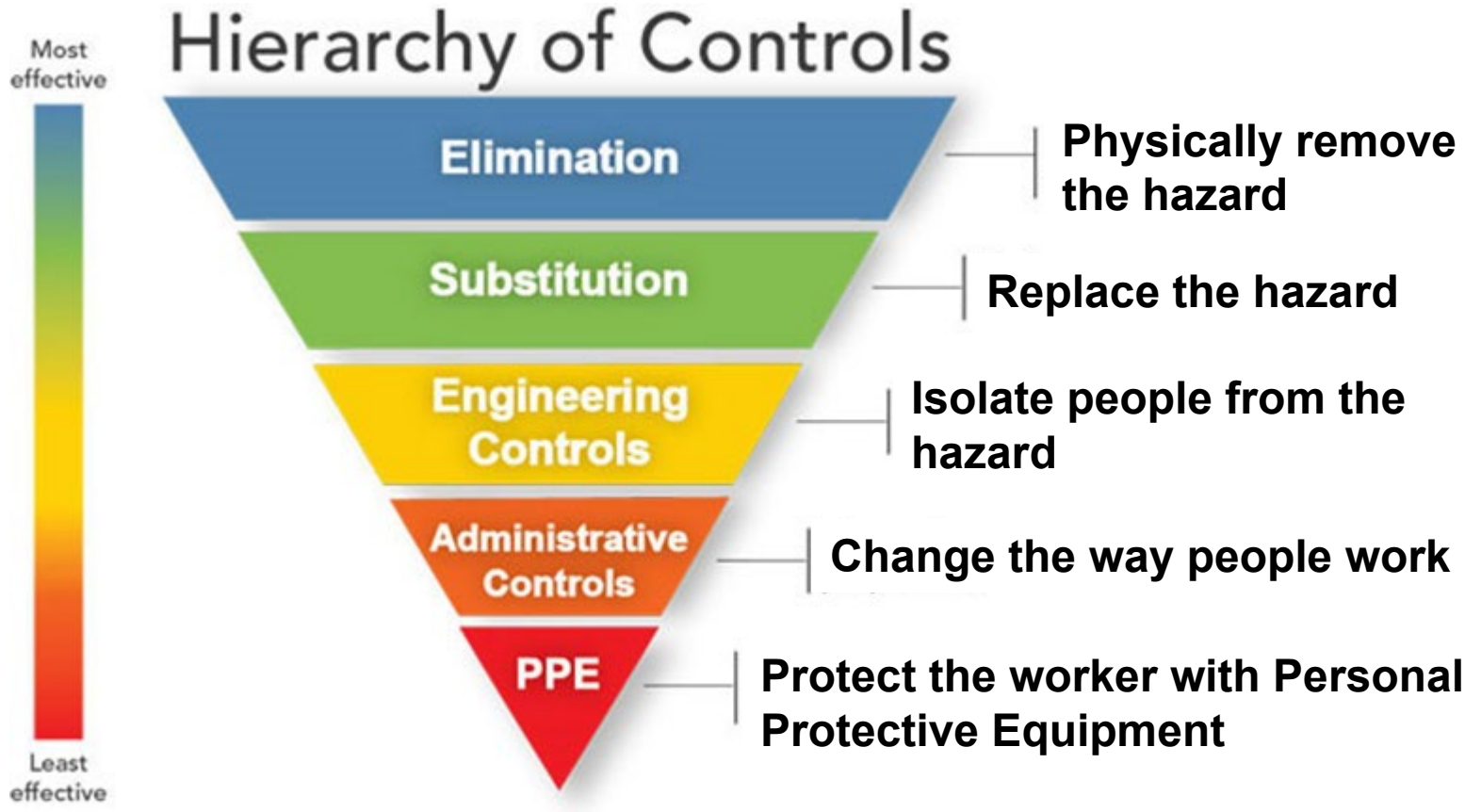
NIEHS COVID-19 Workplace Checklist

COVID-19 Exposure Control Plan	YES	In Progress	NO	N/A
1. Has the employer deployed a safety and health committee or other forum for frontline workers and other key stakeholders to participate in the development of the COVID-19 exposure control plans?	○	○	○	○
2. Has the employer developed a written COVID-19 Exposure Control Plan?	○	○	○	○
3. Has the employer conducted a Job Hazard/Safety Analysis for each position?	○	○	○	○
4. Has the employer put the most effective method(s) for minimizing exposure to SARS CoV-2 in place?	○	○	○	○
5. Are employees encouraged to speak up, without fear of retaliation, if they have safety and health concerns or if they observe violations of employer policies and procedures?	○	○	○	○
6. Is there a formal process for employees to file complaints and offer suggestions?	○	○	○	○
7. Has the employer provided communications and training on the following:				
a. Self-reporting expectations?	○	○	○	○
b. Safety and health protocols and control measures?	○	○	○	○
c. Information on the virus and how it is transmitted in advance of work?	○	○	○	○

Engineering Controls	YES	In Progress	NO	N/A
1. Has the employer adjusted the heating ventilation and air conditioning (HVAC) system so that it maximizes ventilation (dilution of air)?	○	○	○	○
2. Has the employer maximized the use of technology to minimize face to face interactions?	○	○	○	○
3. Have select doors been bypassed to decrease touching of push bars and handles, consistent with security and fire safety requirements (e.g., automatic doors or separate entrance and exit)?	○	○	○	○
4. Has the employer considered eliminating use of time clocks and other devices that cause a gathering of where it is difficult to	○	○	○	○

Protecting workers

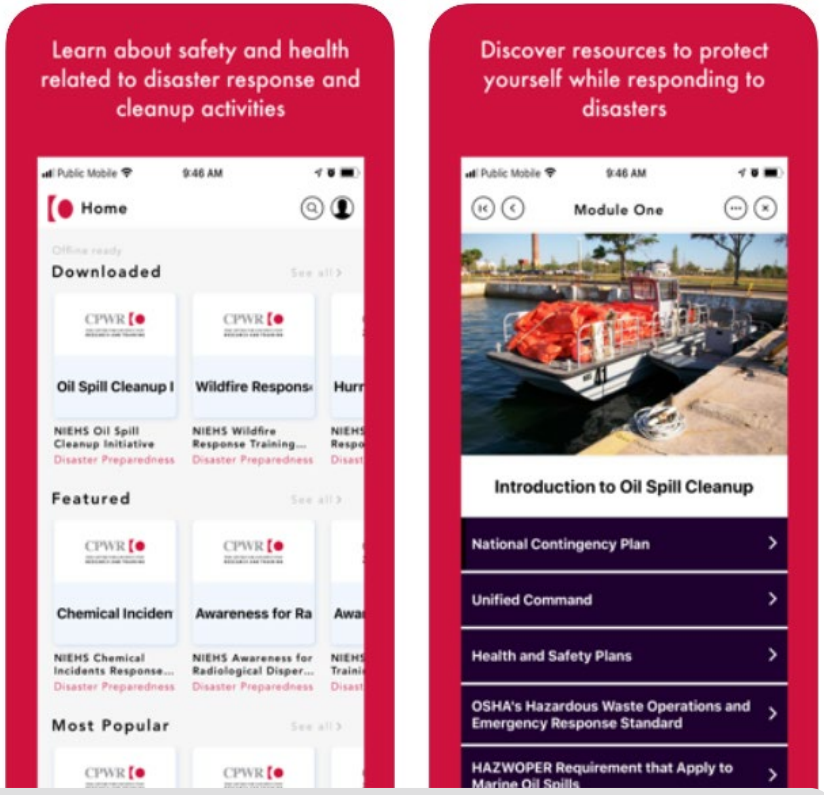
Start with the most effective method to protect workers.



COVID-19 Training Mobile App

WTP and CPWR

CPWR
THE CENTER FOR CONSTRUCTION RESEARCH AND TRAINING

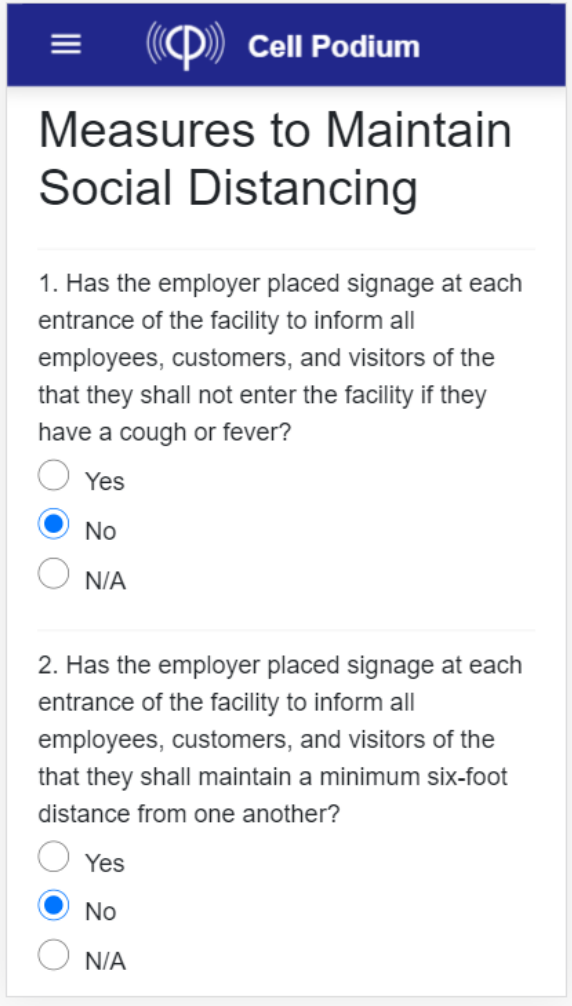


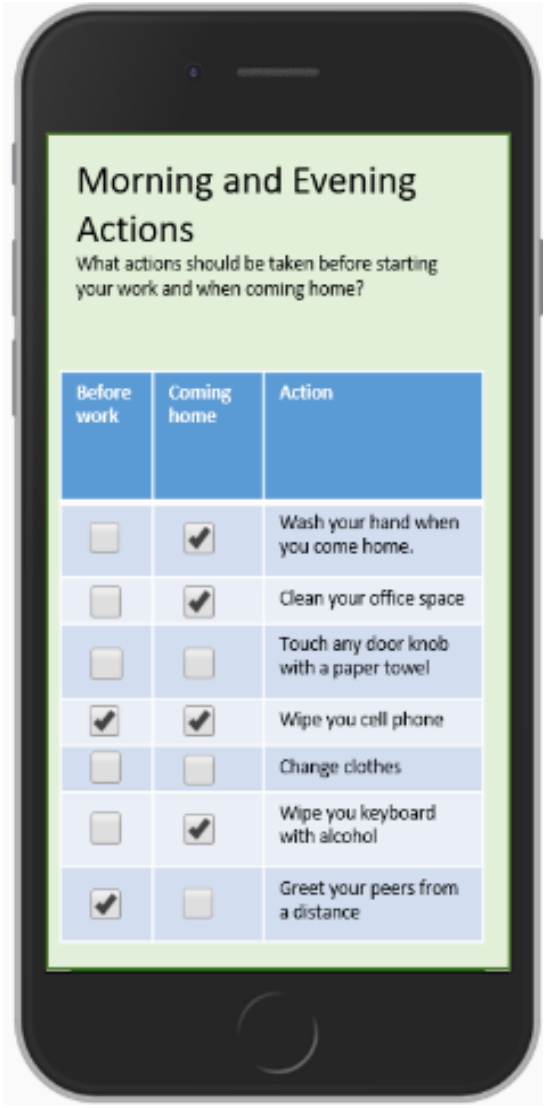
COVID-19 training tool (PowerPoint)

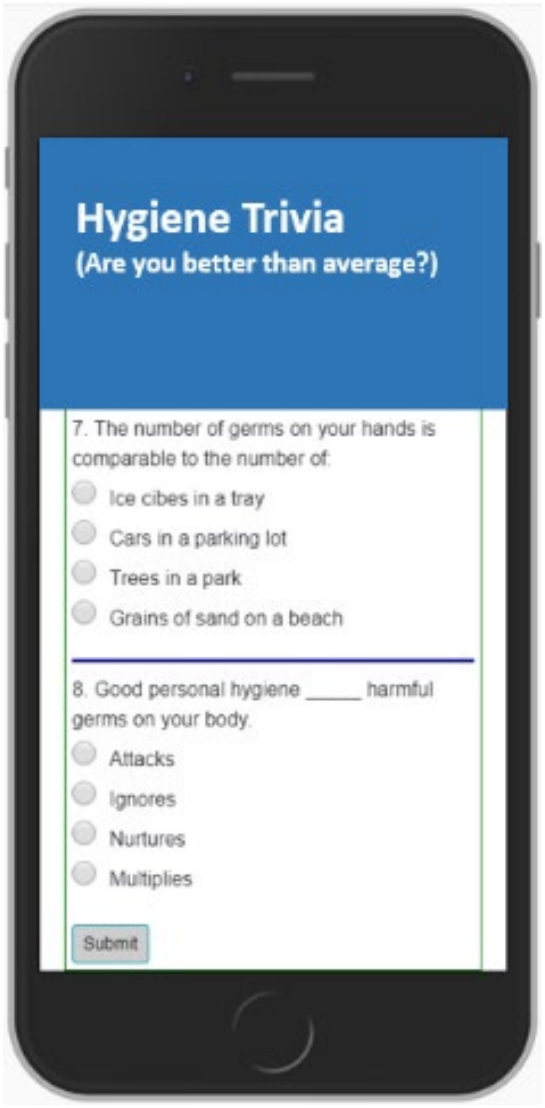
COVID-19 training tool (mobile application)

SBIR Grantee: Cell Podium

- Just-In-Time Essential Worker COVID-19 Mobile Awareness Campaign
  - Brief (<3 minute) multimedia modules pushed via text messages & email
  - Completed: 10 Mobile Modules derived from NIEHS Essential Worker Training Tool and Mobile version of Back to Work Checklist







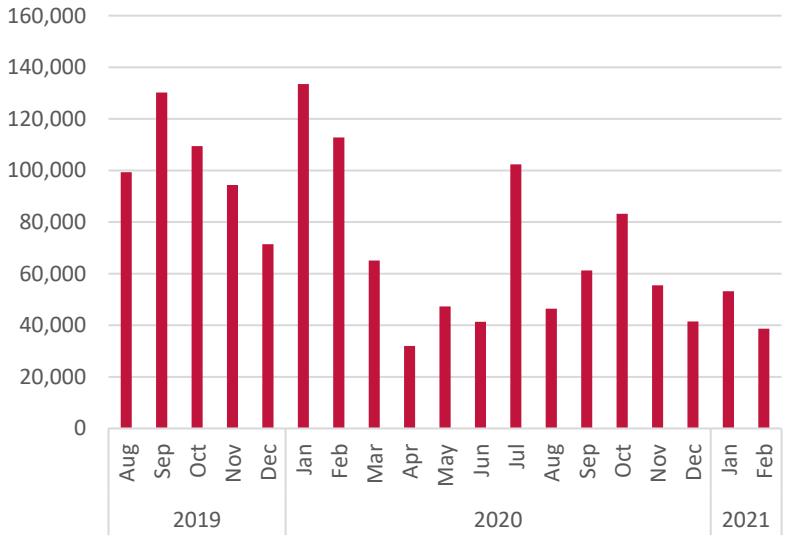
http://covid.cellpodium.com

Contact hours were more affected by COVID-19 than workers trained

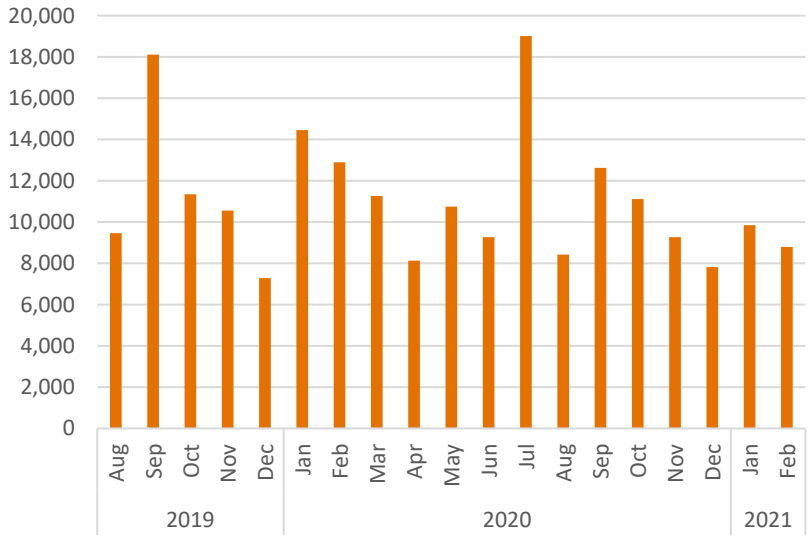
WTP HWWT and HDPT Training Data by Month (Aug 2019 – February 2021)

DRAFT – Interim 2021 data retrieved April 12, 2021

Contact Hours



Workers Trained



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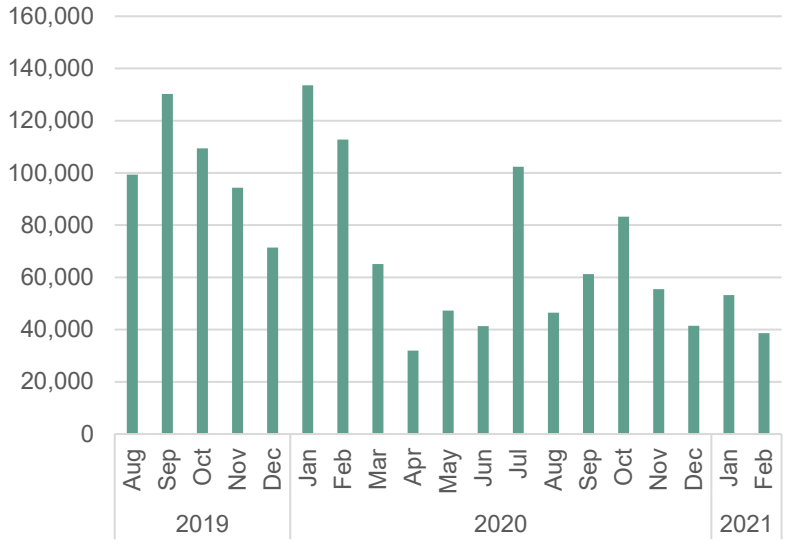
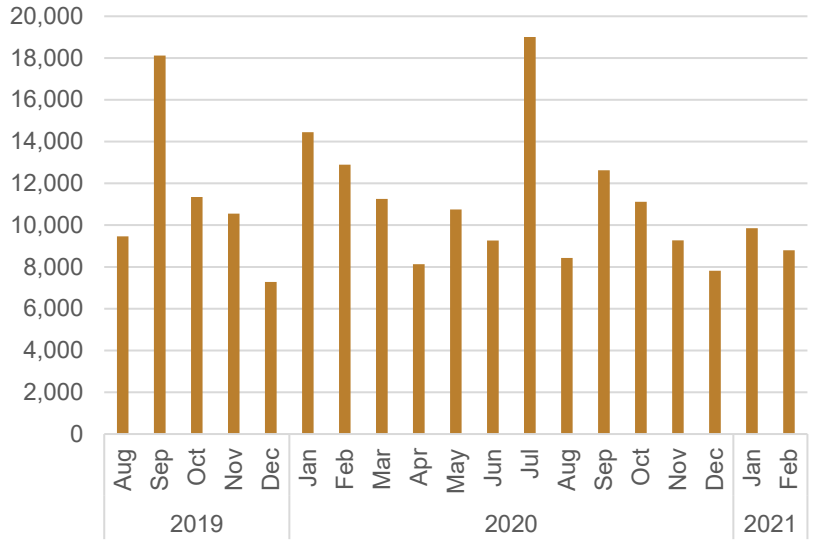


Workers Trained



National Institute of Environmental Health Sciences
Worker Training Program

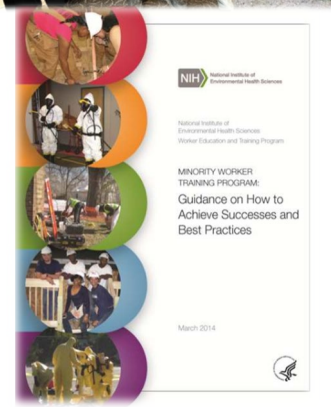
- As of April 2021, NIEHS has 8 COVID-19 Recovery Centers
  - Prevention, Preparedness, and Response Consortium
  - Western Region Universities Consortium
  - New Jersey/New York Hazardous Materials Worker Training Center
  - Sustainable Workplace Alliance
  - The New England Consortium-Civil Service Employees
  - International Chemical Workers Union Council Center for Worker Health and Safety Education
  - Historically Black Colleges and Universities Consortium
  - Steelworkers Charitable Educational Organization /Tony Mazzocchi Center

- The Centers will assess COVID-19 health risks, train essential workers, and coordinate resources needed to reduce disease transmission and promote recovery in disadvantaged and underserved communities.
- Produces high-quality curricula using appropriate language, cultural, and literacy considerations.

Environmental Factor - May 2021: COVID-19 resilience and recovery for workers, communities (nih.gov) - https://factor.niehs.nih.gov/2021/5/community-impact/workers/index.htm

WTP Creates New Job Opportunities and Celebrates 25 Years of the Environmental Career Worker Training Program (ECWTP)

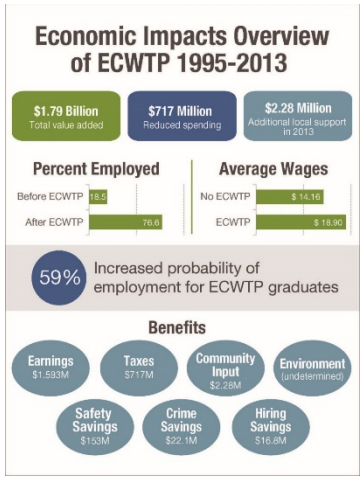
- **Success:** Since beginning of program, appx 13,000 workers have been trained with an average 70% employment rate.
- **Locations:** Over 30 communities trained with 200 different Community Based Organizations (CBOs)
- **Current Programs:** Six grantees working with 25 different CBO's
  - **2019**: 644 individuals trained with 497 obtaining jobs for a 77% job placement rate and offering 303 courses across all programs
  - **2018:** 569 trained, 423 Employed for a 74% job placement rate
  - **Takeaways:** **Changing Lives & Building Careers for a Lifetime**
  - **Training Best Practices -** Extensive life skills, mentoring, numerous technical training and certificates and career options for graduates

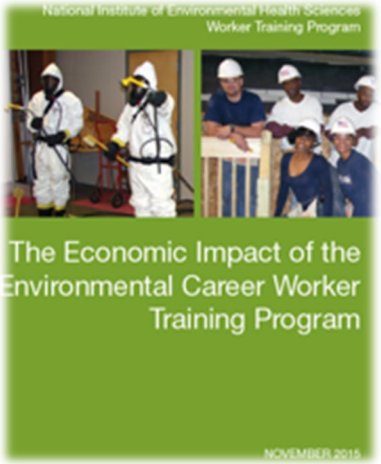


WTP Creates New Job Opportunities and Celebrates 25 Years of the Environmental Career Worker Training Program (ECWTP)

- **How Did We Get Here:**
  - Strong Leadership and Commitment of Staff
  - Excellent System of Tracking Students
  - Creative and Sustainable Partnerships
  - Sharing of Best Practices

- **Economic Impact Analysis:** $100 million return on $3.5 million investment.
  - Increases probability of employment by approximately 59%.
  - $1.6M in higher earnings for its graduates, (from increased likelihood of employment, more hours worked, and higher wages.





The Next 5 Years
ECWTP Awardees

- Center for Construction Research and Training
  - New Orleans, LA; St. Paul, MN; East Palo Alto, CA, Flint MI and Roxbury, MA.
- OAI, Inc
  - Chicago, IL; Dallas, TX; Kansas City KS/MO and Indianapolis, IN.
- University of California, Los Angeles
  - Los Angeles, CA; Native American tribes in Alaska and Portland, OR

- Rutgers School of Public Health-NJ/NY Consortium
  - Newark, NJ and New York City, NY (add Make the Road NY)
- Deep South Center for Environmental Justice
  - New Orleans, LA; Pensacola, FL; Houston, TX; and Detroit, MI.
- **Sustainable Workplace Alliance (SWA)**
  - **Multiple Sites in Florida and San Juan, Puerto Rico**

National Institute of Environmental Health Sciences
Worker Training Program

ECWTP Training Accomplishments

Note: The COVID-19 pandemic was declared on March 11, 2020. Training (and placement for ECWTP) numbers were impacted as a result of the pandemic.

NIEHS ECWTP (formerly MWTP)

25-year Training Summary for the Budget Period
Aug. 1, 1995 – July 31, 2020*

Year	Students Trained	Placed in Jobs	Percentage of Students Placed in Jobs
1996-2008	7,566	5,115	68%
2009	379	285	75%
2010	531	372	70%
2011	396	291	73%
2012	366	274	75%
2013	367	279	76%
2014	348	269	77%
2015	397	323	81%
2016	440	334	76%
2017	562	392	70%
2018	569	423	74%
2019	644	497	77%
2020	455	270	59%
Total	**13,020**	**9,124**	**70%**

* *The 1996-2008 numbers include numbers from the NIEHS/EPA Brownfields Minority Worker Training Program*

2019 California Wildfire Training for Workers

Bilingual Wildfire Training:
October 23, 2019
Pasadena Job Center

WHEN ARE EMPLOYERS REQUIRED TO ACT?

The emergency standard is triggered when the AQI (air quality index) for PM2.5 at the worksite exceeds 150. An AQI above 150 indicates that the air is "unhealthy" to breathe. Employers must monitor air quality using publicly accessible forecasts of AQI for PM2.5 or by directly measuring PM2.5 levels at the worksite.

Photo: Coweymega

WHO DOES THE EMERGENCY STANDARD APPLY TO?

The emergency standard applies to both outdoor and indoor workers who may be exposed to wildfire smoke for more than one hour per day, even if they are not directly impacted by fires.

This may include:

- Construction Workers
- Agricultural Workers
- Utility Workers
- Landscapers and Gardeners
- Day Laborers and Domestic Workers

WHAT PROTECTIONS DOES THE EMERGENCY STANDARD PROVIDE?

When the AQI for PM2.5 exceeds 150, employers are required to:

- Communicate with workers about current AQI PM2.5 at the worksite and the potential symptoms of wildfire smoke exposure
- Provide training on the health effects of wildfire smoke, protections available to them, and procedures for obtaining medical treatment
- Reduce workers' exposure to wildfire smoke by providing enclosed building or vehicles with filtered air, relocating work where the AQI or PM2.5 is lower than 151, changing work schedules, lessening work intensity, and/or accommodating longer rest breaks
- Provide respirators (NIOSH-approved N95 filtering face piece respirators) and encourage their voluntary use
- As currently written, the emergency standard requires respirator use along with mandatory fit testing for workers if the AQI for PM2.5 exceeds 500

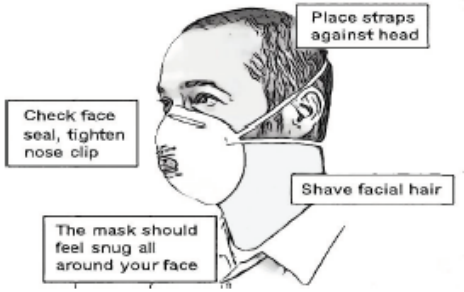
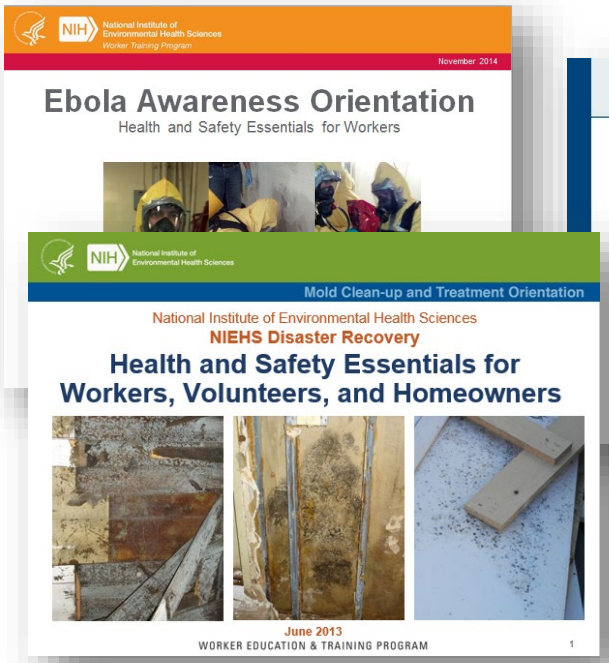
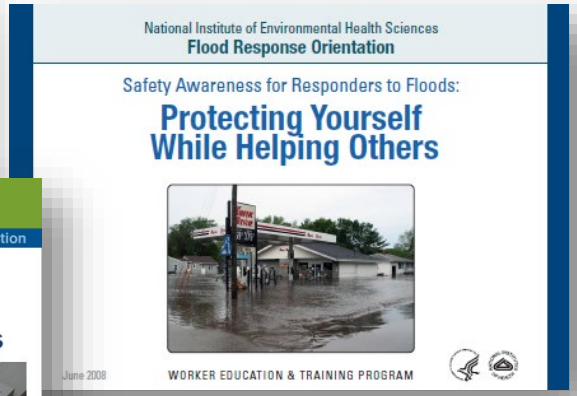


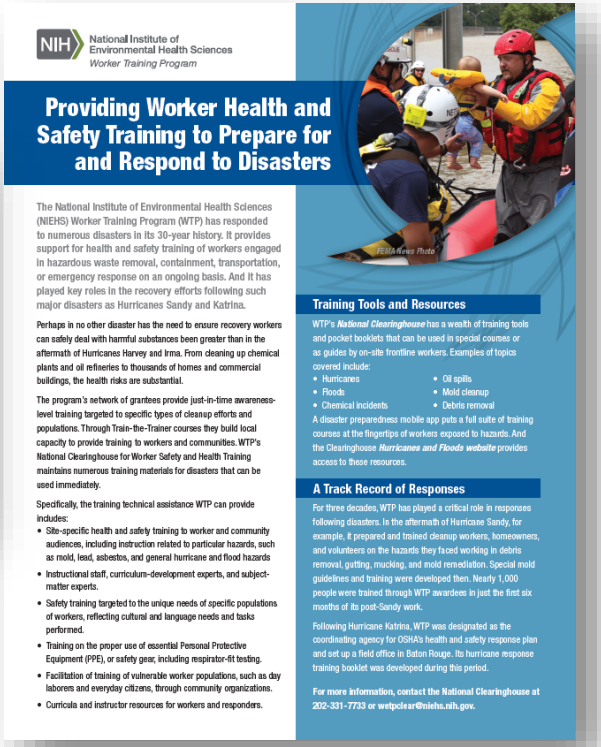
Image shows proper fitting of respirator

Photo: Cal/OSHA

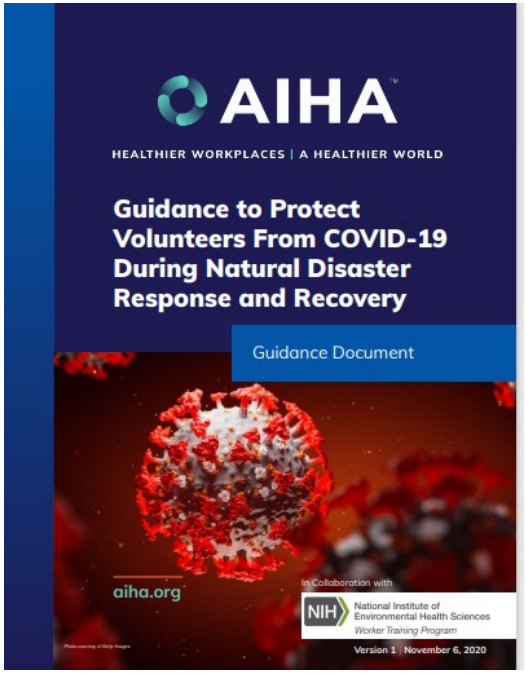
WTP Training Resources







NIEHS/American Industrial Hygiene Association Guidance to Protect Volunteers from COVID-19 During Natural Disaster Response & Recovery



- Designed to provide natural disaster response (unpaid) volunteers information about how to protect themselves from the SARS-CoV-2 virus that causes COVID-19.
- Share information about how volunteer organizations operate during a response
- Natural disasters include severe weather events like hurricanes, earthquakes, tornadoes, and floods, as well as wildfires and environmental spills.

https://aiha-assets.sfo2.digitaloceanspaces.com/AIHA/resources/Guidance-Documents/Guidance-to-Protect-Volunteers-From-COVID-19-During-Natural-Disaster-Response-and-Recovery_GuidanceDocument.pdf

What are the steps in assessing risk?

Risk assessment is an employer responsibility that should involve frontline workers, union reps, and supervisors.

1st Step: **Do you have a process in place already?**

- Safety and Health or Labor/Management Committee
- Task Force or Sub-Committee

2nd Step: **What method will you employ?**

- Inspection, job hazard analysis, brainstorming (who, what when, how), other

3rd Step: **How will you document the assessment?**

Look at new resources – OSHA National Emphasis Program and Training

- OSHA launches program to protect high-risk workers from coronavirus, focuses on employers that retaliate against workers with safety concerns | Occupational Safety and Health Administration

Updated Interim Enforcement Response Plan for Coronavirus Disease 2019 (COVID-19) | Occupational Safety and Health Administration (osha.gov)

Do you have a process that…

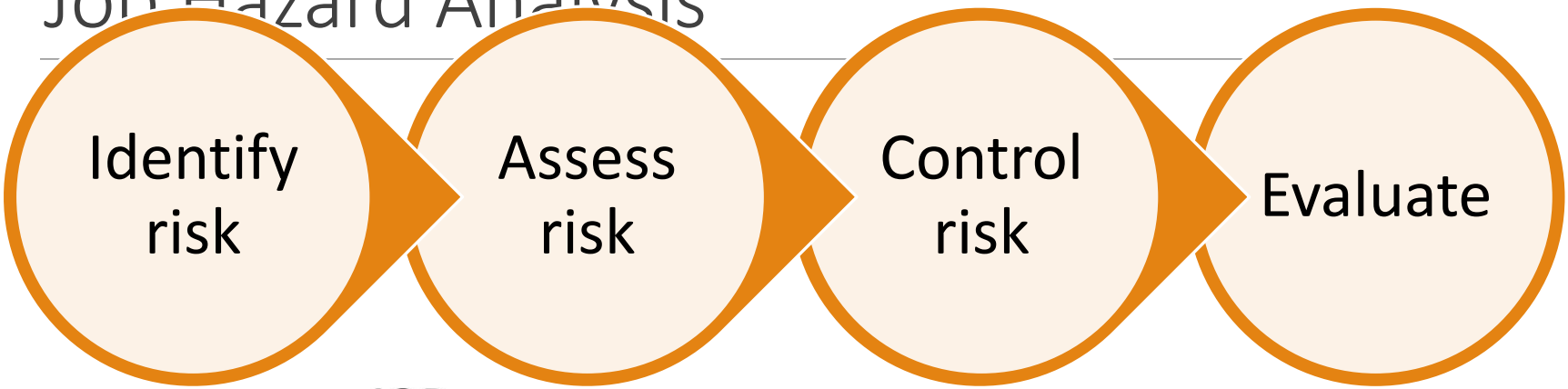
Has clear decision makers?

Includes all key stakeholders?

Includes front line workers?

Has clear lines of responsibility, accountability, and timelines?

Job Hazard Analysis



Thank you for listening!
What are your questions?