



WTP Awardee Meeting

Rodbell, NIEHS

and Virtual

October 19, 2022



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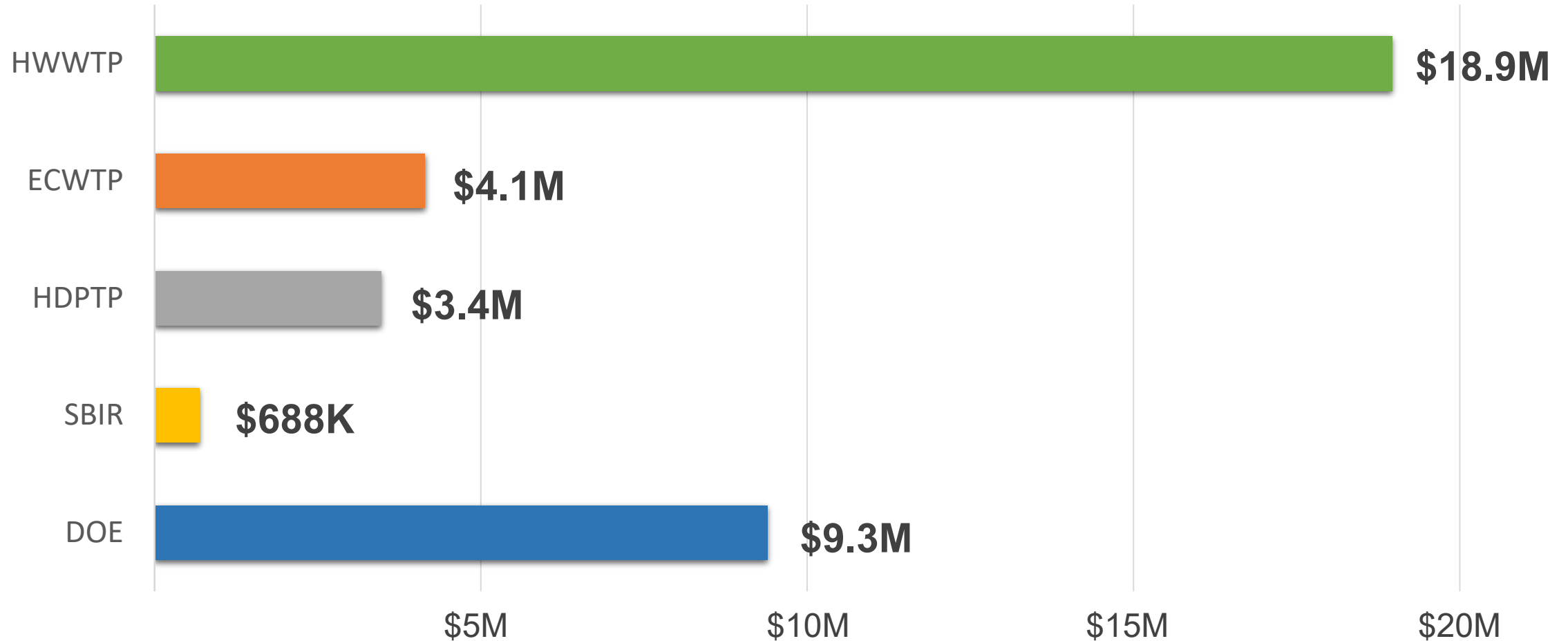


NIEHS Rodbell Conference Center



- New conference room and systems
- NIEHS earns WELL building rating amid pandemic
- NIH Enhanced COVID-19 testing and health & safety

WTP: FY22 Funding Across Program Areas



WTP: Special Appropriations for Disasters and Emergencies

- Hurricane Katrina (2005): **\$302K**
- Deepwater Horizon Oil Spill (2010): **\$352K**
- Superstorm Sandy (2012): **\$180K**
- Ebola Virus Disease (2014): **\$10M**
- COVID-19 (2020): **\$10M**



WTP Program Metrics To Date (Cumulative)



270,000+ courses



5 million+ workers trained



50 million+ contact hours



NIEHS Worker Training Program (WTP): A National Resource for Worker Health and Safety Training on Climate Change Effects

- **Climate changes affects worker health, such as**
 - Extreme Weather
 - Temperature extremes
 - Biological hazards
- **Grantees deliver safety training** to support preparedness for disasters and other climate-related hazards and well as support health and safety during disaster cleanup efforts
- **WTP integrates environmental justice to climate change response:** Focuses work on most-impacted communities and workers
 - Environmental Career Worker Training Program is a pilot program in the **Justice40 initiative** from the White House Environmental Justice Advisory Council



NIH Climate Change and Health Initiative

At NIEHS, we are a part of the NIH Climate Change and Health Initiative, which is an urgent, cross-cutting NIH effort to reduce health threats from climate change across the lifespan the world, especially among those at highest risk.

References:

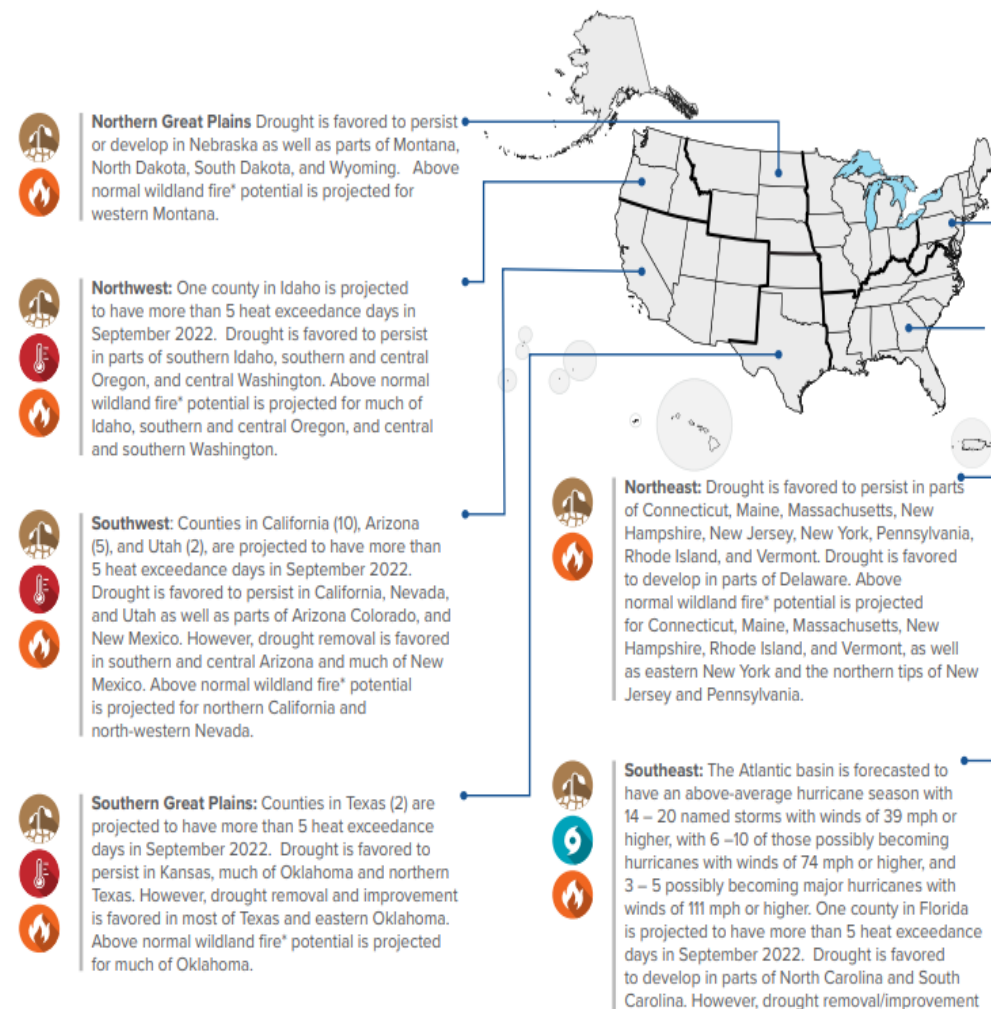
NIH- <https://www.nih.gov/sites/default/files/research-training/initiatives/climate-change/nih-climate-change-one-pager.pdf>

HHS- <https://www.hhs.gov/sites/default/files/climate-health-outlook-september-2022.pdf>

Climate and Health Outlook

ISSUED SEPTEMBER 2022

The Climate and Health Outlook is an effort to inform health professionals and the public on how our health may be affected in the coming month(s) by climate events and provide resources to take proactive action. An [associated webpage](#) includes additional resources and information.



NIEHS-Developed Resources for Climate Change, Disaster Response, and Environmental Justice

- **National Clearinghouse on Worker Health and Safety** – many [booklets and training tools](#) available to support training
- Several new or updated documents
 - Fact sheet on [Mitigating the Impact of Climate Change and Securing Environmental Justice through Safety and Health Training](#)
 - [Climate Change Vulnerability Assessment](#)
 - [Video](#) that promotes disaster-specific tools and resources available through the Clearinghouse
 - [Wildfire training tool](#) to address the health and safety of workers, volunteers, and communities
 - Urban flooding and worker health [report](#) and [fact sheet](#)



Hazardous Waste Worker Training Program (HWWTP)

Provides occupational safety and health training for workers engaged in activities related to hazardous waste removal, containment, or chemical emergency response.

39 million	Worker contact hours since 1987
3.6 million	Workers trained overall
113,224	Workers trained in 2022
17	Current grantees
\$18.9 million	Funding dollars in FY22



Hazardous Waste Worker Training Program:
niehs.nih.gov/careers/hazmat/training_program_areas/hwwt/index.cfm

Hazardous Waste Worker Training Program (HWWTP)

Total Trained * Budget Period: 08/01/2021 - 07/31/2022

7,111	Courses
876,095	Contact hours
113,224	Workers
17	Current grantees
\$18.9 million	Funding dollars in FY22



Hazardous Waste Worker Training Program:
niehs.nih.gov/careers/hazmat/training_program_areas/hwwt/index.cfm

HWWTP Highlight: Training Sheet Metal Workers

CPWR – The Center for Construction Research and Training

- Delivered hazardous waste training to members of the Sheet Metal Workers Local 58 in Syracuse
- Workers needed training as they prepared to install new tooling and replace existing duct where hydrofluoric acid has formed crystals on inner surfaces
- Cleanup work is being done as part of GlobalFoundries™ plans to expand their manufacturing facilities in upstate NY
- The plans include remediation of existing facilities and construction of new ones to bring additional semiconductor manufacturing to the region



Photo courtesy of CPWR, July 2022 progress report

Successful Health and Safety Training Partnerships

Community college students: Providing hazardous materials courses to more than 50,000 community college students annually in 33 states and two territories.

Grantee: Community College Consortium for Health and Safety Training (CCCHST) based in South Portland, Maine

Automobile manufacturing workers: Delivering safety courses at car manufacturing plants in Ohio and other midwestern states for a variety of hazardous industrial environments situations.

Grantees: United Auto Workers and the Midwest Consortium (led by University of Minnesota)

Flint, Michigan residents: Providing training that can lead to membership in the Plumbers and Pipefitters Local 370, removing and replacing lead water lines to Flint residents' homes, and working on Water Treatment Plant construction, under Environmental Career Worker Training Program (ECWTP) job training.

Grantee: CPWR – The Center for Construction Research and Training

“I find that most students leave my trainings with a new or renewed understanding of the important role that safety plays in their daily jobs as well as extreme rescue situations.”

– CCCHST Trainer

“We had a spill of over 50 gallons of gasoline at our plant. We activated the Emergency Response Team and the hazmat response procedures we learned in training. We were able to contain the spill and clean it up safely with no environmental damage.”

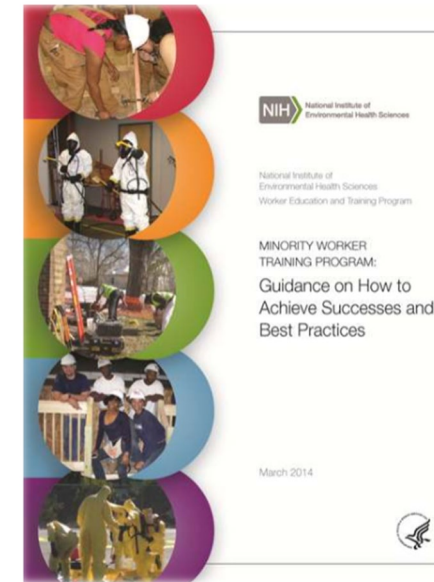
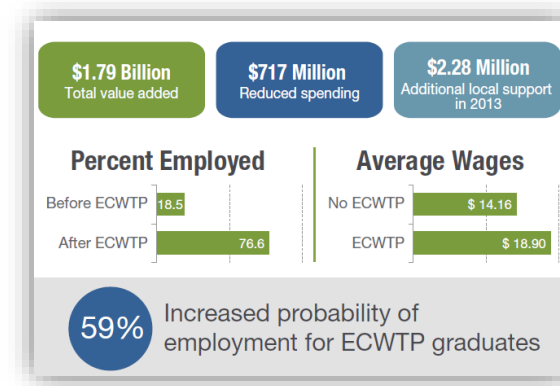
- Student from Ford Motor Company

“The best part about all of this is that I was invited by my 8-year-old son to visit his classroom, where he presented me with an award. It says ‘Thanks Dad, for making our water safe.’ That’s what means the most to me.”

– Flint, Michigan ECWTP participant

WTP 27 Years of the Environmental Career Worker Training Program (ECWTP) in 2022: Creating Job Opportunities & Changing Lives

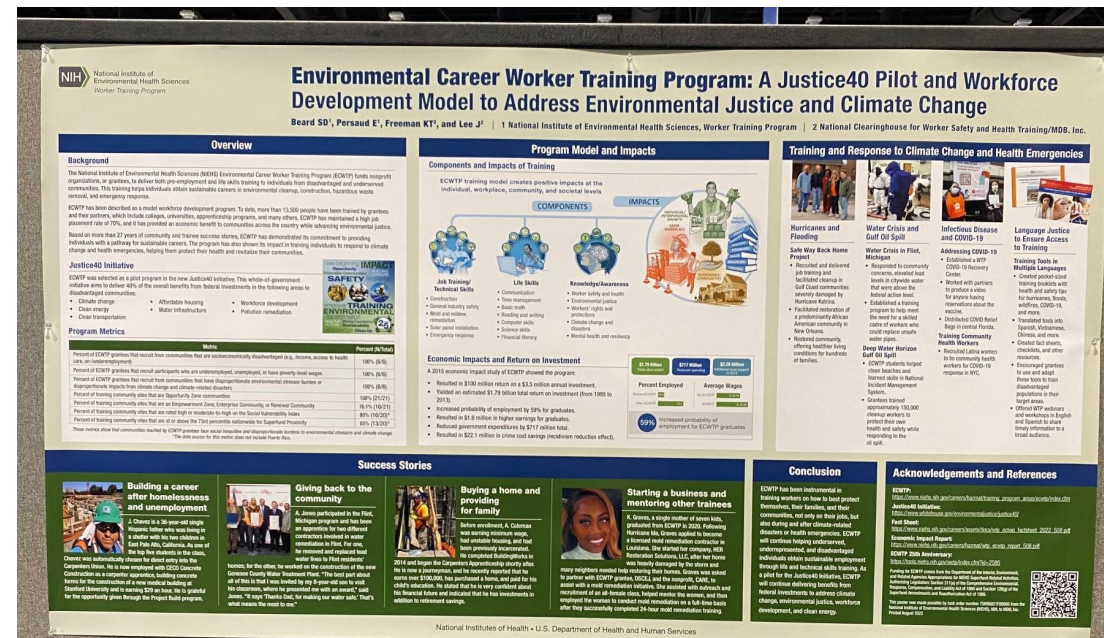
- **Success:** Since beginning of program, **approx. 14,023 workers** have been trained with an average **70% employment rate**.
- **Locations:** Over 30 communities trained with 200 different CBOs
- **Current Programs:** Six grantees working with 25 different CBO's
- ❖ **2022:** 512 individuals trained with 366 employed at a **71 % job placement rate. (As of 10/22)**
- ❖ **2021:** 491 individuals trained with 305 employed at a **62% job placement rate.**
***Note - The COVID-19 pandemic impacted training.**
- ❖ **Designated an HHS Justice40 Pilot by White House**
- ❖ **Takeaways: Changing Lives & Building Careers for a Lifetime**
- ❖ **Training Best Practices:** Extensive life skills, mentoring, numerous training and certificates and career options for graduates
- ❖ **Economic Impact Return of Investment:** \$100 million return on \$3.5 million investment-



https://www.niehs.nih.gov/careers/hazmat/wtp_ecwtp_report_508.pdf

ECWTP & Brownfields 2022

- Sharon Beard and ECWTP grantees attended **National Brownfields Conference** in Oklahoma City
- **People’s Choice Award (poster):** “ECWTP: A Justice40 Pilot and Workforce Development Model to Address EJ and Climate Change”
- **ECWTP/Justice40 Stakeholder Engagement meeting**
 - Discussed Climate and Economic Justice Screening Tool
 - Raised awareness of ECWTP efforts and successes
 - Grantees shared benefit of Justice40, plans to leverage additional funding and expand efforts to other EJ communities
 - Attendees shared perspectives on climate change, workforce development, and mental health



NIH/NIEHS WTP COVID-19 Safety Training Initiative

- **Received \$10 million** from the Coronavirus Preparedness and Response Supplemental Appropriations Act, 2020
- **Implemented a national health safety training response** focused on responders and workers who face potential exposure to COVID-19 with **more than 90,000 workers trained** (October 2021)
- Active participant in **COVID-19 Executive Orders 13996, 13999** (Sustainable Public Health Workforce; Protecting Worker Safety and Health)





Demia Wright

Public Health Educator

Worker Training Program

Division of Extramural Research & Training

National Institute of Environmental Health Sciences

Congressional Justification



How is Worker Training Program Funded?

- Both WTP and the Superfund Research Program (SRP) receive funding through the **House and Senate Appropriations' Subcommittees on Interior, Environment, and Related Agencies.**
- The two NIEHS programs were established under the Superfund Amendments and Reauthorization Act of 1986 (SARA).

The Interior and Environment Appropriations Subcommittees

Senate Membership

- **Jeff Merkley, Chair (D-OR)**
- **Lisa Murkowski, Ranking Member (R-AK)**
- Patrick Leahy (D-VT)
- Jon Tester (D-MT)
- Martin Heinrich (D-NM)
- Dianne Feinstein (D-CA)
- Jack Reed (D-RI)
- Chris Van Hollen (D-MD)
- Mitch McConnell (R-KY)
- Cindy Hyde-Smith (R-MS)
- Marco Rubio (R-FL)
- Roy Blunt (R-MO)
- Shelley Moore Capito (R-WV)
- Bill Hagerty (R-TN)

<https://www.appropriations.senate.gov/subcommittees/interior-environment-and-related-agencies>

House Membership

- **Chellie Pingree, Chair (D-ME-01)**
- **David Joyce, Ranking Member (R-OH-14)**
- Derek Kilmer (D-WA-06)
- Susie Lee (D-NV-03)
- Matt Cartwright (D-PA-08)
- Betty McCollum (D-MN-04)
- Josh Harder (D-CA-10)
- Marcy Kaptur (D-OH-09)
- Chris Stewart (R-UT-02)
- Mike Simpson (R-ID-02)
- Mark Amodei (R-NV-02)

<https://appropriations.house.gov/subcommittees/interior-environment-and-related-agencies-117th-congress>

What is a Congressional Justification?

- As part of the budget process, NIEHS **annually submits a Congressional Justification (CJ)** to be included in the President's budget.
 - Overall, NIEHS submits to the Labor, Health and Human Services, Education, and Related Agencies Subcommittee.
- The CJ provides the Senate and House Appropriations' Committees detailed estimates and justifications for research and research support activities (infrastructure, administrative, etc.) that NIH would anticipate funding at the President's Budget Request level.
- CJ consists of a Director's Overview, fact sheet, budget and other administrative pages, and a justification (program description and program portrait)
- All NIEHS CJs can be found at <https://www.niehs.nih.gov/about/congress/justification/index.cfm>

What's in a Congressional Justification?

Before FY2022 CJ

DEPARTMENT OF HEALTH AND HUMAN SERVICES
NATIONAL INSTITUTES OF HEALTH
National Institute of Environmental Health Sciences (NIEHS)
Department of Interior and Related Agencies Appropriations
Superfund-Related Activities

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NIH/NIEHS Worker Training Program (WTP)

WTP provides the Nation with a workforce trained in the safe handling of hazardous materials and waste. This includes thousands of workers employed at Superfund sites across the United States. This vital training is conducted in all regions of the country and for all relevant target populations through a network of non-profit organizations, including labor-based health and safety organizations and academic institutions. These organizations are committed to protecting workers and their communities by creating and delivering high-quality, peer-reviewed safety and health curricula. WTP has built a national workforce ready to handle hazardous materials, address environmental concerns, and clean up hazardous waste and debris after disasters strike.

⁴ NIH Grant No. R43ES029401. Remediation of Perfluorinated Chemicals in Water Using Novel High-Affinity Polymer Adsorbents. Barin, Gokhan. CycloPure, Inc. Awarded March 22, 2018. NIH RePORTER Link.

Superfund-17

WTP: Response and Preparedness for Natural Disasters

WTP funds training for workers who may face a hazardous work environment. This includes training in disaster response, preparedness, and resilience involving natural disasters such as hurricanes, floods, and wildfires. For example, in Northern California, the International Brotherhood of Teamsters Worker Training Program provided six 40-hour HAZWOPER courses to residents who were involved in wildfire cleanup activities. There were 69 students in the classes for a total of 2,760 contact hours. Many of these students were able to secure temporary jobs as a result of the training they received from these classes. As another example, the University of Minnesota, under the Midwest Consortium/University of Cincinnati, conducted mold training in Minnesota in response to spring flooding, which provided important instruction to help workers remediate flood damage properly and safely.

WTP: Health and Safety in the Industrial Sector

What's in a Congressional Justification?

Before FY2022 CJ

FY2022 CJ and later

DEPARTMENT OF HEALTH AND HUMAN SERVICES
 NATIONAL INSTITUTES OF HEALTH
 National Institute of Environmental Health Sciences (NIEHS)
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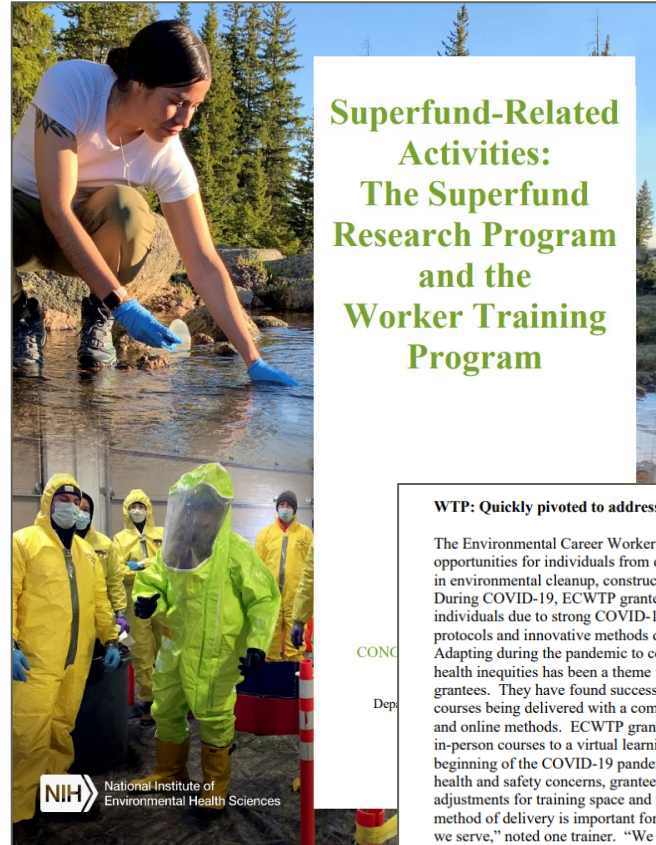
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WTP: Health and Safety in the Industrial Sector




Superfund-Related Activities: The Superfund Research Program and the Worker Training Program





National Institute of Environmental Health Sciences


Superfund-Related Activities


Program Highlights:


- 


SRP: Discovered new mechanisms involved in liver cancer, suggesting novel targets for new therapies
- 

WTP: 2021: trained over 130,000 workers in more than 7,800 courses for nearly 1 million contact hours
- 

SRP: Scientists developed poplar trees to remove trichloroethylene (TCE) from groundwater, saving an estimated \$9.5 million
- 

WTP: Trained thousands of workers for recovery from U.S. natural and man-made disasters, including: World Trade Centers, western wildfires, and Hurricanes Katrina, Sandy, Harvey, and Ida
- 

SRP: Grantees linked low levels of PCBs to obesity-associated atherosclerosis and discovered that
- 

WTP: ECWTP selected for White House Justice40 pilot program, has an average 70 percent employment rate
- 

SRP: supported small molecule-based PFAS destruction unit for soil and water

Future Initiatives

SRP: The SRP is exploring how environmental contaminants affect the immune system and relationships between pollutants and susceptibility to COVID-19 and other infectious diseases. New research projects incorporate novel materials science and bioremediation to clean up emerging contaminants and newly funded training programs will develop curricula on health and safety management practices of emerging technologies. Grantees will expand research on how exposure burdens combine to create health disparities and best ways to communicate environmental health risks to the public. Future initiatives include advancing data sharing and data science and using machine learning and artificial intelligence tools to improve health.

WTP: The WTP is committed to creating a national workforce that can protect themselves, co-workers, and communities from environmental hazards and that have the skills needed for jobs that engage in environmental cleanup, infrastructure building, and green jobs. The program's grantees implement training activities through

WTP: Quickly pivoted to address COVID-19 and promote health equity

The Environmental Career Worker Training Program (ECWTP) provides training to increase opportunities for individuals from disadvantaged and underserved communities to obtain careers in environmental cleanup, construction, hazardous waste removal, and emergency response. During COVID-19, ECWTP grantees were able to continue to offer courses and employment for individuals due to strong COVID-19 infection control protocols and innovative methods during training. Adapting during the pandemic to continue to reduce health inequities has been a theme for the ECWTP grantees. They have found success through training courses being delivered with a combination of classroom and online methods. ECWTP grantees quickly modified in-person courses to a virtual learning environment at the beginning of the COVID-19 pandemic. To account for health and safety concerns, grantees also made other adjustments for training space and recruitment. "The method of delivery is important for the populations that we serve," noted one trainer. "We must have interesting and interactive online content to engage our participants. We are not just training to train, but we want to be effective and train with purpose. That is how we will continue to make an impact." Since 1995, the ECWTP has trained approximately 13,000 workers with an average 70 percent employment rate.

WTP, in coordination with the Interagency Federal Working Group on Environmental Justice (EJ), sponsored *Environmental Justice, Natural Disasters, & COVID-19 Virtual Town Halls*. The purpose of the meetings was to gain a better understanding of how natural disasters and COVID-19 impact minority, low-income, overburdened, and underserved communities, and how

NIEHS (SF)-20



ECWTP STUDENTS IN A HAZARDOUS MATERIALS COURSE IN BREVARD COUNTY, FLORIDA THROUGH THE SUSTAINABLE WORKPLACE

Process for the CJ

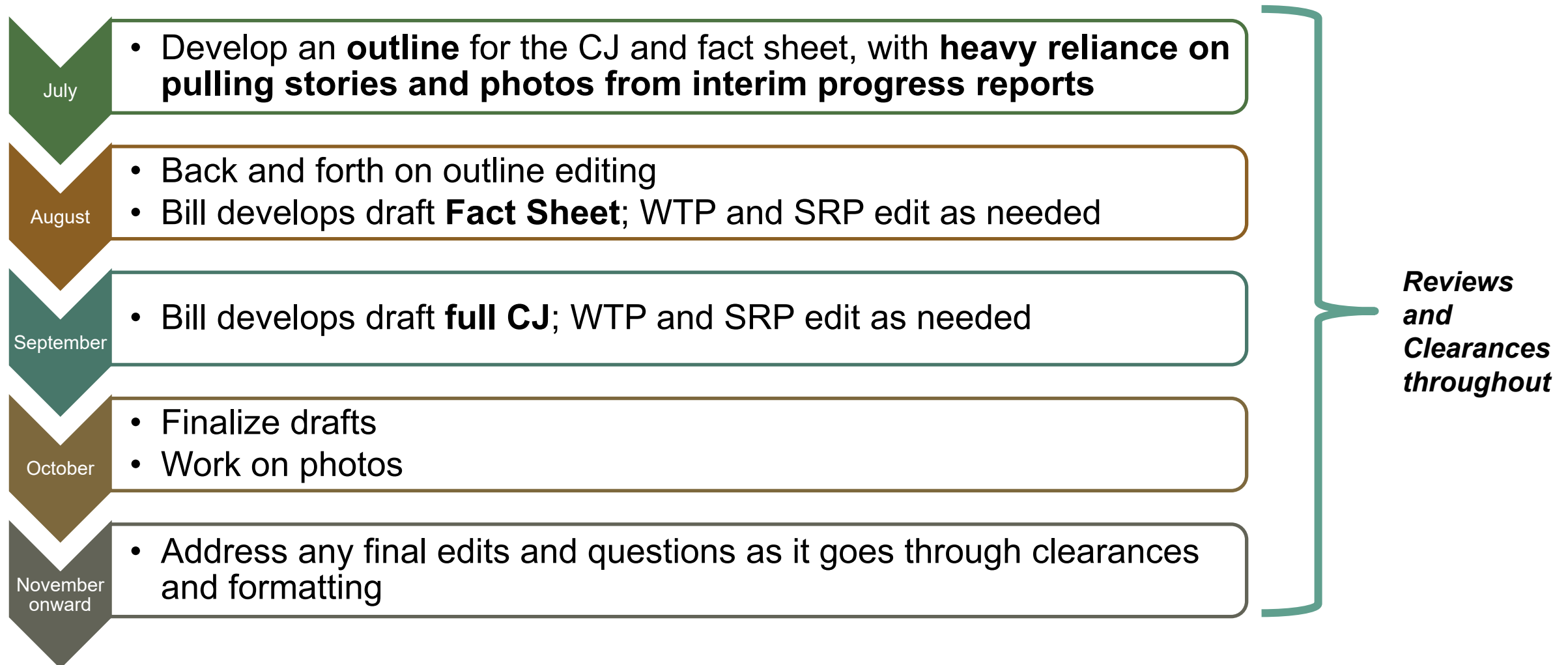


- Bill Jirles in the NIEHS Office of Scientific Coordination, Planning, and Evaluation leads the writing and coordination with WTP and SRP



- All drafts go up through review and clearances at the branch, division, institute, and NIH OD levels

General Timeline for the CJ

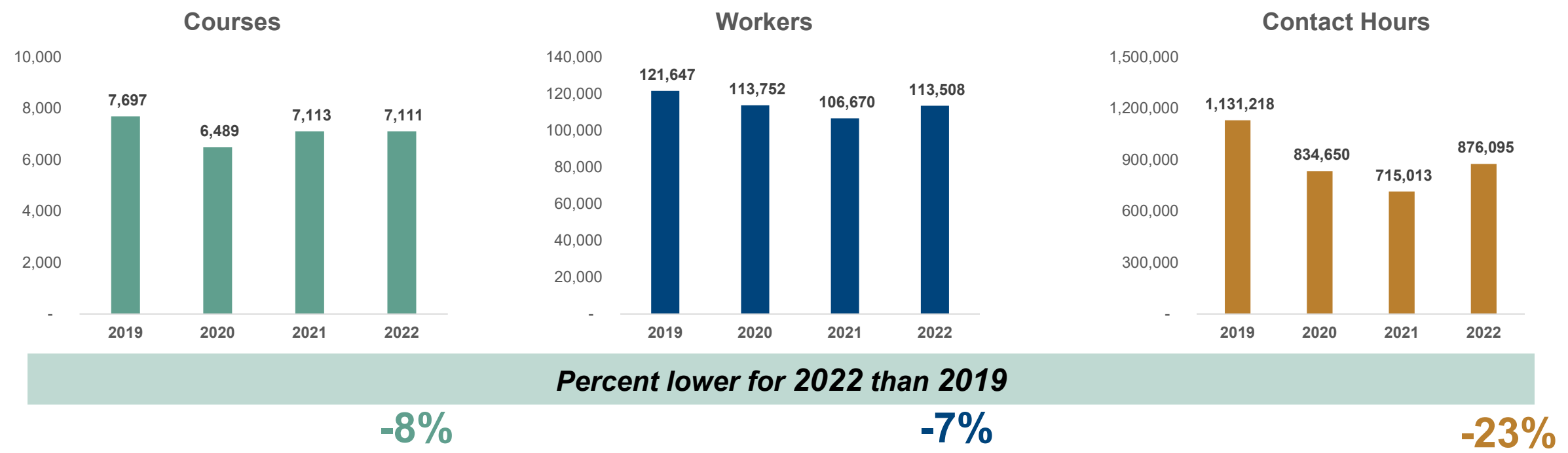


Appropriations' Subcommittees Briefing

- Subsequent to the release of the President's budget, NIEHS is usually invited to brief the Interior and Environment Appropriations Subcommittees.
- This briefing includes updates to Congress on the status of WTP and SRP and highlights recent accomplishments.
 - Presented by NIEHS Director
 - Audience is usually staffers from the “four corners” (currently AK, ME, OH, OR)
 - Very brief
 - Around February (but can vary)
 - Helps justify what is reported and requested in the CJ
 - Covers key topics of interest to the administration and the states represented – e.g., climate change, disasters, J40, American Indians and Alaska Natives

HWWTTP Metrics – COVID Recovery

****2022 Data cleaning not final****

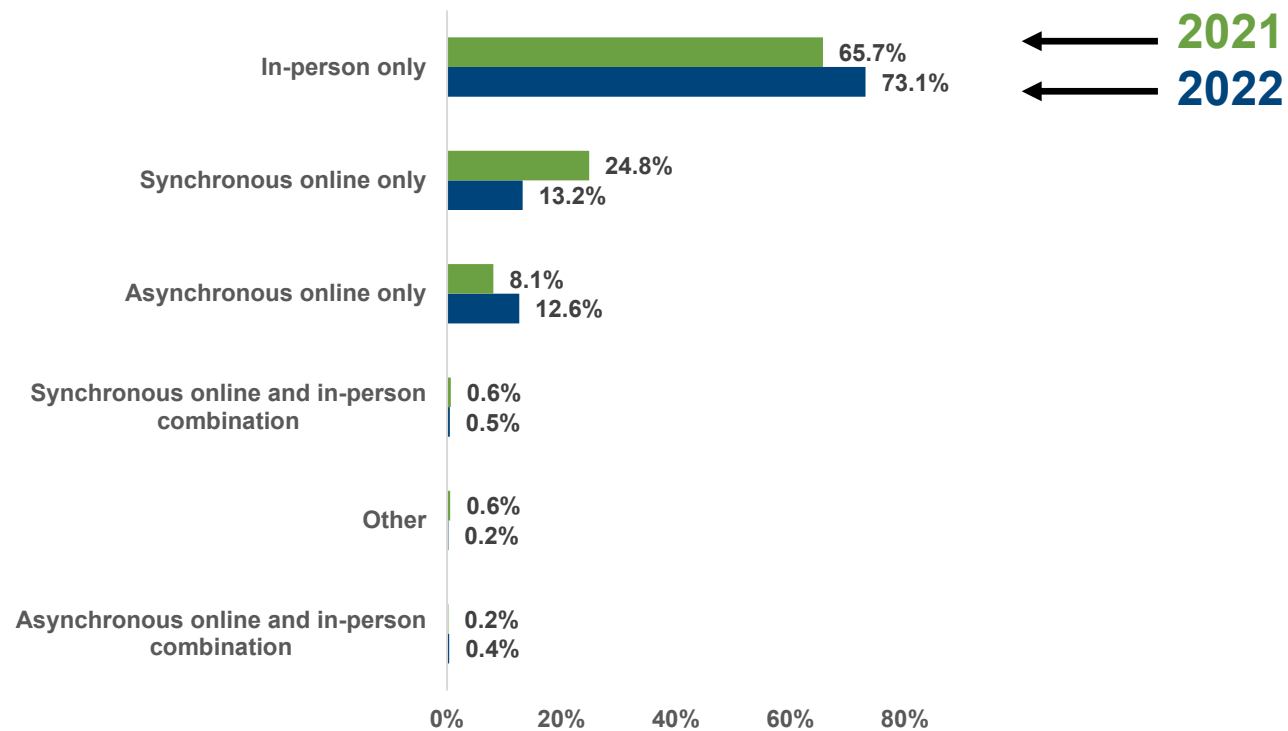


HWWT Metrics - Training Delivery Method

In-person training increased in 2022

****2022 Data cleaning not final****

Percent of Workers Trained

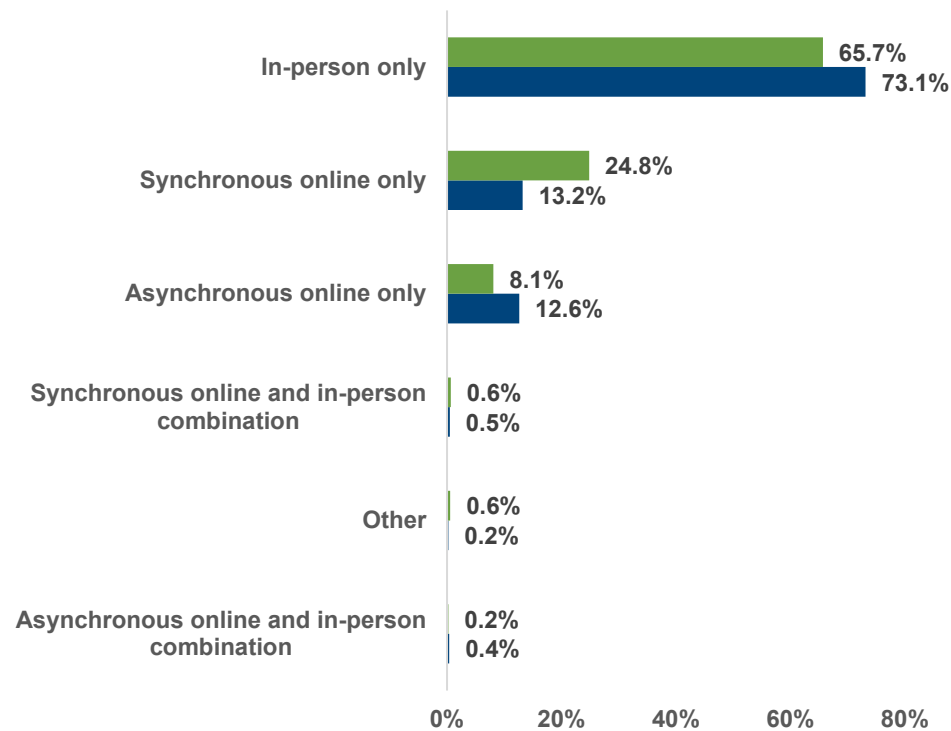


HWWT Metrics - Training Delivery Method

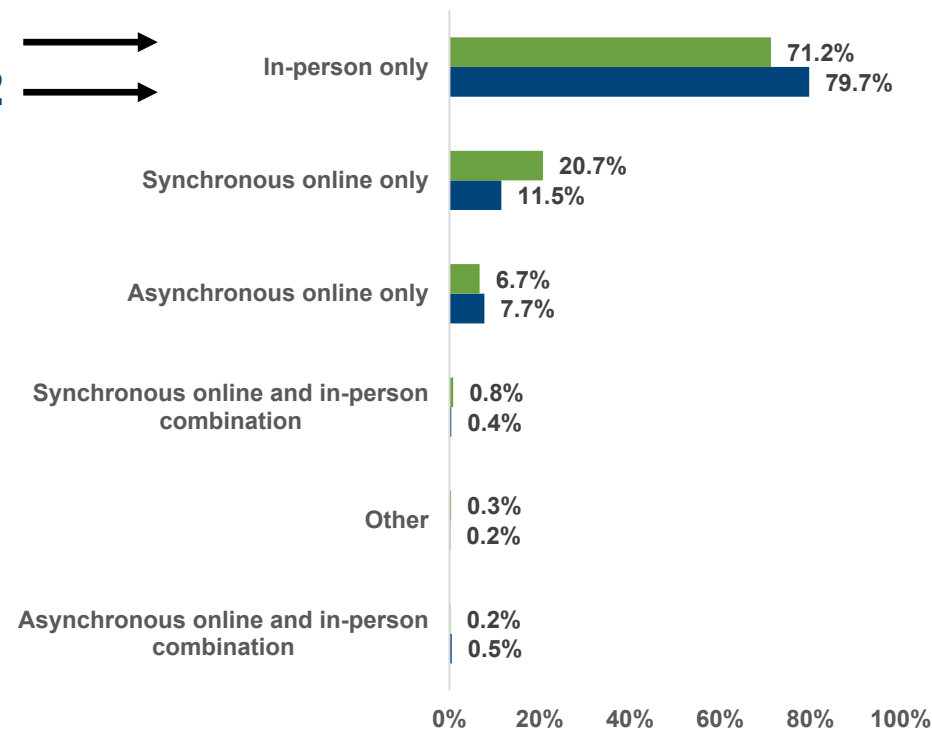
In-person training increased in 2022 – workers and courses

****2022 Data cleaning not final****

Percent of Workers Trained



Percent of Courses Delivered



NIEHS/U.S. DOE Nuclear Worker Training Program

Delivers training for workers engaged in environmental restoration, waste treatment, and emergency response activities at sites in the U.S. Department of Energy (DOE) nuclear weapons complex.

9 million	Worker contact hours since 1994
694,564	Workers trained overall
23,095	Workers trained in 2021
7	Current grantees
\$9.3 million	Funding dollars in FY22



NIEHS/DOE Nuclear Worker Training Program:
niehs.nih.gov/careers/hazmat/training_program_areas/doe/index.cfm

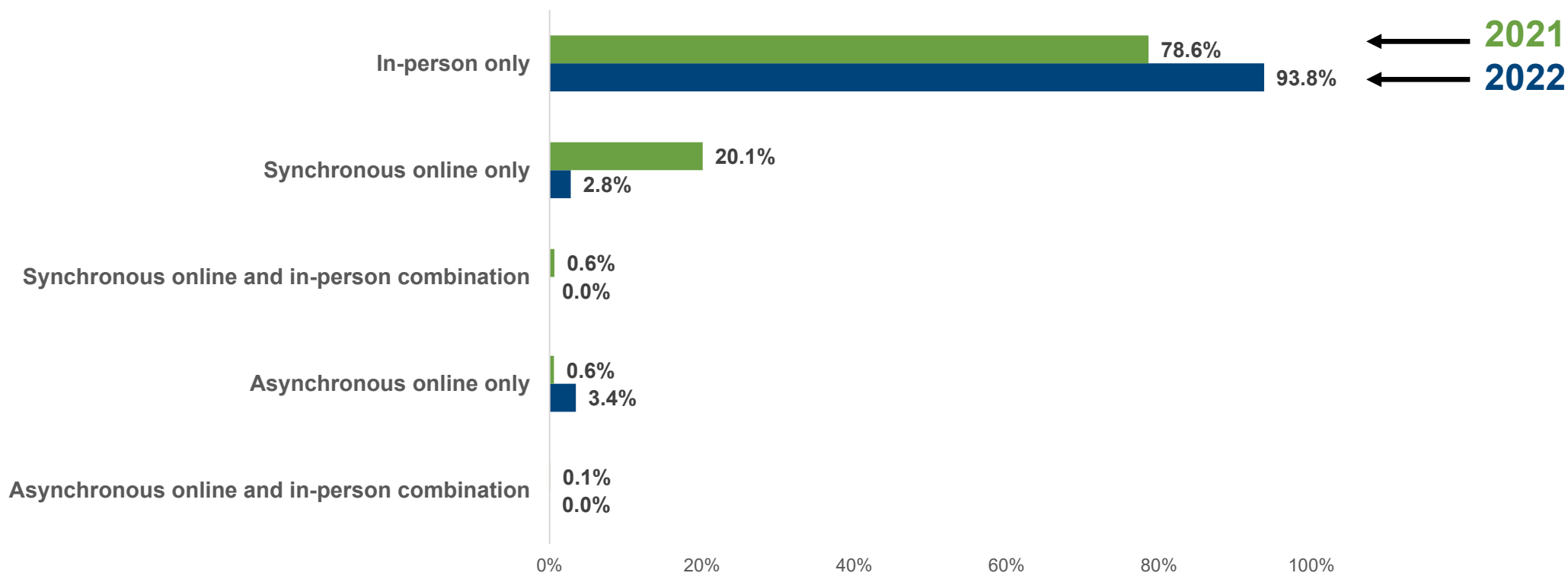


2023 will mark *30 years* of the NIEHS/DOE Program



In-person training has been the predominant training method during 2021 and 2022 for the NIEHS/DOE Program

****2022 Data cleaning not final****



Examples of Grantee Highlights

- Ongoing work to increase training support for **Los Alamos National Lab**
 - **IBT** – Ongoing HAZWOPER and increase in craft training (overhead crane, load securement)
 - **ICWUC** – Extensive efforts to bring new trainers up-to-speed to support ongoing confined space and fall safety training after a retirement
 - **CPWR** – Ongoing refresher courses
 - **PETE** – partners with Santa Fe Community College for RCRA, HazCom, Beryllium, and other courses



Communications, Evaluation, and Reporting

- NC State Profile
- COVID Appropriations 2-pager
- Evaluation work with Dr. Eric Persaud
- Progress report template

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

Worker Training Program: North Carolina

A National Institute of Environmental Health Sciences (NIEHS) Superfund-Related Activity

The NIEHS Worker Training Program (WTP) annually funds training for more than 3,800 workers through 220 health and safety courses in North Carolina. Recipients of NIEHS WTP grants lead trainings to prepare workers to perform their jobs safely, handle hazardous materials, and respond to disasters in their communities.



Courses include:

- Basic Superfund Site Worker and Site Worker Refresher
- Confined Space Entry and Rescue
- Crane and Forklift Operator Safety
- Disaster Site Safety Awareness
- Emergency Response Awareness
- General Construction and General Industry Safety
- Hazardous Waste Operations and Communication
- Hazardous Materials Transportation Awareness
- Infectious Disease and Bloodborne Pathogen Awareness
- Lockout/Tagout
- Microbial Remediation
- Personal Protective Equipment Awareness
- Respiratory Protection

Training Highlights

Hurricane Response and Recovery

WTP grantees deliver training to help North Carolina workers and communities prepare for and respond to hurricanes and flooding.

In response to Hurricanes Matthew and Florence, the International Chemical Workers Union Council Center for Worker Health and Safety Education partnered with the Robeson County Disaster Recovery Committee to provide mold awareness and remediation training. They delivered a train-the-trainer course to disaster case workers, construction analysts, local government officials, and community members. The course provided participants with the knowledge to recognize mold hazards and the skills needed to deliver training to others.

Additionally, the United Steelworkers Tony Mazzocchi Center deployed their Specialized Emergency Response Trainers (SERTs) to hurricane-impacted regions in Wilmington where they delivered training on mold remediation and generator safety. The SERTs also distributed emergency supplies and personal protective equipment to workers and community members.



Photo courtesy of Demia Wright, WTP

For more info
www.niehs.nih

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June 2022

National Institute of Environmental Health Sciences
U.S. Department of Health and Human Services
Printed on recycled paper

https://www.niehs.nih.gov/careers/assets/docs/wtp_state_profile_north_carolina_508.pdf

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

Worker Training Program

OCTOBER 2022

COVID-19 Appropriations: Health and Safety Training During a Pandemic

The NIEHS Worker Training Program (WTP) had a swift response to the coronavirus 2019 (COVID-19) pandemic. This response is based on years of experience and the program's capacity to address infectious diseases, bloodborne pathogens, and other biosafety hazards using regular program funds and emergency appropriations from Congress. This document focuses on how WTP used \$10 million in emergency appropriations from the [Coronavirus Preparedness and Response Supplemental Appropriations Act, 2020](#).*

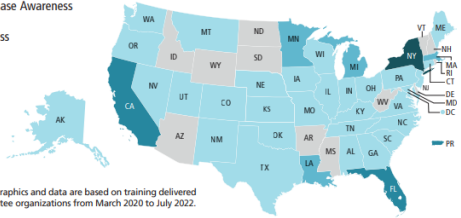
OVERVIEW

- Total dollars funded in supplemental grants: **\$9 MILLION**
- Total number of courses (online and in-person): **2,893**
- Total number of workers trained: **56,461**

Top courses*

- Infectious Disease Awareness: **1,261**
- Community-Level Infectious Disease Awareness: **404**
- Domestic Preparedness Awareness: **316**
- General Industry Safety: **128**
- General Construction Safety: **109**
- Resiliency: **78**
- Hazard Communication: **75**
- Respiratory Protection: **46**

Geographic spread of training courses



*These graphics and data are based on training delivered by grantee organizations from March 2020 to July 2022.

WORKER SECTORS TRAINED

WTP-funded organizations (grantees) make up a national network of health and safety specialists. In response to COVID-19, grantees trained workers in many occupational sectors. This includes, but is not limited to:

- Health care workers (first responders, emergency medical service workers)
- Teachers and students
- Construction workers
- U.S. Department of Energy workers and contractors
- Painters
- Maintenance professionals
- Public health professionals
- Transportation workers (waste haulers, airline/airport workers)
- Disaster and community volunteers/workers
- Maritime workers
- Food service workers
- Laboratory workers

*Funds from the emergency appropriations were allocated for supplemental training grants and program contract support. This document does not reflect additional training and resources completed through WTP Superfund-related funding.

https://www.niehs.nih.gov/careers/assets/docs/wtp_covid_2pager_10mil_508.pdf

Extramural Papers of the Month in the NIEHS Environmental Factor

- We are asked to nominate papers for **published** in the **current month** or the **month prior**
 - Tell us about your publications right away!
- Remember the [NIH Public Access Policy](#) and [federal funding acknowledgement](#) requirements

Environmental Factor
Your Online Source for NIEHS News
OCTOBER 2022

NIH National Institute of Environmental Health Sciences

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Papers of the month

EXTRAMURAL
BY ADELINE LOPEZ

◀ Previous Article | Next Article ▶

Racial segregation worsens the effect of lead on brain development

NIEHS-funded researchers report that early lead exposure, exacerbated by structural racism and racial isolation, may lower reading scores in children. Neighborhood environments influence children's health and development, but relationships between racial residential segregation — the geographic separation of Black populations from other groups into separate, unequal neighborhoods — and cognitive development have not been well studied.

The team used geocoded birth data in North Carolina linked to blood lead surveillance data and fourth-grade standardized test scores for more than 25,000 children. Then, they constructed measures of racial isolation of the non-Hispanic Black (NHB) population at the census tract level. Next, they analyzed individual reading test scores by blood lead level (BLL) and neighborhood racial isolation using generalized additive models.

NHB children were more likely to experience multiple adverse chemical and nonchemical exposures, such as economic disadvantage, higher BLLs, and racially isolated neighborhoods, compared to non-Hispanic white children. BLL and racial isolation were associated with lower reading scores. Reading scores for NHB children with low BLLs were similar across all racial isolation values. NHB children in areas with less racial isolation had similar reading scores as those with low BLLs even when they had higher BLLs themselves. In areas with higher racial segregation, children with higher BLLs had lower reading scores than children with lower BLLs.

According to the authors, the cumulation of exposures associated with living in certain neighborhoods combines to shape educational outcomes that would be missed under standard analysis approaches, highlighting the importance of upstream factors in exposure and health disparities.

Citation: [Bravo MA, Zechyr D, Kowal D, Ensor K, Miranda ML et al.](#) 2022. Racial residential segregation shapes the relationship between early childhood lead exposure and fourth-grade standardized test scores. *Proc Natl Acad Sci U S A* 119(34):e2117868119.

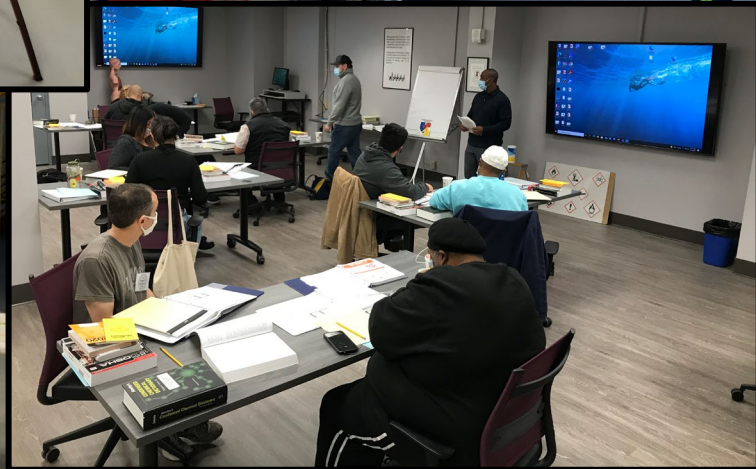
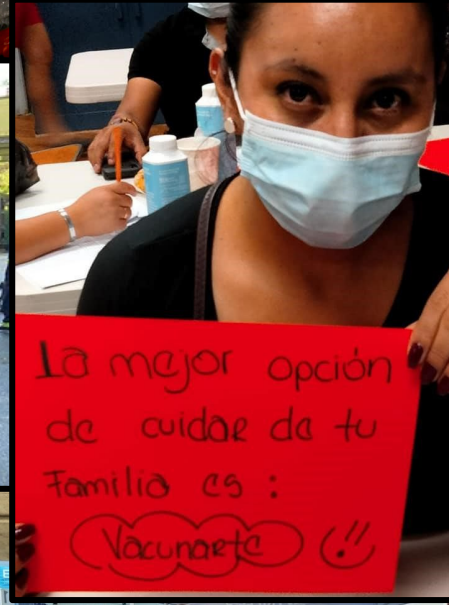
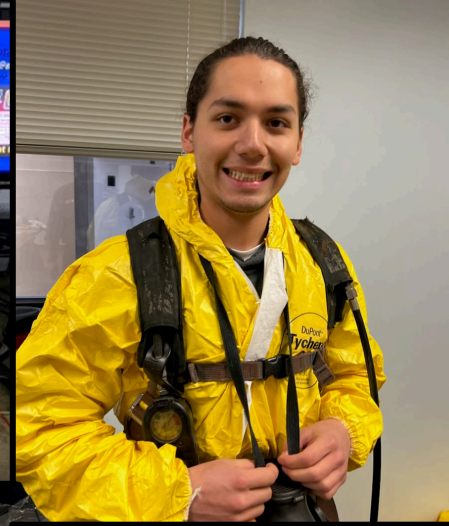
Triclosan can be passed through milk, increase risk of liver disease

Researchers funded by NIEHS found that newborn mice can be exposed to the antibacterial chemical triclosan through breastmilk, leading to increased liver disease risk. Triclosan, commonly found in medical-grade antibacterial soaps and some personal care products, is associated with numerous health concerns, including endocrine disruption, antimicrobial drug resistance, and liver disease.

Extramural Papers

- ◻ Racial segregation worsens the effect of lead on brain development
- ◻ Triclosan can be passed through milk, increase risk of liver disease
- ◻ Link between exposure to wildfire smoke and cardiovascular harm revealed
- ◻ Exposure to PFOS linked to liver cancer

Thank you for the photos!





Kathy Ahlmark

Program Analyst

Worker Training Program

Division of Extramural Research & Training

National Institute of Environmental Health Sciences

Office of Management and Budget (OMB) Requirement

Data Management System (DMS)

OMB # 0925-0348

Expiration Date: 07/31/2025

The screenshot shows the WETCIS DMS interface. On the left is a sidebar menu with items: Awardee Info, Dashboard, Curricula Catalog, Data Entry, Progress Reports, Reports, MUSTID, Admin Functions, Help and Docs, and Admin Pages. The main content area has a header with the NIH logo and 'National Institute of Environmental Health Sciences'. Below the header is a 'Consort (Required)' dropdown menu with 'WTP Test Awardee (999)' selected and a 'Change page to a different Consort's View' button. An 'Announcements' section contains a highlighted message: 'Can conference presentations or workshops be counted as training, particularly with a large number of attendees?'. Below this are sections for 'Deadlines' and 'DOE' with bulleted lists of due dates for various reports and data. At the bottom, there is contact information for data submission questions, technical problems, and Section 508 questions, along with a collection authorization date of July 31, 2025, and a public reporting burden statement.

DMS Justifications for High or Low Student Class Size



Good Justifications

- The XXXXXX requests approval for this course. It was provided to workers at XXXXX. This course requires close monitoring, so the class size is limited. The instructor continued the course because the students needed the course for employment and the next available course was yet to be determined.
- Two participants deferred their registrations to 2021 as they did not want to join an in-person training at this point due to the pandemic. Class held in accordance with XXXXXX COVID-19 guidelines for small in-person training.
- Large class size had four instructors for 100 participants to cover the Zoom platform (instructor, chat, breakout rooms) for this awareness course.
- [PO Name] preapproved this larger emergency response course, coming from a request from XXXXX organization. 3 instructors were present for larger number of students.



Poor Justifications

- Four students attended
- Multiple instructors
- Needed for work

SBIR E-Learning for HAZMAT Program

Develops E-learning health and safety training products in a variety of formats to assist both students and instructors in the training and education process.

82	Grants supported since 1997
4	Current grantees
\$688,067	Funding dollars in FY22

- Design innovative technologies
- Enhance worker training in disasters and emergencies
- Receive patents and awards
- Commercialize products for broader use



SBIR E-Learning for HAZMAT Program:
niehs.nih.gov/careers/hazmat/training_program_areas/att/index.cfm

Active 2022 SBIR Awards



Sohail Baig - MEDCOGNITION, INC. Enabling Realistic HAZMAT Training Simulations with the PerSim® Augmented Reality Patient Simulator: Phase II



Jeffery McLaughlin - RADIANT CREATIVE GROUP, LLC Agile development of innovative, interactive hazard recognition and mitigation tools/learning e-platforms for workers involved in disaster rescue and recovery.



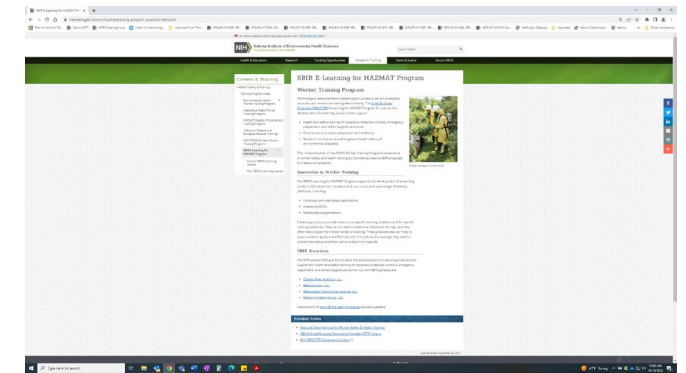
Austin Crumpton - CHARLES RIVER ANALYTICS, INC. Immersive Modular Preparedness Intelligent Tutoring (IMPRINT)



Christopher Held - METAMEDIA TRAINING INTERNATIONAL, INC. EC1 is a mobile 360-degree point-of-view learning and gamification tool integrating a VR scenario, APIE response procedures and assessment to test and improve firefighter decision-making and response.

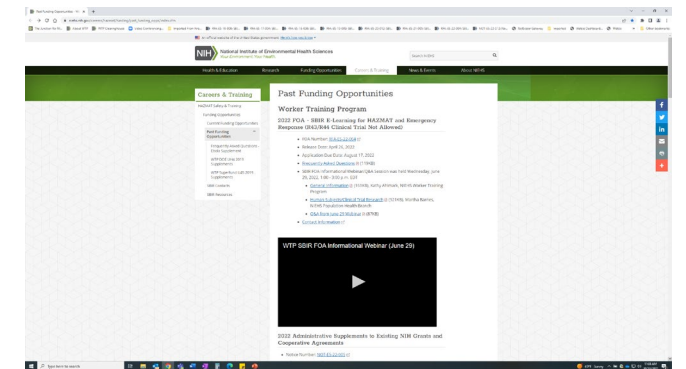
SBIR E-Learning for HAZMAT Program Main Page

https://www.niehs.nih.gov/careers/hazmat/training_program_areas/att/index.cfm



SBIR FOA Information Page

https://www.niehs.nih.gov/careers/hazmat/funding/past_funding_ops/index.cfm





Jim Remington

Program Analyst

Worker Training Program

Division of Extramural Research & Training

National Institute of Environmental Health Sciences

HAZMAT Disaster Preparedness Training Program

Supports the development and delivery of training for hazardous material and debris cleanup commonly needed after natural and man-made disasters.

2 million	Worker contact hours since 2006
222,927	Workers trained overall
28,283	Workers trained in 2021
13	Current grantees
\$3.4 million	Funding dollars in FY22



HAZMAT Disaster Preparedness Training Program:
niehs.nih.gov/careers/hazmat/training_program_areas/hdpt/index.cfm

HDPTP

- Courses, workers, contact hours level
 - Program issues?
 - Preparedness Training?
 - Worker focused (professional, employer vs CERT, volunteer, day laborer)?
 - In person vs virtual?
 - Populations missed?

Disasters

- Reprogramming
- Unobligated balance
- Local partnerships/relationships

New Hazards

- (infectious diseases, waterborne, vector borne)
- Tech related
- ??

Resilience



Talin Barnes

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National Institute of Environmental Health Sciences

I.T. Functions of WETB

- Updating Webpages
- Working with Clearinghouse on DMS updates and maintenance
- Manage several Teams Site
- Manage and maintain shared drives and digital resources
- IT processes of Disaster IDIQ

