



National Institute of  
Environmental Health Sciences  
*Worker Training Program*

# Award Recipient Meeting



OCTOBER 22, 2024



RESEARCH TRIANGLE PARK, NC



## Sharon D. Beard

**Director, Worker Training Program  
Division of Extramural Research & Training  
National Institute of Environmental Health Sciences**



**Worker Training Updates**



**NIEHS and NIH Updates**



**HWWTP Training Update and Success Stories**



**Thank you!**

## Worker Training Program Updates

- NIH OPERATES UNDER A CONTINUING RESOLUTION
- Congressional Justification for FY2025 for the Superfund Programs is online -  
[https://www.niehs.nih.gov/sites/default/files/about/congress/justification/2025/2025\\_superfund\\_508.pdf](https://www.niehs.nih.gov/sites/default/files/about/congress/justification/2025/2025_superfund_508.pdf)
- NIEHS/DOE Nuclear Worker Training Program
  - Renewed our Memorandum of Understanding (MOU) with DOE and NIEHS.
  - This modification hereby extends the Interagency Agreement (IAA) by five years and ends September 30, 2029.
- NIEHS WTP Building Blocks for a Heat Stress Prevention Training Program -  
[https://tools.niehs.nih.gov/wetp/public/hasl\\_get\\_blob.cfm?id=14403](https://tools.niehs.nih.gov/wetp/public/hasl_get_blob.cfm?id=14403)





## Worker Training Program Updates

- **NIEHS AND NIH UPDATES**
- **UPCOMING WEBINARS AND RESOURCES**
  - Grant and Funding-Related Webinar for Applicants and Recipients:
  - [Nov. 13 NIH Grants Process Primer: Application to Award - Part One](#)
  - [Nov. 14 NIH Grants Process Primer: Application to Award - Part Two](#)
- **Review the NIH Guide to Contracts and Grants**
  - Policy Changes -<https://grants.nih.gov/policy-and-compliance/notice-of-policy-changes>
  - NIH Final Scientific Integrity Policy of the NIH-  
<https://grants.nih.gov/grants/guide/notice-files/NOT-OD-24-178.html>
  - NIEHS Grants Updates - <https://www.niehs.nih.gov/funding/grants>



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## Hazardous Waste Worker Training Program from 1987-2024 Last Year Training Numbers for 2023-2024

<b>3,933,536</b>	Total Workers Trained Overall
<b>42,110,622</b>	Total Contact Hours Overall
<b>227,846</b>	Total Courses Overall
<b>132,033</b>	Workers Trained for 2023-2024
<b>1,294,225</b>	Contact Hours for 2023-2024
<b>8,138</b>	Courses for 2023-2024
<b>17</b>	Current Grant Recipients

[https://www.niehs.nih.gov/careers/hazmat/training\\_program\\_areas/hwwt](https://www.niehs.nih.gov/careers/hazmat/training_program_areas/hwwt)

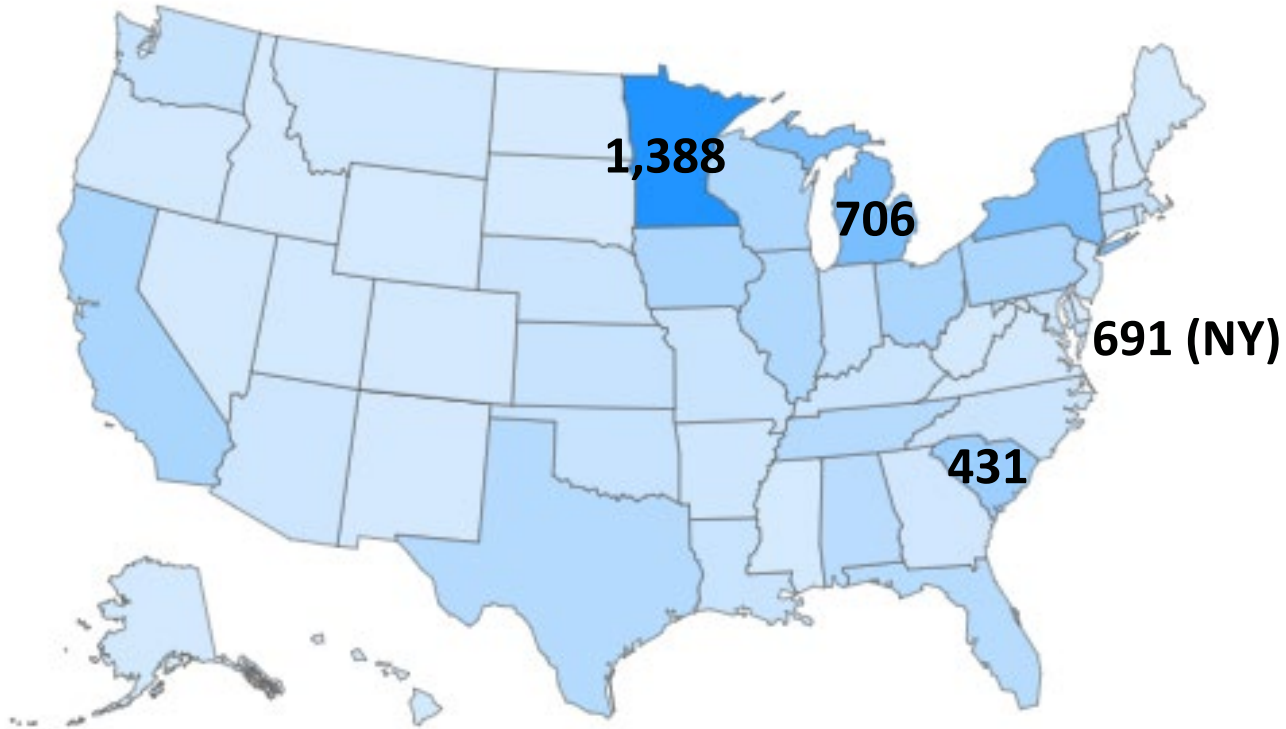
Thank you for the  
pictures!



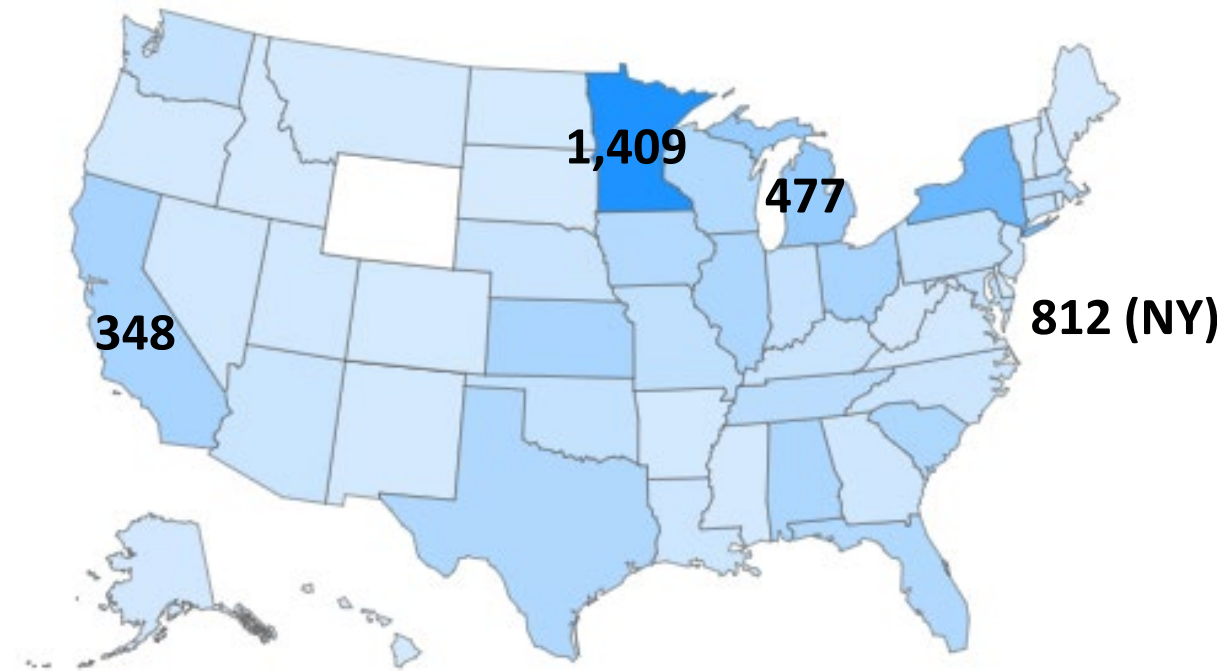
*Heat Injury and Illness Prevention training, IBT Hispanic Caucus, Orlando, FL – July 2023*

## HWWTP Courses by State: FY 2023 vs. 2024

FY 2023 HWWT



FY 2024 HWWT





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## Highlights from HWWT Activities

- OAI, Inc partner, Hazard3 – conducting an 8-hour Battery Training for first responders in Cleveland, Ohio





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## THANK YOU





## **Kathy Ahlmark**

**Health Specialist**

**Worker Training Program**

**Division of Extramural Research & Training**

**National Institute of Environmental Health Sciences**

## WTP Data Management System



### ❖ Reminder:

- New platform and a redesign planned
- Feedback sessions on different parts of the DMS (curricula catalog uploads, course data entry, etc.)
- Thought/Ideas requested on ways to make the DMS easier, faster, more intuitive
- Please attend the feedback sessions if you are available!

### ❖ Reminder Spring Data Collection:

- Award Recipients will enter actual data for the first nine months of the training year and initial progress reports
- Award Recipients will not enter projected 2026 training year data

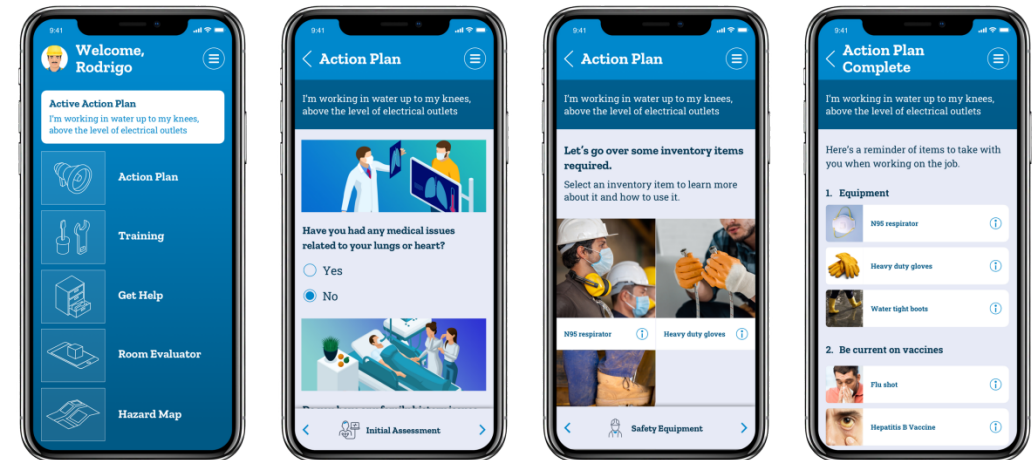


## SBIR E-Learning for HAZMAT Program (R43/R44)

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.

<b>91</b>	Grants supported since 1997
<b>4</b>	Current grantees
<b>\$199,781</b>	Funding dollars in FY24

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



Pocket Ark developed by RADIANT CREATIVE GROUP, LLC

SBIR E-Learning for HAZMAT Program:  
[niehs.nih.gov/careers/hazmat/training\\_program\\_areas/att/index.cfm](https://niehs.nih.gov/careers/hazmat/training_program_areas/att/index.cfm)

## Current WTP SBIRs



### **Jayfus Doswell – Juxtopia, LLC**

JiHi, An Artificial Intelligent HAZWOPER e-trainer for tutoring and evaluating emergency first response clinical skill proficiency



### **Russell Unrath – Medcognition, Inc.**

Interactive Treatments for HAZMAT Training with the PerSim Mixed Reality Patient Simulator



### **Ernest Vincent Cross – Charles River Analytics, Inc.**

Immersive Modular Preparedness Intelligent Tutoring (IMPRINT)



### **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



## NIEHS WTP

### SBIR E-Learning for HAZMAT Program Fact Sheet

- ❖ Impacted worker training in various occupational sectors.
- ❖ Provided opportunities for commercialization and patents.
- ❖ Facilitated partnerships among small businesses that develop technologies and WTP consortiums that deliver training.



#### Program Overview

The National Institute of Environmental Health Sciences (NIEHS) Small Business Innovation Research (SBIR) E-Learning for Hazardous Materials (HAZMAT) Program funds small businesses, or grantees, to develop innovative applications or technologies that are used for health and safety training.

These technologies aid in the mission of the broader NIEHS Worker Training Program (WTP) – to prevent work-related harm by providing training for emergency responders, skilled support personnel, and workers involved in the cleanup, removal, or containment of hazardous materials.

This fact sheet describes how the NIEHS SBIR E-Learning for HAZMAT Program has:

- Impacted worker training in various occupational sectors.
- Provided opportunities for commercialization and patents.
- Facilitated partnerships among small businesses that develop technologies and WTP consortiums that deliver training.

#### Technology Enhances Worker Training

Proper training can mean the difference between life and death for workers who handle hazardous materials or respond to manmade or natural disasters. Although training for such workers has traditionally taken place in physical classrooms, recent technological advances have facilitated more accessible and interactive training through electronic platforms. Technology-enhanced training products can help workers safely assess, respond to, and protect themselves and others from harmful exposures on the job.

In 1997, WTP began conversations to establish an electronic learning (e-learning), or technology-enhanced training products, initiative. These conversations led to the development of a formal e-learning guidance document and the beginning of a NIEHS SBIR E-Learning for HAZMAT Program (SBIR HAZMAT).

In 2001, WTP examined the technological divide for workers in diverse sectors, as well as protocols to aid in knowledge transfer through blended learning techniques. These blended learning techniques include the delivery of training content through a variety of combined methods, such as face-to-face classroom instruction and digital instruction through online, mobile, or virtual activities. WTP has since adopted many best practices in using technology for HAZMAT training.

At the turn of the 21st century, the worker training community witnessed a technology revolution that would enable workers in high-risk environments to better prepare for hazardous incidents and emergencies.

SBIR HAZMAT grantees demonstrate a commitment to technological innovation and dedication to improving worker health and safety.

#### Benefits of Innovative Products and Technologies

SBIR HAZMAT grantees are encouraged to partner with WTP-funded organizations that deliver health and safety training across various program areas – from hazardous waste, to nuclear weapons sites, to disasters, and more. Grantees have revolutionized methods to deliver training to workers through the development and use of online and web-based learning, mobile applications, video games, virtual reality, and immersive learning systems.

Many grantees have developed mobile applications that allow accessibility to health and safety information in areas with limited Internet connection. Others have developed learning management systems that store training modules that can

## Environmental Career Worker Training Program (ECWTP) Update

**Eric Persaud, DrPH**

Health Specialist  
Worker Training Program

Division of Extramural Research & Training  
National Institute of Environmental Health Sciences



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Delivers pre-employment and life skills training to individuals in disadvantaged populations.

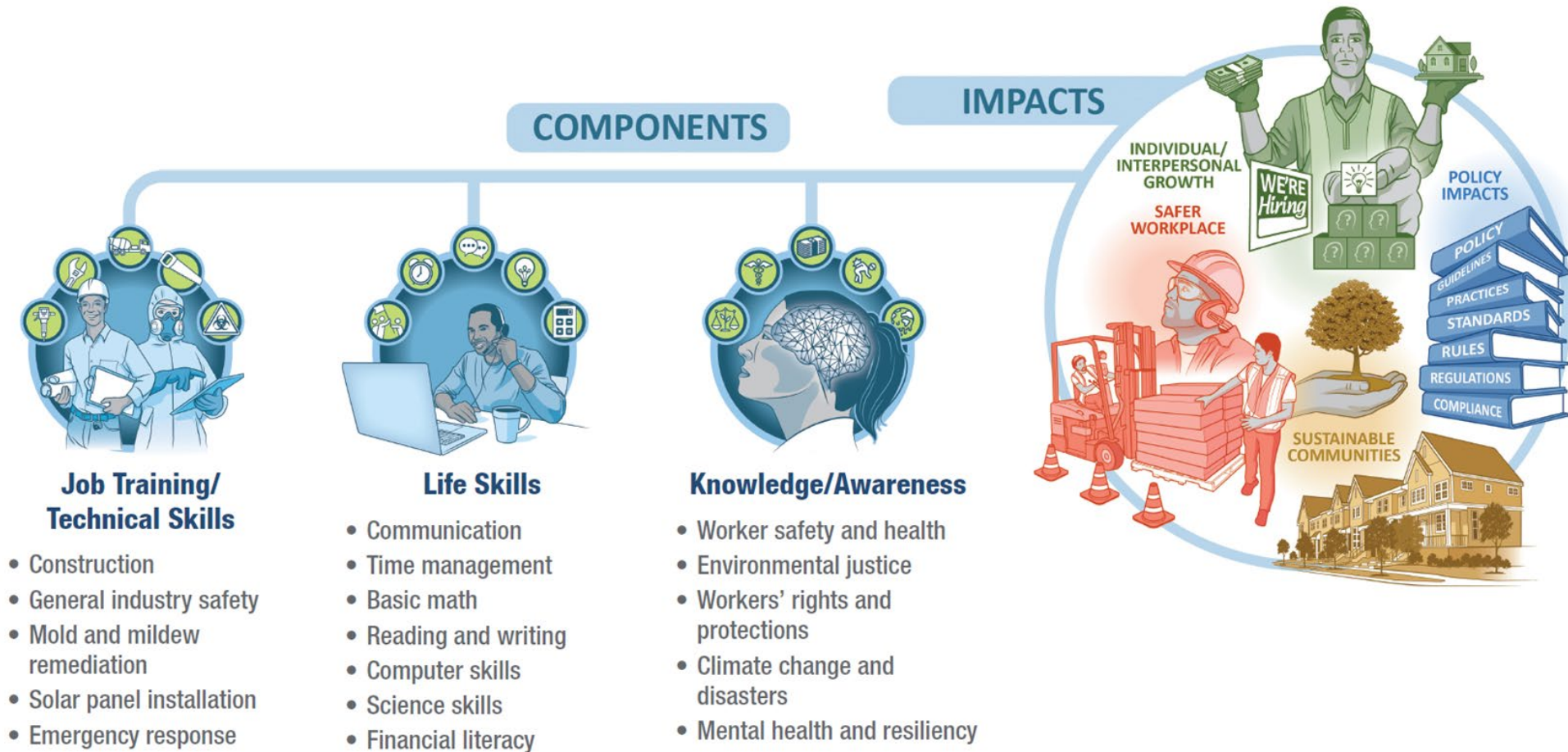
Helps individuals obtain sustainable careers in environmental cleanup and disaster response.

<b>15,309</b>	Workers trained since 1995
<b>70%</b>	Job placement rate overall
<b>73%</b>	Job placement rate in 2024
<b>631</b>	Workers trained in 2024
<b>6</b>	Current grant recipients



Environmental Career Worker Training Program:  
[niehs.nih.gov/careers/hazmat/training\\_program\\_areas/ecwtp/index.cfm](https://niehs.nih.gov/careers/hazmat/training_program_areas/ecwtp/index.cfm)

## ECWTP Training Components and Impacts



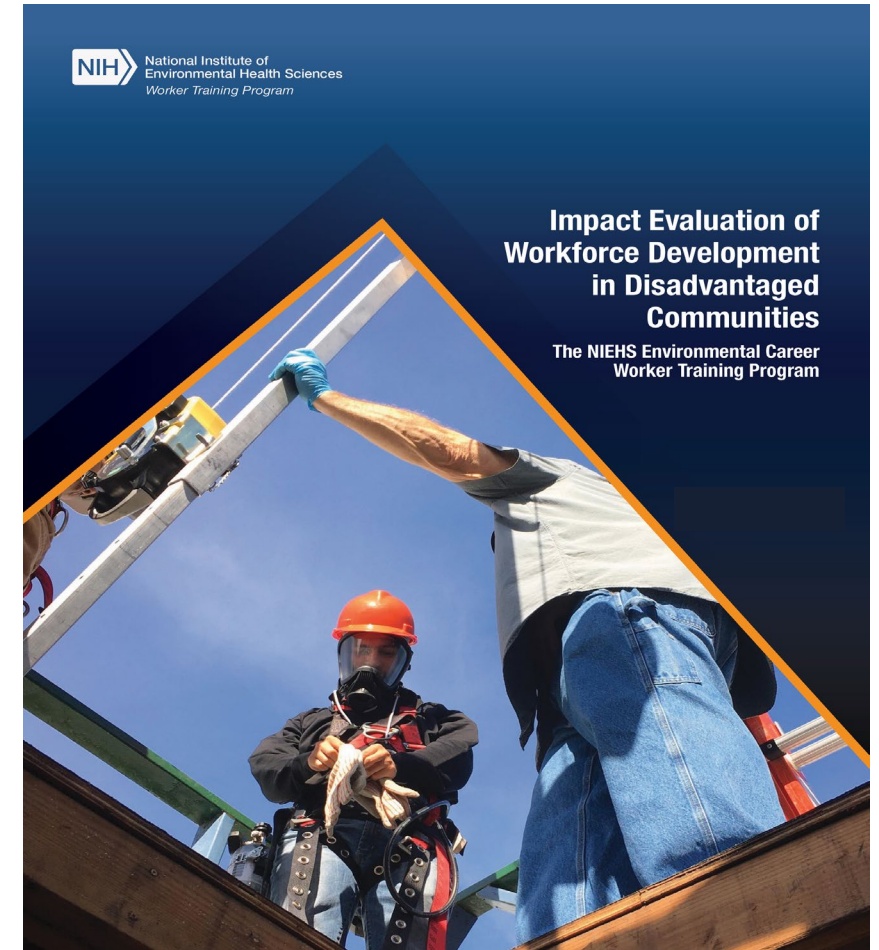


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## ECWTP Impact Evaluation

- Included two parts:  
  
Economic and Qualitative
- Report available online:



## OAI Partners: Delivering ECWTP Trainings Across the Country



### Dallas

#### Construction Education Foundation

- Focus on basic construction, electrical, and plumbing
- Interview training partnership with TD Industries



### Indianapolis

#### RecycleForce

- Focus on job training in electronics recycling
- Embrace “transitional” employment model



### Kansas City

#### NuStart

- Build for Success Program
- Metropolitan Community College hosts trainings on campus



### St. Louis

#### Motivating Purpose with Education and Readiness

- Services include life skills, career guidance, and behavioral health
- Partners provide technical and financial training



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## Sustainable Workplace Alliance





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## Make the Road New York





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## CPWR

Salvador is a graduate of JobTrain's Project Build program  
Living in a clean & sober environment  
Salvador successfully completed the program  
Hired with Piledrivers Local Union  
Now earning \$33.81 an hour.



Photo: Salvador working on a special formwork for a pedestrian bridge.

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## Western Region University Consortium

Something that I will do differently because of this course is:

- Speak up and use my voice if I don't feel safe.
- Pay attention to job sites and be aware of potential safety hazards
- I will properly use my gear and tool correctly
- Know my rights in regard to safety as a worker thanks to OSHA



2024 Zender RACEJT  
Graduates. Photo provided by  
Zender Environmental



## Deep South Center for Environmental Justice & Texas Southern University

Inez entered the program and was homeless.

Completed the ECWTP.

Very next week after graduation, she obtained a job in Tampa,

FL working as an electrician helper making \$18.00 per hour.

PENSACOLA – Unity in the Family Ministry (UFM)

## **Amelia Pearson**

Industrial Hygienist

Worker Training Program

Division of Extramural Research & Training

National Institute of Environmental Health Sciences

## HAZMAT Disaster Preparedness Training Program (HDPT)

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

<b>312,667</b>	Total Workers Trained since 2005
<b>34, 946</b>	Total Workers trained overall in FY 24
<b>1,453</b>	Total Courses Provided in FY 24
<b>309,125</b>	Total Contact Hours FY 24
<b>9</b>	Current Grantees



Respiratory Protection training, Whatcom County and Snoqualmie Fire and EMT Training, IAFF, October 2023



## Hazardous Disaster Prep Training

### Why is HDPT Important?

- ❖ Many hazards are created during and after climate related events, man-made disasters and public health emergencies
- ❖ The Worker Training Program (WTP) coordinates a large network of grantees who respond to events.
- ❖ Grantees deliver health and safety training on tornado, flooding and hurricane cleanup safety; wildfire-related hazards; and hazards to prevent infectious diseases
- ❖ Targeting workers, businesses, and communities at highest risk.

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## WTP Received \$2.5M in Disaster Supplements from Consolidated Appropriations Act, 2023



The first meeting for WTP award recipients was held in Puerto Rico (Sept. 2023)



The second meeting was held in Wilmington, NC (Sept. 2024)

## International Association of Fire Firefighters (IAFF)

- ❖ Developed hazmat training course for fire, rescue, and emergency personnel who may respond to incidents involving Hazmat materials
- ❖ One year later the skills were applied in an actual accident scene involving a tractor trailer
- ❖ Responders mitigated the diesel spill, with no injuries to civilians or firefighters





## Recent Award Recipient Activity With Recent Disasters

- ❖ Several award recipients have deployed several teams in FL, NC and Georgia providing critical support to members from the recent hurricanes and flooding. (IAFF, Deep South Center, Midwest Consortium and others)
- ❖ Migrant's Clinicians Network – will be conducting a webinar on 10/22. Topics include exposure to heat, mold, mildew, and vector-borne diseases and prevention practices and resources. Link to webinar:  
<https://www.migrantclinician.org/webinar/managing-environmental-hazards-and-mental-health-and-well-being-post-hurricane-recovery>

## HDPT

### Hazmat Disaster Training Program

#### Recent Disasters

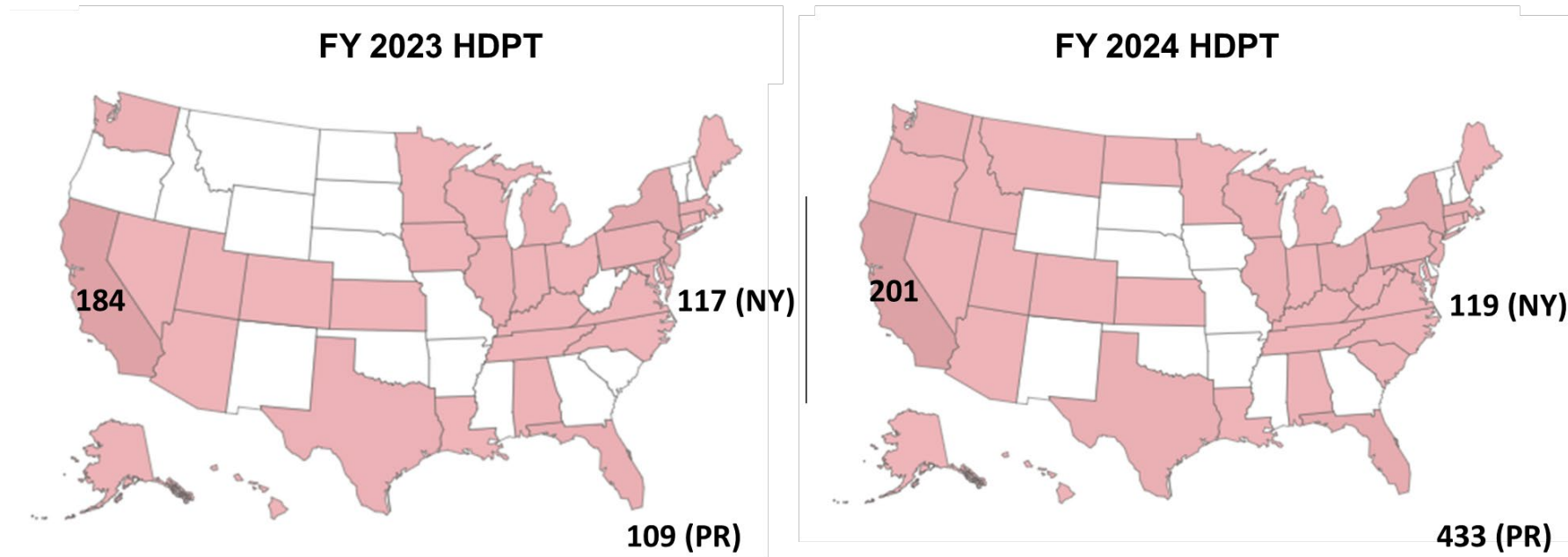
- Hurricane Milton- Florida – (Oct. 5, 2024)\*
- North Dakota Elk Horn Fire – (Oct. 5, 2024)
- North Dakota Bear Den Fire – (Oct. 6, 2024)
- Hurricane Helene – TN, VA, GA, AL, SC, NC, FL (Sept. 2024)\*
- Wyoming Elk Fire – WY (Sept. 28, 2024)
- Tropical Storm Debby – SC – (Aug. 22, 2024)
- San Carlos Apache Tribe Watch Fire - AZ (July 10-17, 2024)
- <https://www.fema.gov/disaster/declarations>



## HDPT

- ❖ If you would like to share some of your HDPT highlights and accomplishments or have any suggestions or comments please reach out to me at [amelia.pearson@nih.gov](mailto:amelia.pearson@nih.gov).

### HDPTP Courses by State: 2023 vs. 2024



## **Gary Johnson**

**Industrial Hygienist**

**Worker Training Program**

**Division of Extramural Research & Training**

**National Institute of Environmental Health Sciences**

## GOAL OF OUR PARTNERSHIP

The goal of the NIEHS/DOE Partnership is to provide fiscally responsible, high-quality training to DOE workers to ensure that they are prepared to safely perform work in hazardous environments, and to support DOE Office of Environmental Management (EM) mission completion, as well as supporting worker safety training for other DOE missions.



## PROGRESS in DOE TRAINING PROGRAM

- Training is available to all DOE workers (Union/Non-Union)
- Meet WTP Minimum Training Criteria for HAZWOPER training and DOE Orders
- WTP grantees collaborated with the DOE Energy Facility Contractors Group (EFCOG) and the National Training Center (NTC)
  - to establish a Training Reciprocity Program
  - improve uniformity in CORE training content,
  - maintain communications amongst site contractors.

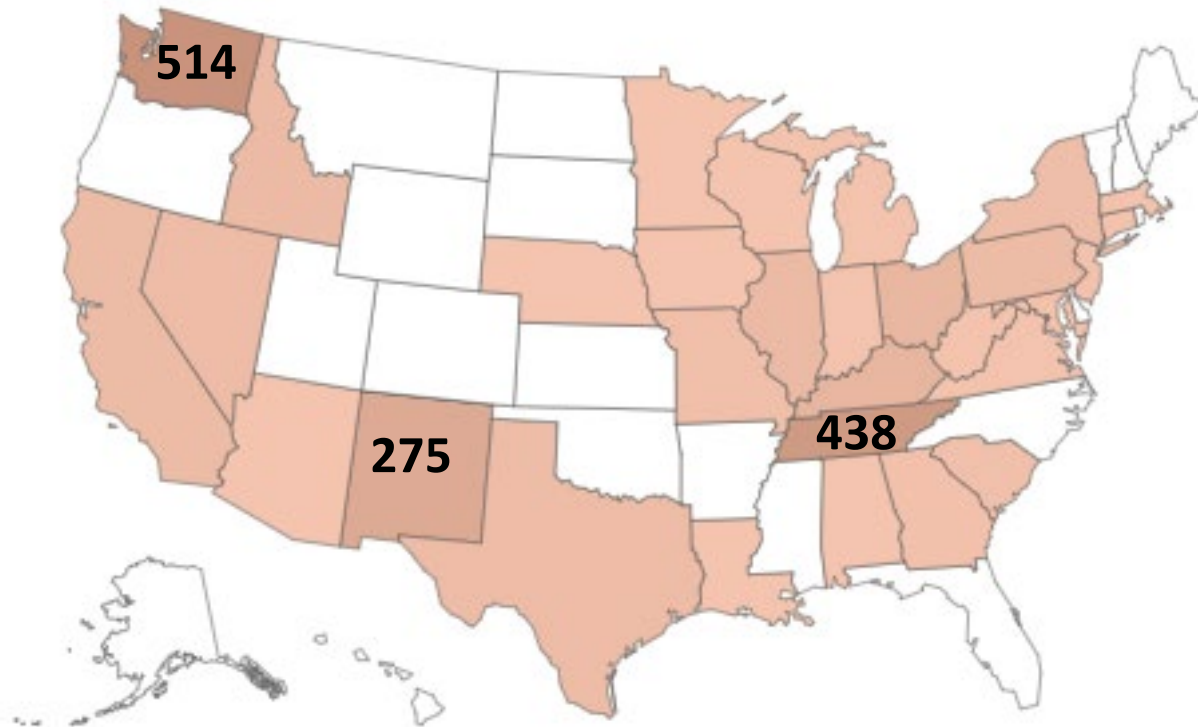
## NIEHS/DOE Nuclear Worker Training Program – Training to date

Year	Total Courses	Total Workers	Total Contact Hours
1994-2004	14,769	199,325	2,834,957
2005	1,961	25,442	329,840
2006	2,044	26,365	325,533
2007	2,283	34,074	400,491
2008	2,225	33,702	414,746
2009	2,265	36,266	530,271
2010	2,188	35,329	523,287
2011	1,987	31,238	405,556
2012	1,963	29,842	365,083
2013	1,790	27,737	309,977
2014	1,900	28,334	311,412
2015	1,830	26,396	323,316
2016	1,927	28,162	368,680
2017	2,066	32,202	389,786
2018	1,679	27,769	343,923
2019	1,795	29,714	368,276
2020	1,387	19,572	214,129
2021	1,901	23,095	280,377
2022	1,890	26,163	327,619
2023	2,378	35,095	421,842
<b>2024</b>	<b>2,011</b>	<b>29,411</b>	<b>347,902</b>
<b>Total</b>	<b>54,239</b>	<b>785,233</b>	<b>10,137,003</b>

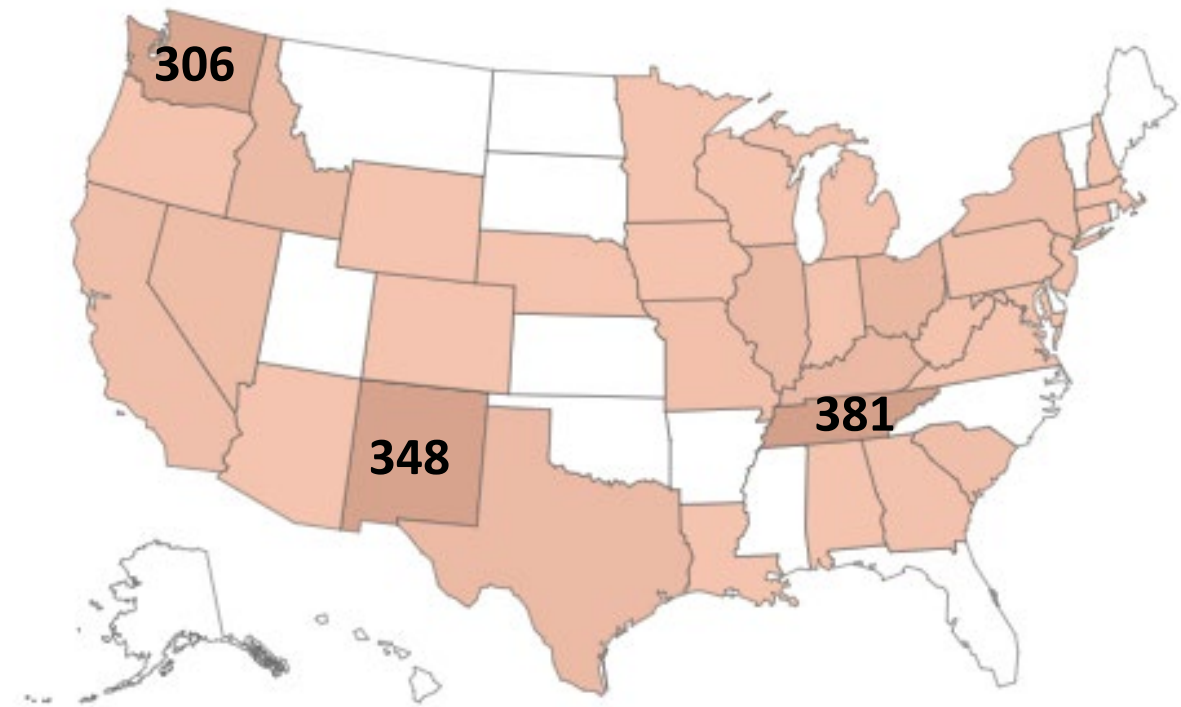
- Overall training Numbers decreased from 2023-2024
- It this a trend?
- Why did this occur?
- Decreased - Washington and Tennessee
- Increased - Nevada

## DOE Courses by State: 2023 vs. 2024

FY 2023 DOE



FY 2024 DOE





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**EFCOG March 19 – 21, 2024**



Participants at the annual Energy Facility Contractors Group's Training Working Group meeting gather in front of the Volpentest HAMMER Federal Training Center in Richland, Washington (Photo courtesy of WTP)



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## August 5-9, 2024: Safety Culture and Improvement Panel (SCIP) LABOR PERSPECTIVES ON SAFETY CULTURE



Ashlee Fitch (USW), Deborah Weinstock (WTP National Clearinghouse), Charles Austin (IBT), and Steve Maiuri (HAMTC)

## **NEW WTP DOE TRAINING ESTABLISHED SAVANNAH RIVER SITE (SRS) - OSHA TRAINING**

- Networked with Dr. Dorian Newton at the 2024 EFCOG
- Asked WTP to meet to discuss training needs at SRS
- Ted Giltz DOE Consultant, Jocelyn Grimes (SRS), Myself, Others
- 30 Hour and 10-hour OSHA General and Construction Courses at the SRS, Aiken Technical College (USW,CPWR,IBT,LIUNA)
- First class was held Oct 15th-19<sup>th</sup> and One is currently is in session



## NIEHS WTP DOE PRIORITIES

- ❖ Integrated Safety Management
- ❖ Safety Culture
- ❖ Chronic Beryllium Disease Prevention Program (10 CFR 850)
- ❖ Worker Safety and Health Program (10 CFR 851)