



NIEHS Worker Training Program Awardees, 2020-2025

The Superfund Amendments and Reauthorization Act (SARA) of 1986 (42 USC 9660a) gave the National Institute of Environmental Health Sciences (NIEHS) responsibility for initiating the Worker Training Program (WTP). The program funds nonprofit organizations with a demonstrated track record of providing high-quality occupational health and safety training to workers involved in handling hazardous materials or in responding to emergency releases of hazardous materials.

Currently, the NIEHS WTP funds and supports 18 organizations that provide health and safety trainings across the country. Each organization focuses on training activities according to one or more [specific program areas](#) that fall under the NIEHS WTP.

The NIEHS WTP is also supporting nine companies that are part of the [Small Business Innovation Research \(SBIR\) E-Learning for HAZMAT Program](#). These companies are developing advanced technologies to be implemented in HAZMAT training exercises or HAZMAT-related research efforts.

For more information about the NIEHS WTP, visit <https://www.niehs.nih.gov/wtp>.

WTP Training Activities and Program Areas

Separate funding streams have facilitated the implementation of different program areas to address current and emerging worker safety and health issues.

Superfund-related activities

[Hazardous Waste Worker Training Program \(HWWTP\)](#): Provides model occupational safety and health training for workers who are or may be engaged in activities related to hazardous waste removal, containment, or chemical emergency response. This program is the core component of the NIEHS WTP.

[HAZMAT Disaster Preparedness Training Program \(HDPTP\)](#): Supports the development and delivery of disaster-specific training to prepare workers to respond to natural disasters and possible future terrorist incidents.

[Environmental Careers Worker Training Program \(ECWTP\)](#): Provides job training for disadvantaged and underrepresented workers through delivery of pre-employment and health and safety training in underserved communities.

[Small Business Innovation Research \(SBIR\) E-Learning for HAZMAT Program](#): Develops e-learning products that support health and safety training of hazardous materials workers, emergency responders, and skilled support personnel; community and citizen preparation and resiliency; and research into the acute and long-term health effects of environmental disasters.

Clean-up of nuclear weapons facilities

[NIEHS/U.S. Department of Energy Nuclear Worker Training Program \(DOE\)](#): Provides worker safety and health training for clean-up activities, waste management, and hazardous materials response at DOE nuclear weapons facilities. This program is authorized by the National Defense Authorization Act, Section 3131 (FY 1992) and implemented through an interagency agreement with DOE.

Alabama Fire College



Alabama Fire College (AFC) is funded under the HWWTP and HDPTP. The AFC Workplace Safety Training Program provides training to two worker populations: members and employees of Native American tribes nationwide, and public safety personnel within the southeastern U.S. AFC partners with the Native American Fish and Wildlife Society to promote training to tribal emergency response personnel.

Benten Tech



Safety Using Augmented Reality to Facilitate Effective Training and Education

Benten Technologies is partnering with the International Brotherhood of Teamsters (IBT) to help workers in the HAZMAT/HAZWASTE industry gain the training they need to do their job safely and effectively. Benten is developing an Augmented reality (AR)/Mixed reality (MR) platform called “Safety using Augmented reality to Facilitate Effective Training and Education (SAFE-TE),” that enhances training in combination with classroom and practical training, and that is more efficient, effective, and engaging than the traditional one.

Cell Podium



Augmented Reality Sensor Simulation System for HAZMAT Training

Cell Podium proposes to develop, in collaboration with the Rutgers School of Public Health Office of Public Health Practice, an augmented reality training system for realistic and experiential health and safety training of hazardous materials (HAZMAT) workers. Augmented Reality HAZMAT Sensor Simulator Phase II involves mock hazards, personal protective equipment (PPE), tools, and hazard sensors.

Community College Consortium for Health and Safety Training



The Community College Consortium for Health and Safety Training (CCCHST), administered by the National Partnership for Environmental Technology Education (PETE) in partnership with the Hazardous Materials Training and Research Institute, consists of more than 100 community colleges and training partners. CCCHST aims to make worker training nationally available through its member organizations, whose instructors are prepared through a Train-the-Trainer model program.

Under the HWWTP, CCCHST instructors train students, workers, and supervisors to protect themselves and their communities from exposure to hazardous materials encountered during hazardous waste site cleanup, Brownfields redevelopment, hazardous materials transportation, and response to spills and releases of hazardous materials. Through the HDPTP, instructors provide hazardous disaster preparedness training to community college students, technical high school students, and the nation’s first responders, such as those belonging to community or faith-based organizations.

Additionally, CCCHST provides training to DOE contractors and subcontractors at multiple DOE environmental restoration and waste management sites such as, the Oak Ridge Operations, Tennessee; Portsmouth Site, Ohio; Los Alamos National Laboratory, New Mexico; Savannah River Site, South Carolina; and Pantex, Texas.

CPWR – The Center for Construction Research and Training



CPWR consists of a training consortium of 12 international and national building trades unions that represent workers engaged in hazardous waste work at designated hazardous waste sites nationwide. Under the HWWTP, CPWR provides environmental health and safety training to construction workers from a variety of crafts and organizations, such as electrical workers, asbestos workers and insulators, carpenters, and others. CPWR's major objective under the HDPTP is to develop a cadre of local skilled construction workers trained in disaster response who may be called to support first responders in rescue, recovery, and cleanup operations.

For the ECWTP, CPWR offers training to eligible residents in New Orleans, Louisiana; St. Paul, Minnesota; East Palo Alto, California; Flint, Michigan; and Boston, Massachusetts.

Under the DOE program, CPWR trains construction workers who are called to work on DOE sites in support of hazardous waste operations, facility decommissioning and decontamination, hazardous materials transportation, environmental restoration of contaminated facilities, or chemical emergency response.

Charles River Analytics



Immersive Modular Preparedness Intelligent Tutor (IMPRINT)

Charles River Analytics (CRA) is providing a portable, adaptive, virtual reality (VR) intelligent training system to support the Hazardous Waste Operations and Emergency Response (HAZWOPER) tabletop scenario exercises required during recertification training. They will prototype Immersive Modular Preparedness Intelligent Tutor (IMPRINT), which will actively improve trainees' ability to perform HAZWOPER procedures within a wide range of realistic field scenarios.

Deep South Center for Environmental Justice/Texas Southern University



The Historically Black Colleges and Universities (HBCU) Consortium is co-led by the Deep South Center for Environmental Justice in New Orleans, Louisiana and Texas Southern University in Houston, Texas. Their partners include the Green Door Initiative (Detroit, Michigan); Harambee House, Inc. (Savannah, Georgia); and Unity in the Family Ministry (Pensacola, Florida).

For both the HWWTP and the ECWTP, the consortium targets underserved populations in their training areas. Under the HWWTP, training occurs in New Orleans, Louisiana; Atlanta and Savannah, Georgia; Detroit, Michigan; and at HBCUs and minority small businesses in the southeastern U.S. Under the ECWTP, training occurs in New Orleans, Louisiana; Houston, Texas; Detroit, Michigan; Flint, Michigan; and Pensacola, Florida.

Gryphon Scientific



Interactive Training in Emergency Operations for the Response Community

In this Phase II SBIR, Gryphon Scientific proposes to develop a refresher training in the form of an interactive, mobile app that will allow two groups that are intermittent participants in disaster response to practice their emergency response skills after completing basic training. The app will target the research responders who were the focus of the Phase I project as well as the "citizen responder" community, including Community Emergency Response Teams and Medical Reserve Corps.

Preventing Opioid Exposure Training (POET) for First Responders

This study proposes to collect valuable data on learners' understanding of pathogen safety fundamentals and the potential efficacy of remote educational approaches to enhance microbiological literacy. Usability testing and knowledge retention (both immediately after training and three months later) research will be integrated into the base Phase I study by testing these videos at the same time as those on opioid exposures. The initial products developed in this study may directly improve microbiological literacy among at-risk populations, and these early studies may help to inform future training interventions.

International Association of Fire Fighters



Under the HWWTP and the HDPTP, the International Association of Fire Fighters (IAFF) trains hazardous materials workers and chemical responders, including potential disaster response workers, to protect themselves and their communities from exposure to hazardous materials. This training applies to routine daily work as well as potential disaster response, which may include chemical and radiation emergency response.

Under the DOE program, IAFF targets workers and first responders with a likelihood of responding to assist in emergencies at DOE facilities within a 150-mile radius, resulting in appropriately-trained responders who may be dispatched to a specific DOE facility via site mutual aid agreements.

International Brotherhood of Teamsters



The International Brotherhood of Teamsters (IBT) is funded under the HWWTP, the HDPTP, and the DOE program. For the HWWTP and HDPTP, the IBT Consortium consists of 11 IBT training centers and the Rail Workers Hazardous Materials Training Program, representing nine rail unions. The target population of workers includes remediation and construction workers, truck and rail transportation workers, warehouse workers, and airline workers.

Under the DOE program, the IBT Consortium consists of eight IBT training centers and the Rail Workers Hazardous Materials Training Program. The consortium provides training to a target population of workers within the DOE complex, including workers who deliver drums and water to facilities; operate forklifts, tractors, and dump trucks on-site; repair on-site roads; haul contaminated soil; and transport radioactive material by both road and rail.

International Chemical Workers Union Council Center for Worker Health and Safety Education



Under the HWWTP and the HDPTP, the International Chemical Workers Union Council (ICWUC) Center for Worker Health and Safety Education and its consortium provides a national multi-union training program to protect a range of collateral duty emergency responders and disaster workers, and works to develop a cadre of worker trainers. Consortium members are: the American Federation of Government Employees; the American Federation of Teachers; the Coalition of Black Trade Unionists; the International Association of Machinists and Aerospace Workers; ICWUC; the Labor Council for Latin American Advancement; the National Council for Occupational Safety and Health; National Nurses United; the United Food and Commercial Workers International Union; the University of Cincinnati; the American Federation of State, County and Municipal Employees; and the Association of Occupational and Environmental Clinics.

Under the DOE program, the ICWUC Consortium delivers training at four DOE facilities: Hanford, Washington; Oak Ridge, Tennessee; Kansas City, Missouri; and Los Alamos National Laboratory, New Mexico. The International Association of Machinists and Aerospace Workers is a significant partner in these efforts, representing members at three of these sites.

International Union, United Auto Workers



Under the HWWTP, the International Union, United Automobile, Aerospace and Agricultural Implement Workers of America (UAW) works to prevent work-related harm by providing health and safety training to UAW members and members of communities who may face environmental injustices, limited English proficiency, and lack of educational opportunities. UAW and the University of Michigan work together to ensure ongoing high quality training in existing and new programs.

The priority training population is drawn from chemical emergency response teams, hazardous waste handlers, and workplace joint labor-management committees. Spanish-speaking workers are another target population. UAW has formed a consortium with the University of Puerto Rico, La Casa Guadalupana, Catholic Charities Hispanic Outreach Services, and University of Michigan to deliver and evaluate health and safety training. UAW also works with the Green Door Initiative (GDI) in Detroit, Michigan, providing training for GDI's Environmental Technician Program which prepares students for work in hazardous clean up and deconstruction worksites.



HazPrep Worker Training - Community Risk Profile

HazPrep is a new form of a social learning platform which includes crowdsourcing and machine learning artificial intelligence to formulate personalized learning activities for at risk workers, such as those engaged in activities related to hazardous materials, waste generation, removal, containment, transportation, and emergency response. The Phase II project includes implementation and innovative use of big data algorithms for community profiles and fusion with a worker's personal hazard profile allowing for targeted and personalized training to complete the HazPrep prototype developed and exercised in Phase I.

LIUNA Training and Education Fund



LIUNA Training and Education Fund (LIUNA Training) is funded under the DOE program. LIUNA Training reaches DOE workers at the following sites through local training partners: Hanford Site, Idaho National Engineering Laboratory, Los Alamos National Laboratory, Nevada Test Site, Oak Ridge Field Office, Paducah Gaseous Diffusion Plant, Savannah River Site, and West Valley Demonstration Project.

LIUNA Training's program will target primarily Construction Craft Laborer (CCL) workers and supervisors and will include other crafts as appropriate. CCLs perform a variety of tasks on deactivation and decommissioning (D&D) jobs, including waste and radioactive materials containment or removal; decontamination; D&D; and lead, asbestos, and mold remediation. Training will also be provided to operations and maintenance workers at DOE sites who may be at risk of exposure to hazardous materials on the job. As needed, the LIUNA DOE program trains DOE Environmental Management employees, contractor representatives who are responsible for oversight of D&D projects, and subcontractor personnel.

Med Cognition



Enabling Realistic HAZMAT Training Simulations with the PerSim™ Augmented Reality Patient Simulator

This project will develop and evaluate HAZMAT training scenarios in the existing innovative AR-based patient simulator, PerSim™. The system projects high-resolution, realistic animations of a patient onto any surface a trainee chooses, and the principal investigator will work with medical artists from the University of Texas (UT) Health and a HAZMAT expert to create realistic HAZMAT scenarios and integrate them with the PerSim™ system.

Midwest Consortium for Hazardous Waste Worker Training



The Midwest Consortium for Hazardous Waste Worker Training (MWC) conducts training under the HWWTP to serve the needs of workers and communities potentially exposed to hazardous materials in nine states: Illinois, Indiana, Kentucky, Michigan, Minnesota, North Dakota, Ohio, Tennessee, and Wisconsin. Consortium members are: the University of Minnesota (lead organization), Cincinnati Interfaith Workers Center, Citizens Environment Alliance of Southeastern Michigan, Emergency Response Solutions International, Environmental Management Institute at Ivy Tech Community College, Fisk University, Greater Cincinnati Occupational Health Center, Green Door Initiative, Lakeshore Technical College, Three Affiliated Tribes, University of Illinois Labor Education Program, University of Tennessee Center for Industrial Services, and YouthBuild Louisville.

MWC has successfully developed and implemented awareness and preparedness programs for workers at hazardous waste sites and at treatment, storage, and disposal facilities; emergency responders; and underserved communities.

New Jersey/New York Hazardous Materials Worker Training Center



Under the HWWTP and the HDPTP, the New Jersey/New York Hazardous Materials Worker Training Center trains workers on topics related to safety issues during cleanup of hazardous waste sites; issues related to generation, treatment, and storage of hazardous materials; and emergency response. Center members are: Rutgers School of Public Health (primary awardee), Migrant Clinicians Network, New Jersey State Police, New York Committee for Occupational Safety and Health, Make the Road New York, New York District Council of Carpenters, New York University, Universidad Ana G. Mendez, University at Buffalo, and World Cares Center.

Under the ECWTP, the center uses focused strategies to recruit, train, and employ predominantly minority communities who are unemployed or underemployed for construction and environmental remediation work in the metropolitan areas of New York City and Newark, New Jersey.

Nova Southeastern University



The Institute for Disaster and Emergency Preparedness at Nova Southeastern University is funded under the HWWTP and the HDPTP. For the HWWTP, Nova provides new and ongoing on-site preparedness training for maritime employees, including dock workers, ship workers, and their supervisors, as well as safety trainers and law enforcement personnel through Project South East Area Maritime Industry Safety Training (SEAMIST). Under the HDPTP, Nova implements the Hazardous Material Maritime Industry Response Training Safety Initiative to provide training on hazardous material disaster response preparedness.

OAI, Inc.



OAI HWWTP Consortium partners are: OAI as the lead organization (Chicago, Illinois); Ammonia Safety & Training Institute (California and nationwide), Biosafety and Infectious Disease Instructors (three states), Boat People SOS (five states), California Health Nail Salon Collaborative, Cara Chicago (Illinois), Commonwealth of Kentucky Division of Fire Prevention, Kentucky State Police, Latino Worker Safety Center (three states), Mendez Environmental (Louisiana), Romeoville Fire Academy (Illinois), Revolution Workshop (Illinois), Thomas O. Murdock, PhD. (Minnesota), and YouthBuild USA member organizations (10 states). OAI's HWWTP targets the following primary worker populations in 19 states who are exposed to workplace hazards: emergency first responders and law enforcement personnel, including rural, volunteer, part time and paid on-call responder; transitional and temporary workers, including day laborers and individuals re-entering the workforce; and non-union and underrepresented workers, including Vietnamese nail salon and home care workers and Latinx construction workers.

OAI ECWTP Consortium partners include: OAI (Chicago, Illinois); City Square (Dallas, Texas); NuStart Career Builders, Kansas City, MO; and RecycleForce, Indianapolis, IN. The OAI ECWTP assists unemployed African-Americans, Hispanics, women, ex-offenders, and veterans who face multiple barriers to employment in Chicago, Illinois; Dallas, Texas; Indianapolis, Indiana; and Kansas City, Kansas/Missouri.

Prevention, Preparedness, and Response Consortium



The Prevention, Preparedness, and Response (P2R) Consortium includes The University of Texas Health Science Center at Houston (primary awardee), Texas A&M University, the University of Michigan at Ann Arbor, and the University of Utah.

Training provided by the P2R Consortium under the HWWTP targets people working with, or in, high-risk areas, communities, or industries, or those engaged in high-risk activities such as hazardous waste and substances handling, transport, removal, disposal, or spill and disaster as well as biosafety and infection prevention. For the HDPTP, the Texas-Utah Consortium trains a broad audience from many industrial sectors, as well as the general community. Both training programs are tailored to accommodate individuals with high-, mid-, and low-level technical skills. Special emphasis is directed toward recruiting and training veterans and minority populations to enhance diversity and provide career opportunities to groups who may not have been previously aware of safety-related careers.

Radiant Creative Group



Agile Development of Innovative, Interactive Hazard Recognition and Mitigation Tools/Learning E-Platforms for Workers Involved in the Rescue and Recovery Operations in Diverse Flooding Environments

E-learning platform 'Pocket Ark' will provide training before flooding occurs, real-time decision support during a clean-up, and communications capabilities during and after cleanup to the workers involved. It addresses an important public health problem and uses a novel app-based e-learning platform to improve and enhance the cognitive understanding of flood-related health hazards within this vulnerable working population.

Spectral Labs



Realistic Adaptive Immersive Learning System (RAILS) for HAZMAT Site Monitoring Characterization and Remediation Training

The project will develop an immersive video game-based training program to train HAZMAT workers specifically involved in the emergency response, site characterization, waste removal, and site remediation at the extensively contaminated sites on the National Priorities List. The development will provide a first-person immersive training environment for the trainee to learn and practice key operational tasks such as site characterization and analysis, site control, monitoring, and decontamination by allowing the trainee to actively participate in the operation, performing tasks from the first person perspective, with realistic environments, equipment and tools.

Sustainable Workplace Alliance



The Sustainable Workplace Alliance (SWA) is a workforce education organization that trains workers in the geographic target areas of Florida, Puerto Rico, the U.S. Virgin Islands and the Pacific Island regions including Hawaii, Guam, Saipan, American Samoa and Palau.

SWA provides training under HWWTP, HDPTP, and ECWTP. HWWTP activities reach workers such as remediation contractors; workers in their region who participate in site demolition, debris removal, and post-emergency cleanup; laborers who work with mold, asbestos, or lead-based paint; and abatement workers performing work at Superfund or Brownfield sites. HDPTP activities focus on career and volunteer first responders and how to safely respond to emergency events and protect themselves from exposure risks to opioids. ECWTP activities provide job preparation training and placement services for citizens of underserved communities in Florida and Puerto Rico.

The New England Consortium-Civil Service Employees Association



The New England Consortium-Civil Service Employees Association (TNEC-CSEA) is a partnership involving the University of Massachusetts Lowell (lead organization); five New England coalitions for occupational safety and health (COSH groups) in Massachusetts, Rhode Island, Connecticut, and New Hampshire; and CSEA Local 1000, AFSCME in New York.

Under the HWWTP, the program targets workers engaged in hazardous waste operations and emergency response in the six New England states and New York, including New England area training programs targeting low-income adults from underserved urban communities. Training under the HDPTP targets public and private sector skilled support personnel in the New England states and New York. HDPTP will also provide health and safety awareness training to Latino and Brazilian immigrant workers in Massachusetts and Rhode Island. Opioids awareness training will be provided under both program components to workers who are most vulnerable to opioid misuse.

The Steelworkers Charitable and Educational Organization



The Steelworkers Charitable and Educational Organization (SCEO), the nonprofit arm of the United Steelworkers (USW), is funded under the HWWTP, HDPTP, and the DOE program. The Tony Mazzocchi Center, SCEO's training entity, brings together USW, the Communications Workers of America, the Labor Institute, the National Day Laborer Organizing Network, Make the Road New York, and Make the Road sister organizations in New Jersey, Pennsylvania, Connecticut, and Nevada. SCEO also partners with the Umatilla, Cayuse, Walla Walla, Yakama, and Nez Perce Tribes in the Northwest.

Under the HWWTP, SCEO conducts courses reaching steelworkers, immigrant day-laborers, and temporary workers who face a myriad of hazards on their ever-shifting work. SCEO also delivers courses through a labor-management program called the Triangle of Prevention under HWWT. Under the HDPTP, SCEO continues development of their cadre of expert Specialized Emergency Response Trainers who serve as a part of the national WTP team, ready to respond to any emergency anywhere. SCEO training provided under the DOE program targets workers whose jobs put them at risk of exposure to hazardous materials or waste and risks associated with hazardous materials incidents at DOE sites.

Tietronix



VR-Based Evaluation and Training System for Emergency Responders and Managers

Tietronix's approach is to immerse first responders in HAZMAT emergency scenarios that are realistic and also designed to focus on measurement and refinement of specific areas of both individual and team performance. Their virtual reality system is also a configurable platform that enables the evaluation and training of a wide range of skills needed by distinct roles (police, firefighters, EMTs, etc.) in diverse scenarios such as biosafety spills, HAZMAT disasters and bioterrorism threats.

Western Region Universities Consortium



The Western Region Universities Consortium (WRUC) consists of the University of California, Los Angeles Labor Occupational Safety and Health Program as the lead institution; the University of California, Berkeley Labor Occupational Health Program; the Arizona State University Fulton Schools of Engineering Environmental & Resource Management Program; and the University of Washington School of Nursing.

WRUC provides training under HWWTP, HDPTP, and ECWTP. HWWTP activities reach hazardous materials and waste workers and supervisors in the Western U.S. and strengthen emergency response capacity on the U.S.-Mexico border, among tribal groups, and in the Pacific Islands. HDPTP activities reach workers and community members through partnerships with tribal groups in Alaska and the Pacific Northwest and with labor and community environmental justice groups in California, preparing for and responding to wildfires, earthquakes and other environmental disasters. ECWTP activities train and place workers in construction and environmental jobs in the cities of Los Angeles, California and Portland, Oregon, and in remote Alaska tribal villages.