**Western Region Universities Consortium Snapshot:**

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<th><strong>HDPT TRAINING:</strong></th>
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<tr>
<td><strong>Principal Investigator:</strong></td>
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<td>• Linda Delp</td>
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<td><strong>Evaluator(s):</strong></td>
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<tr>
<td>• Kevin Riley – Coordinator/Evaluator</td>
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<tr>
<td><strong>Grant Number:</strong></td>
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<td>• U45ES06173</td>
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<td><strong>Goal(s) of Evaluation:</strong></td>
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<tr>
<td>• Assess performance for emergency response courses</td>
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<td>• Address issues specific to local training populations and determine the effectiveness of the training in addressing issues of concern</td>
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<td>• Identify new topics for training</td>
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<td>• Determine how and if trainees have used the information from courses in their worksites</td>
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<td><strong>Evaluation tools:</strong></td>
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<td>• Needs assessment strategies include worker/community surveys and site visits, as well as interviews with local emergency response officials and other key informants.</td>
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<td>• Instructors assess skills and knowledge through a variety of hands-on learning exercises such as identifying isolation procedures for chemicals using the chemical name, placard, or identification number; identifying Safety, Isolation, and Notification concerns under port-specific scenarios; and emergency response drills.</td>
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<td>• In Alaska, UW asks trainees to write two-page reports at the completion of their training indicating how the courses are likely to benefit them and their communities.</td>
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<td>• Technical assistance reports are periodically reviewed to identify new topics for training.</td>
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<td>• WRUC instructors document trainees’ places of employment and occupation through course registration forms.</td>
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<td>• Course evaluations by trainees provided by each consortium member.</td>
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<td>• Quality assurance through auditing includes twice yearly meetings of the Executive Committee, Trainers Exchanges, and consultation between PI and project directors regarding instructor to trainee ratios, curricula adaptation, and other issues as needed.</td>
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<td><strong>Population Served:</strong></td>
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<td>• Efforts are targeted to three strategic worker groups in the Western region:</td>
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<td>1. Workers at the ports and in other emergency response roles in Southern California</td>
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<td>2. Emergency responders in tribal villages in Alaska</td>
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<td>3. Emergency responders in villages in the Pacific Islands</td>
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<td><strong>Types of Courses/ Training Curricula Offered:</strong></td>
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<td>• Include Hazardous Materials Technician courses, First Responder Awareness Training, CPR/AED and Basic First Aid courses, Emergency Response courses</td>
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<td><strong>Trainers:</strong></td>
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<td>• WRUC instructors who train in the disaster preparedness program participate in annual instructor support activities organized by each consortium member. Each WRUC also holds meetings/training sessions with instructors at least once a year to bring them up-to-date on new information and teaching methodologies to be included in future classes.</td>
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<td><strong>Proof of effectiveness/value?</strong></td>
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One example of addressing needs for additional training from technical assistance reports: LOSH developed awareness training for members of ILWU Local 94 in response to concerns about working around containers with refrigeration units.

Most beneficial aspects/well received methods:

- Longstanding relationships with the ILWU have increased the capacity of union locals in Southern California to respond to potential disasters. ILWU worker-trainers have participated in emergency response activities at port terminals and are discussing with LA/Long Beach Ports representatives more formal emergency response roles for union members.
- Ongoing collaborations with tribal organizations in Alaska have enabled UW to continue its hazard disaster preparation training in remote villages. And UCDE’s relationships with government agencies and community groups in the Pacific Islands make possible a number of emergency response trainings each year.
- Needs assessment for issues specific to local training populations makes courses tailored to be site specific and to change along with the needs of the training populations.

HWWT TRAINING:

Principal Investigator:
- Linda Delp
Evaluator(s):
- Kevin Riley – Coordinator/Evaluator
Grant Number:
- U45ES06173
Goal(s) of Evaluation:
- Training effectiveness is measured by:
  a) analyzing the demographic characteristics of the population we train
  b) tracking outreach to minority populations
  c) implementing methods to assess trainee skills during the course
  d) assessing the impact of training on the job
  e) effectively meeting the needs of trainees with different levels of literacy and language differences; and
  f) implementing targeted outreach and special emphasis programs to reach workers and the broader community.
- WRUC is currently collaborating with the New England Consortium, the Midwest Consortium, and the New Jersey/New York Consortium to carry out a three-year cross-grantee evaluation of our training programs. The evaluation focuses on three central questions:
  1) What factors influence whether employers comply with the requirements to provide health and safety training that meets the OSHA HAZWOPER Standard?
  2) Did the training provided by our programs meet their perceived needs?
  3) Did they utilize the resource of trained employees to develop or strengthen their workplace health and safety programs?

Evaluation tools:
- Traditional written exams is administered.
- Instructors assess skills and knowledge through hands-on learning exercises.
• Students evaluate each other’s skills in donning and doffing protective clothing and respirators by using check off lists.
• Small group activities to practice use of instruments and exercises based on real-life case studies used to evaluate students’ comprehension of the material.
• Instructors gather information about incidents during all courses and adapt the training program to enhance workers’ ability to prevent and respond to those incidents.
• Participants are asked the following questions at refresher courses:
  o Have any changes in the workplace occurred in the last year as a result of your training?
  o Have you participated in any emergency response activities or have any spills or near misses occurred during the last year?
• Multi-grantee evaluation uses an online survey of managers who send their employees to HAZWOPER courses. The survey consists of 18 questions that explore what employers and managers look for in a training provider, what they expect employees to get from training, what motivates them to maintain compliance with HAZWOPER training requirements, and the impacts they believe the training has had in the workplace.
• WRUC instructors document trainees’ places of employment and occupation through course registration forms.
• Quality assurance through auditing includes twice yearly meetings of the Executive Committee, Trainers Exchanges, and consultation between PI and project directors regarding instructor to trainee ratios, curricula adaptation, and other issues as needed.

Population Served:
• Courses were offered to hazardous waste workers throughout EPA Regions IX and X, as well as in the Pacific Islands, on Native American reservations, and among maquiladora workers in Nogales, Sonora, Mexico

Types of Courses/ Training Curricula Offered:
• Include hazardous waste site courses, TSD, emergency response, hazmat transportation, and hazard communication classes

Trainers:
• Each WRUC member holds a meeting/training session with instructors at least once a year to bring them up-to-date on new information and teaching methodologies to be included in future classes.
• All subscribe to the BNA Occupational Safety and Health Reporter and/or its equivalent at the state level (e.g., the Cal/OSHA Reporter) to inform Project Directors and instructors of new initiatives at the federal and state level.

Proof of effectiveness/value?
• Some quotations from participant regarding training effectiveness:
  • “The course teaches me to be a ‘heads up’ team player and to keep my eyes open for my coworkers’ safety.”
  • “I had an employee who was about to remove items from a plating tank without his PPE. The refresher course reminded me to always use PPE for safety.”
  • “We are able to better manage our waste streams. Perform proper inspections and are ready to respond to emergency situations – being prepared.”

Most beneficial aspects/well received methods:
• Course provided in both English and Spanish.
• WRUC has taken action to address literacy issues including using performance evaluation
measures that minimize a reliance on reading and instructors who assist individuals with limited literacy skills when reading is required.

- Outreach to underserved communities throughout our region, including immigrant and non-English-speaking workers, tribal groups, *maquiladora* workers, and workforce development program participants.

### MWT TRAINING:

**Principal Investigator:**
- Linda Delp

**Evaluator(s):**
- Kevin Riley – Coordinator/Evaluator

**Grant Number:**
- U45ES06173

**Goal(s) of Evaluation:**
- Determine rates of job placement for trainees
- Indicators of training effectiveness under the Minority Worker Training Program include:
  - (a) recruitment of minority and underserved workers
  - (b) implementing methods to assess trainee skills during courses
  - (c) using adult learning methods to meet the needs of trainees with literacy and language differences and to stimulate critical thinking skills
  - (d) course and program evaluation measures.

**Evaluation tools:**
- Instructors assess skills and knowledge through hands-on learning exercises.
- Small group activities to practice use of instruments and exercises based on real-life case studies used to evaluate students’ comprehension of the material.
- Course evaluations are completed as either written evaluations from each student or as group exercises and activities to elicit information about what students like most and areas for improvement.
- Quality assurance through auditing includes twice yearly meetings of the Executive Committee, Trainers Exchanges, and consultation between PI and project directors regarding instructor to trainee ratios, curricula adaptation, and other issues as needed.

**Population Served:**
- Individuals recruited from underserved urban communities disproportionately affected by environmental exposures.
- Programs designed to prepare trainees for environmental and construction careers in civil service and in the private sector.
- The majority of 2012 MWT trainees were male and 70.8% were African American in this grant year. Also in 2012 79.2% of trainees were unemployed prior to entering the program.

**Types of Courses/ Training Curricula Offered:**
- Various courses including Basic Construction Math, Basic Computer Skills, Introduction to Green Jobs, General Construction Safety, HAZWOPER, First Aid and CPR, Lead Renovation, Green Chemistry, Environmental Justice, and Imagine 21 (a life skills course)

**Trainers:**
- WRUC’s Minority Worker Training Program courses are taught by consortium staff and
consultant instructors as well as instructors who are staff from partner organizations.

**Proof of effectiveness/value?**

- The job placement rate among trainees through April 2012 is 72.2%.
- Certifications through the program provided not only an increased awareness of the various health and safety precautions on the job, but enhanced their existing skill set, making students more marketable as job applicants.

**Most beneficial aspects/well received methods:**

- All WRUC instructors use participatory adult learning methods and are taught to consider trainees’ literacy level in designing and carrying out class activities.
- Course activities teach participants to apply critical thinking skills to an analysis of their communities, encouraging them to become engaged in efforts to promote more environmentally sustainable cities.
- Students enjoy the hands-on learning exercises and interactive activities, such as learning the proper way to use monitoring equipment in the 40-hour HAZWOPER course. Students also were excited to receive certifications through the training courses.