HWWT TRAINING:

Principal Investigator:
- Craig Slatin

Evaluator(s):
- Dr. Slatin and Jane Fleishman coordinate evaluation for the consortium. Ms. Fleishman conducts annual assessment of trainers. Dr. Slatin worked with Dr. Cora Roelofs several years ago to survey employers and managers who send their employees to TNEC, in order to better understand what drives management to train workers, and how they use the resource of a trained workforce. That pilot work is the basis for a current multi-awardee research team conducting a similar survey across much of the nation. Dr. Slatin and Ms. Fleishman are part of this team. Paul Morse reviews and catalogs student feedback forms and regularly informs TNEC trainers and directors of his findings. This information is used to set TNEC priorities for further training development.

Grant Number:
- U45ES06172

Goal(s) of Evaluation:
- Measure training progress in students and trainee knowledge at the end of the course
- Determine trainee perspectives on effectiveness and course content
- Measure use of training materials after course completion and how trainees value training materials
- Monitor workplace health and safety communications subsequent to training
- Measure trainee ability to better handle or prevent hazardous materials incidents after returning to their jobs
- Monitor efforts to improve workplace health and safety conditions as a results of training
- Assess trainers on experience, skills, and effectiveness
- Understand the context of health and safety training within firms, by surveying and interviewing employers and managers, using questions that aim to elicit data about the motivation for providing health and safety training to employees and how trained employees are incorporated into the firm’s comprehensive health and safety program.

Evaluation tools:
- Student performance measured based on information received from students in initial participatory exercises on the first day of training of open enrollment classes, or through pre-training discussions with health and safety managers who assign workers for training prior to contract courses.
- Instead of employing pre-tests, instructors monitor student progress and applied understanding of content during reinforcing small group activities, table-top and hands-on exercises.
- Trainers review daily evaluation feedback sheets that students turn in at the close of each day for multiple-day sessions. Student feedback sheets asked students to rate training materials on a scale of 1 to 10.
- Trainees demonstrate what they have learned throughout the 24-hour and 40-hour courses by participating in teams as part of a mock final incident scenario.
- Students take an end-of-course exam in all multi-day courses and instructors and students go over the answers together.
- Follow-up conversations held with employers, organization or union reps, and students.
- TNEC uses a registration database to track demographic information, employers, industry sectors, and names of officials who assign employees for training.
- Pilot Effort: Use of an “Action Card Activity.” Each course participant is asked to 1) name at least one thing you are committed to doing to make your workplace safer, 2) name at least one thing you are committed to doing to help your co-workers work more safely, and 3) name at least one thing you need at your workplace to support your working safely.
- Data collection by an online quantitative survey in collaboration with other NIEHS WETP grantees focused on three questions: 1) What factors influence employer provision of health and safety training that meets the OSHA HAZWOPER Standard requirements? 2) Did the training meet their perceived needs? and 3) Did they utilize their new resource of trained employees to develop or strengthen their workplace health and safety programs?
- TNEC Trainers have participated in critical examinations, on a peer-to-peer basis, of best practices regarding delivery of various courses and modules including co-training issues.

**Population Served:**

- Some students are being trained to help remediate contaminated inner-city properties as they are rehabilitated for new productive uses and for green jobs in weatherization, recycling, and emerging technology sectors.
- The Civil Service Employees Association of New York State (CSEA) provides training to state employees in a range of departments and agencies – and sometimes trains municipal employees. Target populations are New York public works, highway, wastewater, and other workers who may be first on the scene or assist in a response to a chemical spill or emergency, or who are involved in construction, maintenance, or repair work. Members come from State Departments of Transportation, Environmental Conservation, State University (SUNY) System, county highway, municipal departments of public works, public hospitals, sanitation and landfill workers, custodians, janitors, and cleaning workers.

**Types of Courses/ Training Curricula Offered:**

- Include 40-hr HAZWOPER, 24-hr Emergency Response, Site Worker and ER Refreshers, Site Supervisor, First Responder Operations, General and All Hazards Awareness, Incident Commander, General Construction Safety, Lockout/Tagout sessions, HazCom Right – to – Know, Confined Space Entrant, and other customized programs

**Trainers:**

- Peer Trainers used for most CSEA training (a network of nearly 100 Peer Trainers from across the state of New York). Other training is performed by a mix of professional trainers at COSH groups and a university program – some of whom formerly were workers in the sectors from which our training population comes.
- Annual trainer skills development workshop held in addition to Train-the-Trainer sessions.

**Proof of effectiveness/value?**

- Among the many positive effects of the WETP-funded TNEC, its member organization CSEA has observed that all employers that participate in the program have:
  - Evaluated and modified written programs.
- Purchased required safety equipment.
- Relied on the knowledge of the Peer Trainers to guide the decision making process.
- Given workers a voice through active participation in program implementation and management.
- Created or reinvigorated joint labor/management health and safety committees.
- Observed significant cost savings.

- According to TNEC’s 2012 progress report, 84% of students in the New England training courses overall rated their courses as “very good to excellent”. On a scale of 1 to 10 with 10 being the upper limit, students scored the course content 8.6 on how well it met their needs.
- According to the 2012 progress report, over a period of 258 instructor training days, students rated the teaching techniques and team approach 8.9 out of 10 points.

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

- Important in the realm of environmental justice.
- Training participants express appreciation for TNEC’s focus on job rights under OSHA, EPA, and other health and safety laws/standards.
- As a member of the Hartford Environmental Justice Network, ConnectiCOSH brings together union and community members to deal with environmental racism. Additionally the COSH consortium partners reach out to immigrant workers and English as a Second Language workers.
- The MassCOSH and NHCOSH partners reach out to education workers as well as school support staff, teachers, and parents from more than 50 different schools.
- RICOSH has developed a training program for Green During Construction.
- Students view hands-on equipment practice, interaction with others, and small-group problem solving as the most effective training aspects in terms of being better prepared to handle spills, releases or other incidents at their place of work. Additionally it was important to them to learn how to best use the resources available.