

Review of Awardee Evaluations



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NIEHS WETP mission



- To prevent work related harm involving hazardous materials by assisting in the development of model, state-of-the-art training and education programs for hazardous materials handlers, chemical emergency responders, and waste cleanup workers

WETP Training Programs



- **HWWT** - (*Hazardous Waster Worker Training Program*) – Occupational health and safety training for workers who are or may be engaged in activities related to hazardous waste removal or containment or chemical emergency response
- **MWT** - (*Minority Worker Training Program*) – Focuses on delivering training to disadvantaged urban youth in order to prepare them for employment in the construction and environmental cleanup fields.
- **HDPT** - (*Hazmat Disaster Preparedness Training Program*) – Intended to enhance the health and safety training of current hazardous materials workers and chemical responders
- **DOE** - (*Department of Energy/NIEHS Nuclear Worker Training Program*) – Focuses on training workers engaged in environmental restoration, waste treatment, and emergency response activities at sites in the Department of Energy's nuclear weapons complex.

Evaluation Overview



- “Rigorous program evaluation is essential in determining whether health and safety training has led to substantially improved protection aimed at reducing occupation illness and injuries and their attendant social and financial costs” (McQuiston, “Multi-program Evaluation: A Descriptive Review”)
- Evaluation holds relevance for:
 - ✦ Funding
 - ✦ program changes
 - ✦ program stakeholders and partners

Overview of my project



- **PURPOSE**: To develop and catalogue resource materials for the Fall 2012 workshop on training evaluation
- **OBJECTIVES**:
 - Determine which materials are relevant
 - Determine which information should be included
 - Review selected materials
 - Compile and format the relevant information
 - Make this resource available to those who would benefit
- **RESOURCES**: DMS progress reports, input from grantees
- **END PRODUCT**: Descriptive snapshots of programs and program evaluation for each grantee

Overview of Snapshots



- **Purpose of snapshot format:**
 - A concise summary of evaluation tools and methods, as well as other related information from each grantee
 - To be used as a resource for NIEHS as well as grantees
 - To compare and promote learning and sharing between grantees
 - To provide NIEHS with an overview of the evaluation methods being used among grantees

Data Fields Used in Snapshots



Principal Investigator

- PI for program

Evaluator(s)

- List of any internal or 3rd party evaluators mentioned in progress reports

Grant Number

- Applicable grant number for program

Goal(s) of Evaluation

- Lists the goals of evaluation programs, either expressly mentioned in the progress report or inferred from the evaluation tools

Evaluation Tools

- List of methods and tools used to evaluate programs, students, and instructors. Also includes trainee follow-up.

Population Served

- Description of target population. May include demographic information as well as employment status or area of employment

Types of Courses/ Training Curricula Offered

- Lists some of the types of training courses offered through the program

Trainers

- Information regarding trainers/instructors including type of trainer and support and training provided to instructors

Proof of effectiveness/value

- Selection of data provided regarding fulfillment of program goals, trainee improvement and learning, and success stories

Most Beneficial aspects/well received methods

- Lists some of the innovative methods used or aspects of courses highly valued by either trainees or instructors

Sample Snapshot *(Texas-Utah Consortium for Hazardous Waste Worker Training)*

HWWT TRAINING:

Principal Investigator:

- Robert Emery, DrPH, CHP, CIH, CSP, CBSP, CHMM, CPP, ARM

Evaluator(s):

- Janelle Rios, PhD

Grant Number:

- U45ES019360

Goal(s) of Evaluation:

- To gauge how well instructors met stated learning objectives
- To assess relevance of training to the participant needs
- To quantify the short-term impact of the course at the participant's workplace, measured 3-6 months post-course
- To quantify the potential long-term impact of the course
- To solicit future training needs

Evaluation tools:

- Online course evaluations
- Online impact survey questionnaire delivered 3-6 months post-course

Population Served:

- Hazardous waste and emergency response workers in Public Health Regions 6 and 8: Texas, Utah, Louisiana, New Mexico, Oklahoma, Arkansas, Colorado, Wyoming, Montana, North Dakota, and South Dakota.

Types of Courses/ Training Curricula Offered:

- HAZWOPER supervisor, 40-hour, 24-hour and 8-hour refresher courses
- HAZWOPER Operations Level Emergency Response
- Leadership Development for Hazardous Materials Professionals (16-hour course)

Trainers:

- Faculty, staff and contractors at the University of Texas and the University of Utah
- Certified instructors employed by local safety councils and institutes

Proof of effectiveness/value?

- According to an annual summary of our course evaluations, 89% of participants in year 1 and 82% in year 2 reported the HAZWOPER training "completely met their training requirements" and some trainees reported they discovered new job opportunities in HAZWOPER-related fields.
- Positive Workplace Impact: In the impact survey following the most recent Leadership Development course, 100% of respondents reported that the training positively influenced their workplace practices.

Most beneficial aspects/well received methods:

- Use of interactive methods and audience response systems
- Scenario simulations

Commonly Used Evaluation Tools and Methods



Worksheets/Surveys
(17 out of 19 grantees)

**Observation of
Trainees**
(9 out of 19 grantees)

**Specifically pre/post
tests**
(7 out of 19 grantees)

Final exams
(9 out of 19 grantees)

**Email or online
follow up**
(9 out of 19 grantees)

**Discussion with
Trainees**
(9 out of 19 grantees)

**Employment
tracking**
(6 out of 19 grantees)

**3rd Party/External
Evaluation**
(7 out of 19 grantees)

**Forms or other
evaluation at
refresher courses**
(5 out of 19 grantees)

Innovative Evaluation Tools and Methods



Use of review game exercises

(2 out of 19 grantees)

Trainee Focus Groups

(3 out of 19 grantees)

Telephone Interviews

(3 out of 19 grantees)

ARS - Audience Response Systems
(2 out of 19 grantees)

Incorporation of the Social Ecological Model
(1 out of 19 grantees)

Commonly mentioned best practices/well-received program aspects



Hands-on Emphasis

(12 out of 19 grantees)

Spanish Language Materials and/or Instructors

(6 out of 19 grantees)

Addressing Literacy Challenges

(6 out of 19 grantees)

Focus on green/clean economy or cities

(4 out of 19 grantees)

Integration of academic, life skills, and technical training- mainly applicable to MWT

(3 out of 19 grantees)

Innovative aspects of training programs



Training in Remote Areas

(3 out of 19 grantees)

Outreach to Native American and/or tribal Workers

(2 out of 19 grantees)

Demand Driven Courses

(2 out of 19 grantees)

Use of Near Miss Reporting

(2 out of 19 grantees)

Program Helps trainees pursue college degrees

(1 out of 19 grantees)

Efforts to recruit more women into the program

(1 out of 19 grantees)

Participatory Evaluation methods

(1 out of 19 grantees)

Summary of Snapshots and Moving Forward



- The information in these snapshots can be used to compare and contrast evaluation methods and tools
- In the process of creating an inventory of electronic resources containing the evaluation tools used by each grantee