POST-CONFERENCE PROCEEDINGS
WORKSHOP SESSION SUMMARY
NIEHS NATIONAL TRAINERS' EXCHANGE
MARCH 2012

1. Session Title and Presenters' Contact Information

"Developing and Implementing Preparedness and Response Core Competencies**"**

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2. Workshop Summary

The goal of this workshop is to share the development and implementation of a model of core competencies for the public health preparedness and response workforce. The model was developed by the Association of Schools of Public Health at the request of the Centers for Disease Control and Prevention through the engagement of a national panel of content experts. The workshop demonstrates how competencies are developed through consensus and illustrates the value of competency-based approaches. Opportunities for using and evaluating competencies in one's own training program are illustrated.

3. Methods

The training methods used include:
- Reflective analysis of learning experiences to inform practice;
- Competency awareness;
- Determining needs (target audience characteristics and adult learning theory concepts that transfer to practice); and
- Organization related to time and content management.

4. Main Points

Key Issues

- The Association of Schools of Public Health, in partnership with CDC under a cooperative agreement, engaged nearly 400 national experts to develop a model of core competencies for the public health preparedness and response workforce (1).

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March 28-29, 2012, Fort Lauderdale, FL

- The project was guided by a Leadership Group that included Joseph "Chip" Hughes (NIEHS WETP) as one of the 18 members. Dr. Audrey Gotsch (UMDNJ) and Dr. C. William Keck (Akron Health Department, Ohio) served as the co-chairs of the Leadership Group.

- The model developed by the national experts fulfilled a mandate in the 2006 Pandemic and All-hazards Preparedness Act to develop "a competency-based training program to train public health practitioners."
- The competency model is a proposed national standard of behaviorally-based, observable skills that mid-level workers, regardless of their employment setting, are expected to demonstrate to assure readiness.
- A mid-level public health worker is defined as a individual with:
  - ✓ five years experience with an MPH equivalent or higher degree in public health, or
  - ✓ 10 years experience with a high school diploma, bachelors, or non-public health graduate degree.
- The Public Health Preparedness & Response Core Competency Model includes four areas (**model leadership, communicate and manage information, plan for and improve practice and protect worker health and safety**) that contain 18 core competencies selected by consensus that sustain the capacity of public health workers to fulfill their responsibilities (2, 3).
- Competencies are statements that describe learning outcomes. They consist of single action verbs linked to specific content areas that are associated with professional practice (4).
- Competencies structure the instructional experience and provide the indicators for assessing both learners' performance and the suitability of the instructional design.
- Competencies can be used to form the foundation for a profession's identity and certification, and/or licensure.
- Adult learners consider competencies to be a contract between the instructor and the learners. Learners expect to be able to perform the outcomes of instructional experiences and be assessed on these outcomes.
- Competencies enable adult learners to know their strengths and weaknesses.
- Instructors utilize competencies to assess the needs of their learners.
- Instructors develop and implement competency based instruction according to self and participant assessment.
- Advantages of competency-based education include knowledge gained allowing more self-awareness of effective vs. ineffective practices.

- Disadvantages of competency-based education would result from a deficiency in any of the four areas noted in the model (model leadership, communicate and

manage information, plan for and improve practice and protect worker health and safety) that are not included in the training program for the adult learner.

Participant Discussion

- CDC Preparedness and Emergency Response Learning Centers have been established at 14 accredited schools of public health to provide preparedness and response training and education to fill the needs of the public health workforce in 39 states and the District of Columbia that would be excellent collaborators for the NIEHS WETP.
- Locations of the regional CDC Preparedness and Emergency Response Learning Centers are available at http://www.cdc.gov/phpr/perlc.htm.
- Several of the participants asked for additional information on the Dreyfus Model/Scale (5). The Dreyfus Model is a way to segment the intellectual stages of a career. The original work was done studying artificial intelligence and computer science. This work has been translated into professional education in many disciplines because it can provide guidance to instructional developers on how to integrate competencies using adult learning principles through interactive case studies and other forms of problem solving curricular designs.
- The importance of formative assessment/evaluation during the training phase was noted by several participants. This serves not only as a means to provide trainees with feedback on their learning but also to provide guidance to trainers throughout the course.

5. References

1) The Public Health Preparedness & Response Core Competency Model project was supported under a cooperative agreement from the Centers for Disease Control and Prevention (CDC) through the Association of Schools of Public Health (ASPH) grant number U36/CCU300430-28.

2) Gebbie, KM, Weist, EM, McElligott, JE, Biesiadecki, LA, Gotsch, AR, Keck CW, Ablah, E (2012 in press). Implications of preparedness and response core competencies for public health, J Public Health Management Practice, 00(00), 1-7.

3) Information about the Core Competency Project is available at: http://www.asph.org/document.cfm?page=1081

4) Koo, D, Miner KR (2010). Outcome-based workforce development and education in public health. Annual Review of Public Health, 3:253-269.

5) Dreyfus H (2001). On the Internet: Thinking in Action*.* 2ed. New York, NY: Routledge.

6) Gaiser, R (2010). The Adult Learner: Is it Necessary to Understand for Teaching Anesthesiology: 48(3):1-12.

7) Knowles, M (1998). The Adult Learner: The Definitive Classic in Adult Education and Human Resource Development. Houston: Gulf Publishers.

8) Lieb, S (1991). Principles of Adult Learning. Arizona Department of Health Services.

9) Images: Microsoft Stock Photo Collections.

10) Information also adapted from the following online learning modules produced by the Office of Faculty Development, Texas A&M Health Science Center, College of Medicine, College Station, TX:
- ✓ West, C and Graham, L (2011). Adult Learning Theory.
- ✓ White, BA, West, C, and Graham, L (2011). Knowing Your Audience.

6. Workshop Handouts/Resources

"Learning Outcomes of the Session" (PPT), Dr. Louise Weidner
Handout 1: "The Role of Competencies in Professional Education Curricular Development" (PPT), Dr. Kathleen Miner
Handout 2: "Public Health Preparedness & Response Core Competency Model" (PPT), Dr. Audrey Gotsch
Handout 3: Overview of the Preparedness & Response Core Competency Model; Public Health Preparedness and Response Competency Map; and Flow Chart for the Development of Knowledge, Skills & Attitudes (KSA) developed by the Association of Schools of Public Health
Handout 4: "Learning Experience Reflection" (PPT), Dr. Lori Graham
Handout 5:   Developing and Implementing Preparedness and Response Core Competencies—Best Practices Exercise; Self-Evaluation; and Making Connections in Planning for Trainings