Building a statewide online threat preparedness course for West Virginia: A collaborative partnership

Allison George, MPH, CPH, MCHES,1 Jerry Rhodes,2 Jennifer Hegle, MPH, CPH,1 Rachel Wilfert, MD, MPH, CPH1
1UNC Center for Public Health Preparedness, North Carolina Institute for Public Health, UNC Gillings School of Global Public Health;
2Center for Threat Preparedness, West Virginia Department of Health and Human Resources

Background

In West Virginia, designated threat preparedness staff at the regional and local level are tasked with ensuring that their organizations plan and respond appropriately to a wide variety of public health emergencies. As new staff come into threat preparedness positions they need training in their essential roles and responsibilities. Staff at the West Virginia Center for Threat Preparedness (WV CTP) typically conducted such trainings as 1 or 2-day face-to-face orientation sessions.

Recognizing that these training sessions were very resource-intensive for state and local staff and that they did not provide enough time to cover all topics in the depth necessary, WV CTP staff consulted with the University of North Carolina Center for Public Health Preparedness (UNC CPHP) to develop an online training course to provide a basic overview of core preparedness concepts and West Virginia-specific information for new threat preparedness staff. The intent of the course was not to replace face-to-face orientation sessions with state preparedness staff, but to allow such time to be spent more productively on higher-level issues. In addition, course materials could also serve as refresher trainings on specific topics as needed.

In 2010-12, WV CTP and UNC CPHP, through the support of the CDC-funded UNC Preparedness and Emergency Response Learning Center, collaborated to develop and deliver the West Virginia Threat Preparedness Online Training Course. The course has an 8-module “advanced track,” designed specifically for regional and local public health staff in West Virginia with threat preparedness responsibilities, as well as a 2-module “basic track,” designed for general local health department staff.

Course Development

Initial steps in the collaborative process included establishing partners’ roles and responsibilities, consensus on project timeline, ensuring input from the target audience, and deciding technical options for course development, delivery, and hosting. Partners agreed on a 5-phase process for developing the modules.

Training module development: Five phase process

1. Conceptualizing and designing course modules
2. Developing course materials
3. Creating interactive experiences
4. Reviewing and modifying course materials
5. Planning for delivery

The course was developed using Articulate® e-learning software to allow for incorporation of interactive features for learners. Each module was built around clearly-stated learning objectives to ensure input from the target audience, and deciding technical options for course development, delivery, and hosting.

Lessons Learned

• Close collaboration between academic and practice partners was the single strongest factor for success of the project, although it necessitated a significant commitment of resources (e.g., time) on the part of West Virginia state-level staff.
• Academic partners needed to be flexible concerning completion of various tasks as state partners engaged in large-scale response activities at various times in the project (e.g., 2012 derecho).
• Use of e-learning software produced a higher-quality product for learners, but involved more staff time for development.
• Changing federal guidance (e.g., HSEP) made finalizing some modules challenging.

Course Delivery

The course is available on the UNC CPHP Training Web Site, a learning management system hosted by UNC CPHP. Participants complete each of 8 course modules independently. Each module is accompanied by pre-/post-tests to measure knowledge gain, as well as a post-training evaluation. West Virginia’s state affiliate site of the TRAIN (TrainingFinder Real-time Affiliated Integrated Network) learning management system serves as the portal to the trainings, allowing state-level staff in West Virginia to track training completions. All modules offer continuing education credit.

Evaluation

While the majority of the modules were posted in late 2012 and do not yet have enough participant completions to reliably analyze evaluation data, 3 trainings posted earlier in 2012 have had enough participant completions to look at results of post-training evaluations.

Evaluation results (May 2012–February 2013) for Module 1 Basic Track and Module 1 Advanced Track

Participants were also asked if they intended to apply the new skills/information to their job activities and how frequently they intended to apply what they had learned. For all 3 trainings, at least half of respondents (70%, 74%, 50%) said that they intended to apply what they had learned to their jobs, while a high percentage (50%, 74%, 67%) expressed intent to use what they had learned weekly or daily.

Next Steps

• The WV CTP will incorporate the course as part of orientation activities for new local and regional level staff, and will promote use of the course as refresher trainings.
• UNC CPHP will build on this successful model to adapt various course modules for use in North Carolina, and will launch a version of the course for a national audience.