

# Expanding Training and Distance Learning in the Northwest

*Public health has had quite a year grappling with bioterrorism preparedness, smallpox vaccinations, and SARS. Even without such challenges, there would be plenty of work developing the skills of younger professionals for the expected retirement of many senior leaders.*

Margaret Shield

Three current trends are key to effective training and learning strategies: (1) basing training on public health competencies, (2) bringing real-world challenges into the classroom, and (3) using nontraditional educational formats to provide learning opportunities when and where they are needed.

## Competency-based training

Public health practice has been moving toward competency-based curricula and assessments. The recent CDC guidance for bioterrorism preparedness builds the momentum, directing both states and Academic Centers for Public Health Preparedness, such as the Northwest Center for Public Health Practice (the Center), to develop, deliver, and evaluate competency-based training to enhance public health preparedness.

Competencies describe the skills, knowledge, and behaviors that people need to perform their jobs. They are similar in complexity to job function statements. Competencies are used to design trainings, as well as create assessment and evaluation tools to measure development of skills in key public health areas. One of the advantages of a competency-based (or job function-based) approach to training is that it integrates multiple subject areas just as we do daily at work. Basic professional skills—such as effective communications and project management—can be integrated, for example, into a training emphasizing the steps in conducting a disease outbreak investigation.

Although the Center has been providing public health training for many years, identifying the competencies addressed by its courses and workshops is a new requirement. The Center is beginning to map course content to competencies, with an initial emphasis on preparedness competencies. For public health epidemiology, the Center is developing a competency set that emphasizes the skills and knowledge needed at the local and state levels. In another project, the Center is creating guidelines and performance indicators for incorporating the ten essential services into daily environmental health functions.

## Real-world challenges

Building competencies takes more than a knowledgeable instructor lecturing to a class.

Learners need opportunities to assimilate new information and explore how it can be applied to workplace challenges. Instructors need to actively involve their students and keep content focused on knowledge and skills with real-life applications. Educational formats such as case-based learning, problem-based learning, and tabletop exercises are well-suited to these goals.

**Case-based learning and problem-based learning.** Using case studies is already fairly common in public health education. Cases may include real or imagined scenarios, critical incident analyses, and anecdotal accounts. The instructor leads learners through a case to demonstrate how classroom concepts are used in real situations, allowing time for analysis and discussion. Problem-based learning uses a special format in which learners work in teams to solve challenging, realistic problems. Learners take the lead in analyzing the problem, seeking out information and resources, discussing possible solutions, and then presenting their plan of action. The instructor serves as a facilitator as learners develop critical thinking and collaborative skills. The UW's MPH in Community-Oriented Public Health Practice uses this approach extensively.

**Tabletop exercises.** Participants in a tabletop exercise work through a dry run response to an emergency situation, with emphasis on analysis and discussion of policies and processes. Although a tabletop does not provide the realism of a full-scale drill, it has the advantages of costing less, taking less time, and being lower profile, thus providing a low-stress environment for examining intra- or interagency capabilities and identifying training needs. The lower intensity format also creates a better forum for professionals from different backgrounds—for example, emergency responders, law enforcement, board of health members, hospital administrators, lab directors, and public health staff—to get to know each other professionally and personally.

Bringing community professionals together is one of the most valuable outcomes of a tabletop. Other professionals and officials often do not understand the roles and capabilities of public health workers. Differences in organizational structure and terminology between public health personnel and emergency responders can also

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create obstacles. Through the exchanges prompted by the exercise, relationships will form and understanding of the different agencies can develop.

Center faculty worked with the Washington State Department of Health to develop a tabletop exercise based on a suspicious food-borne disease outbreak. The *Bioterrorist Attack on Food* CD-ROM is available from the Center and can be customized to meet local needs.

## Nontraditional learning opportunities

Public health professionals have demanding workloads and responsibilities that make it difficult to leave the workplace for traditional academic courses. A solution is to seek out less traditional learning formats, such as intensive residential trainings (institutes) and programs offered partially or entirely by distance learning.

**Institutes.** Short-term, residential institutes offer an alternative to an eight- or ten-week academic course. A multi-day format allows instructors to cover a range of topics and gives learners time to digest content. Institutes also offer many positive intangibles. A residential format encourages attendees to build relationships and swap ideas. The Center's week-long Summer Institute for Public Health Practice continues to be very popular, and other institutes are catching on throughout the region. (*See p. 18, for a discussion of Montana's summer institute.*)

**Distance learning.** Distance learning can be a solution to demanding work schedules and shrinking or nonexistent travel budgets, but it is not a panacea. The core definition of distance learning can be pared down to "any learning opportunity where the instructor and the students are separated by distance or time." Video conferencing and webcasting are real-time formats in which the instructor and learners can interact from different locations. Self-paced online courses or CD-ROM materials allow learners to set the time for study, with communication facilitated by e-mail or electronic discussion boards.

The advantages of distance learning are immediately obvious: learning can often occur in the workplace; no travel approvals or expenses are needed; and greater flexibility allows training periods to fit into busy schedules. Some of distance learning's challenges may be less apparent. Although technological improvements allow greater interactivity between learners and instructors and among groups of learners, distance learning is still very different from being in a classroom. Some learners love it; others may find it too difficult and isolating. Public health staff should carefully explore each course or program and consider their own learning style to determine

whether distance learning is right for them. (*See Questions to Consider About Distance Learning on the journal's Web site at [www.nwcphp.org/nph](http://www.nwcphp.org/nph).*)

**Longer-term learning cohorts for building complex skills.** Because face-to-face time can be so valuable, many programs combine residential training with distance learning. One example is the UW's Certificate Program in Public Health (<http://depts.washington.edu/hsedp/prospect/cert/phpstu.shtml>), which blends a month-long, intensive, on-campus session with independent study and weekend sessions over a one-year period.

Longer-term learning formats are a good strategy for developing complex skills, such as leadership, that require change, practice, and application. Scholars in the NW Public Health Leadership Institute form a cohort that works together for a year. Three on-site sessions are held in Seattle for three days each. Scholars do additional individual and group work between sessions, communicating electronically and through periodic conference calls.

In the past, the Center has emphasized on-site instruction and distribution of curricula to local instructors. To better meet current regional needs, the Center will be expanding its direct delivery of training via distance learning. The emphasis will be on short, online modules and resources with content also available, when possible, on a CD-ROM for those who lack a high-speed Internet connection. The Center is also sorting through the volumes of resources on the Web to identify the best sites for key public health subjects. A recently developed resource, "Understanding the Role of Epidemiology in Public Health" ([www.nwcphp.org/epi/resources/](http://www.nwcphp.org/epi/resources/)), provides annotated links to Web sites in five broad areas: disease description, disease investigation, screening, surveillance, and evaluation.

## One-size doesn't fit all learners

In designing an effective training plan for public health staff, a diversified program blending both traditional and nontraditional learning opportunities is likely to be the most successful. Specific staff needs and departmental resources will determine whether longer-term programs, short courses, or distance-learning modalities are the best fit. In addition, adult learners tend to be particularly assertive in looking for learning formats that match their personal styles and interests. A diversified approach to workforce development is most likely to meet their needs and pay off by enhancing skills in both everyday and emergency public health situations. 🐾

### Author

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### Resources

The Council on Linkages core competencies and the newer bioterrorism and emergency readiness competencies. [www.nwcphp.org/comps](http://www.nwcphp.org/comps).

*BT Create. A Customizable Bioterrorism Tabletop Exercise Builder.* NACCHO. [www.naccho.org/prod140.cfm](http://www.naccho.org/prod140.cfm).

Osaki, CS. Training for public health emergencies. *Northwest Public Health*. Spring/Summer 2001.