

Preparedness Partnerships: The Multidisciplinary Approach to Emergency and Disaster Training

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Background

Hurricanes Katrina, Rita and Wilma highlighted the need for coordinated multidisciplinary response to emergencies and disasters. These recent natural disasters, in combination with concerns about pandemic influenza, have underscored the importance of collaborative training and planning for public health and public safety officials. Such collaborations must not only include health and safety officials, but also be expanded to include representatives from public works departments, school departments, elected officials, and members of the public.

Many communities—and public health authorities—are met with pressure to increase efforts around preparedness training. Potential training scenarios are numerous. Some are likely to be more relevant to a particular community than others. What we present here is not the latest scenario to drill in your community (avian flu), but instead a critical structure for all future trainings in your community.

In September 2005, the Cambridge Public Health Department Advanced Practice Center for Emergency Preparedness (APC) and several public health partners co-sponsored a tabletop entitled: *Combining Forces Against Disaster: A Public Health and Public Safety Partnership*. The training allowed local officials from a variety of disciplines to simulate response to an avian flu scenario and to have the response observed and evaluated to aid future planning. The nine Boston-area communities that make up the Boston Urban Area Security Initiative and the Massachusetts Department of Public Health participated in the training.

Training Description

The purpose of this training was to provide local government, public health, public safety, emergency management, EMS, hospitals, and other partners an opportunity both to assess and improve their readiness for emergencies and disasters. The use of an avian flu scenario achieved both practical and strategic goals. Increased awareness of vulnerabilities to a pandemic made the tabletop invitation a timely one. Also, the avian flu scenario highlights the importance of public health participation in local response.

The objectives established for the tabletop were to: 1) clarify emergency response roles in a public health emergency, 2) build local community partnerships, 3) clarify local and state response functions, and 4) build capacity for multi-jurisdictional cooperation.

Training Partners

In organizing the avian flu tabletop, the Cambridge APC reached out to the Harvard School of Public Health (HSPH) Center for Public Health Preparedness, Boston Public Health Commission, Boston EMS, and DelValle Institute for Emergency Preparedness. Each co-sponsor played a specific role in the development and implementation of the drill. For example, Dr. Paul Biddinger from HSPH developed the exercise scenario with input from the APC.

¹ The nine member communities of the Urban Area Security Initiative area under discussion are Boston, Brookline, Cambridge, Chelsea, Everett, Quincy, Revere, Somerville, and Winthrop.

DelValle Institute for Emergency Preparedness played a key role in the logistics of the event, such as registration and event facilities. Identifying the strengths of each partner from the outset contributed to the overall success of the event.

Scenario

The scenario presented a series of events that are likely to unfold during the initial days of an infectious disease outbreak. It began with a businessman arriving at a Boston-area hospital with flu-like symptoms. Having recently returned from a business trip in Asia, his travels may have exposed not only several hundred passengers on his flight home, but also colleagues attending a large awards dinner directly following his trip. Over the next eleven days the scenario unfolds as a significant test of hospital surge capacity, and includes emergency responder staffing shortages, and civil unrest. The scenario was designed to aggressively push communication among city departments and disciplines, as well as across municipal boundaries and various levels of government.

Training Tools

One of the unique strategies employed in the tabletop was the utilization of communication technologies. In the days prior to the exercise, participants were sent a mock press release about the status of avian flu in the Asian countries. They were also instructed to bring with them those communication tools that they might utilize in a real emergency—two-way radios, cell phones, emergency call lists, etc.

At the event itself, participants were seated in multi-disciplinary municipal teams, with MDPH seated at its own table. A facilitator for each team provided scenario details/injects and encouraged group discussion. An observer was assigned to each table to assess whether pre-determined benchmarks were met. One table was left open should participants decide to establish an incident command center.

Participants were instructed to gather as much information as they could to formulate their response strategy, using resources outside of the room as well as colleagues present for the exercise. All communities showed a high level of engagement and willingness to do so; as an example, one community's, public works representative contacted its vendor to determine the availability of cots in order to plan for setting up a mass treatment facility. Teams were also encouraged to simulate conference calls and press conferences to gather and disseminate information.

Evaluation

Evaluation focused on each community's observed ability to (1) assess information about potential and real public health threats, (2) implement response plans, (3) manage an unfolding crisis and (4) mitigate additional threats to prevention and public safety. Direct observations of each community were recorded in the form of notes and an appraisal of pre-determined benchmarks. Participant feedback was also obtained via conference satisfaction surveys administered at the conclusion of the day. A report on general observations will be provided to all participants, with each community also receiving individual feedback.

Conclusions

The exercise after action report will draw on the observers' notes and participant feedback to describe strengths and challenges still to be addressed in future planning and exercise opportunities. The exercise challenged participants' abilities to muster the resources – both human and material – that would be needed to respond effectively to a large-scale public health emergency. Existing inter-disciplinary relationships facilitated cross-agency and community

collaborations, and the exercise provided an opportunity for the nine communities and the Department of Public Health to share plans and strategies. Still, large and small communities grappled with issues of surge capacity, risk communication, and public safety as the scenario progressed. The difficulty of maintaining consistent, coordinated communications, both internally and externally, was highlighted across the communities as reports of illness and death mounted, and resources dwindled.

Despite these challenges, participant feedback confirmed that the exercise provided a valuable opportunity for communities and agencies to work together in testing their response plans, and to strengthen relationships for future efforts. Ongoing exercises will build on the lessons learned from this exercise and allow agencies, communities, and regions to continue to test and improve upon their plans.

***For more information on this training format and topic please contact
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