Pandemic planning and response

This regular column, continued by **JL Smither**, draws upon lessons learned and examples of best practice as researched by the US Department of Homeland Security's official network — Lessons Learned Information Sharing

outbreak must act quickly and efficiently to curb the spread of disease. Because careful planning is essential to an effective response, many countries have conducted exercises around pandemic outbreaks and other biological threats. In addition, the 2003 Severe Acute Respiratory Syndrome (SARS) outbreak has provided valuable lessons learned to emergency planners around the world.

№ Public health officials should communicate disease and response information quickly to limit the spread and side effects of an epidemic

When faced with the SARS outbreak in 2003, the Singaporean government quickly recognised the importance of public communication to avoid widespread panic, promote good personal hygiene, and to help curb further spreading of the disease.

First, the government implemented a SARS television channel that offered news updates and practical information in all local dialects 24 hours a day. Then, officials created multilingual posters and flyers that provided information for isolated areas on food safety, SARS symptoms, and warnings about the effects of discrimination against people with SARS. By acting quickly and providing accessible and helpful information, the Singaporean government was able to limit the spread of SARS.

M Hospitals should create surge plans that consider the difficulties of moving staff members among facilities during a public health emergency

At the time of the SARS outbreak in Toronto, Canada, about 44 per cent of nursing positions in the area were filled by part-time staff members. Many divided their time among several medical facilities and were included on staffing surge plans throughout the area. But, in response to the SARS outbreak and the fact that 40 per cent of all probable cases were

healthcare workers, the Canadian government issued quarantine restrictions on at least ten medical facilities. The quarantine orders resulted in nurses being unable to move from one facility to another, which severely limited the number of part-time nurses available to fill their roles in the staffing surge plans. Some hospitals offered double and triple pay to healthcare workers who were not quarantined just to meet their nursing needs, although this strategy left other hospitals drastically under-staffed.

By the time the outbreak was controlled and the patients were treated, hospital officials had learnt the lesson of having practical emergency plans that take unique restrictions into consideration. Hospitals are now asked to create staffing surge plans that account for quarantines and other restrictions that may be placed on a healthcare worker's availability during a pandemic.

■ Plans to distribute large quantities of medication to the public from a central location should include a safe shelter for victims awaiting treatment

In the United States, the Centers for Disease Control and Prevention have created the Strategic National Stockpile programme to ensure that the necessary pharmaceutical and medical supplies will be available and rapidly deployed in the event of an emergency.

To test their ability to receive and distribute the stockpile, Michigan authorities conducted a full-scale exercise in June 2003 that simulated the release of an aerosolised biological agent during a Michigan State University hockey game.

Exercise officials established a central point of dispensing, and organised queues for victims awaiting treatment outside a sports arena on Michigan State University's campus. When it began to rain, officials were forced to move the queue of victims to a sheltered area that was not previously organised or easily managed. Officials had trouble controlling the crowd of victims who began to push

forward and become unruly. Later, when the rain stopped, victims were moved back to the established queues outside the arena and order was quickly restored. The exercise afteraction report suggests that victims awaiting medicine and treatment should remain in a sheltered area to encourage order and to allow officials to distribute the stockpile easily.

When the next pandemic strikes, those who have planned and trained will have a much greater ability to respond. By activating established communication plans, governments can provide the public with valuable health information to help curb the disease and its effects. Likewise, educational and healthcare facilities that prepare in advance to meet the unique challenges imposed by a disease outbreak will be better equipped to handle the effects. By learning lessons from past events and exercises and by sharing information, each country will be more prepared to stop a rapidly spreading disease from becoming a worldwide pandemic.

Schools should train staff members to serve as substitutes for regular assignees to incident command system positions

In addition to healthcare facilities, schools must also consider the possibility that their primary staff members may not be available to serve in their emergency plan roles during an actual emergency. The University of Washington held a tabletop exercise in 2006 to assess the readiness of its Seattle, Bothell, and Tacoma campuses in the event of a pandemic influenza outbreak.

Exercise evaluators noted the possible effects an outbreak and response could have on university staff members. If staff members become sick or are placed under quarantine orders, some may be unable to fulfil the incident command roles assigned to them. For this reason, the evaluators suggested identifying and training several substitutes for each position who could be called on during an emergency.

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