

Pandemic Versus Preparedness

By **Scott A. Mugno, J.D.**

Editor's Note: The possibility of an avian flu outbreak in the U.S. is becoming more likely. The author, who works for FedEx, provides resources for businesses and SH&E professionals. As he notes, transportation is a fast-paced and ever-changing industry, and he reminds the reader of the SARS epidemic of just a few years ago.

We all have emergency, continuity or preparedness plans. They are required by regulation, law, industry best practices or just sound business practice. Over the last 5 years, many businesses have learned how effective those plans were—Sept. 11, 2001, anthrax, SARS and various natural disasters, including the catastrophic Hurricane Katrina.

Even if your plans, teams and operations fared well in these recent real-world situations, there is a yet another on the horizon. The magnitude of a worldwide influenza pandemic is a challenge not known to this generation or present-day economy. We may have had a preview with the 2003 SARS outbreak. But such an event's effect would be felt globally and could challenge even the best prepared.

Is It Hype?

It is hard to miss the media coverage on avian influenza or "bird flu." In the worst scenarios, accounts read more like a Hollywood movie script. Consider the following.

A novel animal virus mutates and

begins to infect humans. The virus mutates again and human-to-human transmission occurs by coughing and sneezing. People are contagious before the onset of symptoms, which takes an average of two days. Lab tests and official notifications take time as people go about their normal daily lives. Specifically, global commerce and travel continue.

Then, the first case of efficient human-to-human transfer is confirmed in a country. The virus is like none seen before. There is no known vaccine and not likely to be one for months. Antivirals, where available, slow it but do not stop it.

Then more cases are reported, in more countries and at an alarming rate. Predicted infections are one-third to two-thirds of the world population. Predicted deaths are in the millions.

Fear is spreading faster than the virus. Healthcare systems are overwhelmed. Medical equipment and supplies are depleting quickly. All nonessential healthcare services stop. Death management is becoming an issue. There is a run on all daily essentials, shortages occur amazingly fast and prices rise. Businesses and entire industries begin to shut down, mandatory and voluntary social distancing (quarantine) starts occurring. In those businesses open or trying to stay open, absenteeism is 30 to 50%. With national

economic boundaries blurred and supply chains dependent on just-in-time deliveries, national economies start to decline—and in some cases crash.

In fairness to any such scenario writer, there are many reasonable uncertainties concerning the current avian influenza, both it becoming a pandemic influenza, then resulting in a pandemic. As a result, many predictions and projections are coming from many notable reputable sources. So, if directed to be on your organization's pandemic preparedness team, what do you rely on?

What You Need to Know

A pandemic occurs three to four times a century (World Health Organization—which is the source of most information in this section). The last was the "Hong Kong Flu" in 1968. Pandemics occur when a new influenza virus emerges and starts spreading as easily as normal or seasonal influenza - by coughing and sneezing. Because the virus is new, the human immune system will have no pre-existing immunity. This makes it likely that people who contract pandemic influenza will experience more serious disease than that caused by normal or seasonal influenza.

A pandemic influenza is different from avian influenza. Avian influenza refers to a large group of different influenza virus-

es that primarily affect birds. On rare occasions, these bird viruses can infect other species, including pigs, cats and humans. Most avian influenza viruses do not infect humans.

However, avian H5N1 influenza has pandemic potential, since it might ultimately adapt into a strain that is contagious among humans. Should this occur, it will no longer be a bird virus—it will be a human influenza virus.

At the time this was written, 39 countries had confirmed cases of birds infected with the avian H5N1 influenza. Seven countries have confirmed cases of humans infected with the avian H5N1 influenza. The cumulative number of the World Health Organization's (WHO) confirmed human cases of avian H5N1 influenza in 2006 is 31 cases, with 19 resulting in death. The total since 2003 is 175 cases, 95 resulting in death. The world is presently in Phase 3 of WHO's six phases of pandemic alert, with six being a pandemic. Phase 3 is defined as a new influenza virus subtype causing disease in humans but not yet spreading efficiently and sustainably among humans.

Here are some other quick facts from the Trust for America's Health. Unlike normal or seasonal influenza, pandemic influenza can occur in any season. All age groups, not just at-risk groups may be at risk for infection. Based on patterns of previous pandemics, otherwise-fit adults could be at relatively greater risk. While a vaccine is currently being developed based on an avian H5N1 influenza strain isolated last year, new strains of the virus must be accurately identified and an effective vaccine produced for it. So, a vaccine against pandemic influenza may not be available at the start of a pandemic and could take six or more months to be supplied to medical facilities/personnel. Antiviral drugs may be in limited supply and their effectiveness will only be known definitively once a pandemic is underway.

According to Dr. Michael T. Osterholm, director of the Center for Infectious Disease Research and Policy, associate director of the Department of Homeland Security's National Center for Food Protection and Defense, and professor in the School of Public Health, University of Minnesota, "pandemic influenza is not a matter of if, just when, where and how."

No one can predict if, when or where avian H5N1 influenza will change, causing a pandemic influenza. Recent

research has uncovered chilling similarities between the current avian H5N1 influenza and the 1918 "Spanish Flu" H1N1 influenza. Current human cases and case clusters are telling but not defining. If a pandemic occurs, 98 percent of people should survive their infection, but care for the infected will be a significant issue. Finally, given global flyways of migratory birds, expect more countries and continents to report infected birds.

Preparedness Planning

In November 2005, the U.S. Department of Health and Human Services (HHS) and the Centers for Disease Control and Prevention (CDC) issued a 2-page "Business Pandemic Influenza Planning Checklist," which is available at www.cdc.gov/flu/pandemic. It is divided into six sections: 1) plan for the impact of a pandemic on your business; 2) plan for the impact of a pandemic on your employees and customers; 3) establish policies to be implemented during a pandemic; 4) allocate resources to protect employees and customers during a pandemic; 5) communicate to and educate your employees; 6) coordinate with external organizations and help the community.

Each section lists three to nine important specific activities a business or organization can take now to prepare. If nothing else, they are an excellent collection of thought-provoking reminders, recommendations or suggestions to initiate your team's planning effort.

While the CDC checklist is a good start, it is only that. To be effective, pandemic preparedness planning must include an honest assessment on specifically how a pandemic could impact or harm an operation. Fortunately, some focused or industry-specific reminders, recommendations or suggestions are beginning to be published. Of course, several reputable business continuity consultant services available as well.

A document worth reviewing is the Food Industry QRT Pandemic Analysis: An Analysis of the Potential Impact of the H5N1 Avian Flu Virus (August 2005). It is available free at www.cidrap.umn.edu/index.html. Although this 19-page white paper and template was prepared for the food industry, many parts are applicable to other industry sectors. Several of its key recommendations are covered in the HHS/CDC checklist, but the reader will find some additional useful comments and suggestions, including:

- Establish trigger points that can be invoked as the pandemic takes hold and as it passes; each trigger needs a set of checklists with clear responsibilities.

- Encourage industry or trade groups to begin preparing for this potential crisis; in addition to helping the industry prepare, they should represent the industry before various government officials in implementing a number of actions needed to assist the industry during a pandemic.

- Analyze service lists to determine likely demand shifts during a pandemic.

- Prepare a media point person.

- Implement a companywide analysis of essential and nonessential functions during a pandemic.

- Develop an emergency corporate chain of command so that no matter which executive becomes ill, leadership is well understood.

- Develop essential contacts and relationships with governmental agencies (now); understand and document which agencies will be making which decisions.

- Consider increasing security for warehouses and vehicles.

- Develop procedures for all aspects of an operation to minimize human contact.

- Develop alternative routing that may reduce opportunities for human contact.

- Develop plans to minimize the potential for a fuel shortage in a pandemic.

- Develop policies to address workers who refuse routes into certain areas.

- Investigate the potential to secure housing for critical employees who prefer to stay away from their family while working in a pandemic.

- Develop cooperative arrangements with suppliers of critical parts and supplies required to keep equipment running.

In February 2006, the University of Minnesota's Center for Infectious Disease Research and Policy along with the U.S. Chamber of Commerce and Minnesota Chamber of Commerce held a 2-day "Business Planning for Pandemic Influenza: A National Summit" in Minneapolis. In addition to current appraisals from some top experts on the risks and potential impact of an avian H5N1 influenza outbreak, the summit addressed what measures businesses can pursue to protect their employees and to ensure the continuity of their operations in a pandemic. Articles from and about the summit can be found at www.cidrap.umn.edu/index.html.

Messages from the summit include:

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- Employees are the critical asset.
- Clear, accurate communication is essential now and throughout a pandemic
- Leadership should be cross-cutting; involve government and business leaders.
- Regulatory relief will likely be needed; both business and government should use existing trade and professional associations in this regard.
- Reconsider the just-in-time model for obtaining materials; there will be neither time nor availability when the pandemic is already here.
- Build a value proposition for supporting employees' ability to work from home; weigh the expense of doing this with that of not doing it.
- Develop systematic and proactive shut down and restart procedures, and how such procedures will work for multinational companies.
- Develop worker training programs; cross training, replacement training, recall and train retirees, keep workforce running in light of 25 to 40% loss.
- Manage client expectations in advance.
- Who will be in charge? If the CEO is sick, who steps in? If first in line is out sick or doesn't show up, who steps in then? Name specific individuals in each line of responsibility—no committees.
- Identify businesses on which you depend and ask what they are doing to prepare.
- Plan that today's just-in-time model will be disrupted.
- How will you care for employees and how will you maintain operations without them (due to death, illness or caring for sick family members)?
- Do not depend on the federal government; contact groups such as trade organizations, National Guard and public health officials.
- Engage in any and all activities to convince the government that the issue of pandemic is very important.
- Start now.

Industry sector breakout sessions during the summit included the transportation and warehouse sector. The key strategies stressed were maintaining at least minimal workers to keep the operation running, maintaining or obtaining a fuel supply, and maximizing efficiency by relaxing existing work rules so services could continue with fewer workers.

Dr. Osterholm provided this piece of advice: Too often in disaster planning people try to take on the whole world. He encouraged summit participants to begin with small bites—one step at a time.

Another article worth reviewing is "Avian Flu: What to Expect and How Companies Can Prepare for It" from Knowledge@Wharton (www.wharton.upenn.edu). Some of the article's key messages include:

- While important that organizations assess how a pandemic can harm their operations and to take preventive measures, experts say they should actually be planning for all sorts of risks and include efforts to prepare for a possible flu pandemic within that broader strategic plan.
- The concern is not simply with people getting sick and staying out of work; it has to do with a fairly substantial breakdown in infrastructure.
- The hardest-hit companies in any industry are likely to be those with worldwide operations, global supply chains and/or international customers; these companies specifically are creating task forces combining their strategic planning, operations—continuity procedures, human resources and health services to adopt event-specific measures in anticipation of a pandemic.
- Some local, state and national government agencies are setting in place plans to curtail travel, close schools, quarantine individuals and communities, and ban public gatherings.
- Planning for a pandemic should be just one component of an organization's overall approach to risk management; take steps that could have a lot of other planning benefits for any number of risks—terrorism or natural disasters, etc.
- Independent of the threat, the outcome is going to affect four areas—people, technology and processing, their physical environment, and their relationships.

Conclusion

Given our fast-paced, ever-changing transportation industry, following is the executive summary for all you need to know and do concerning the possibility of an influenza pandemic—prepare now.

Still need convincing? Consider Toronto's experience with SARS in 2003. In Toronto, the virus infected only 252 people and resulted in 44 deaths. That was sufficient to trigger quarantine of

15,000 people. Toronto hospitals filled up and were forced to stop all non-essential health services. WHO advised against traveling to Toronto. The advisory was misunderstood and people didn't travel to any location in Canada. Air Canada went bankrupt. According to Dr. Sherry Cooper, global economic strategist and executive vice president, Harris Bank and BMO Financial Group, Toronto, it took 2 years for that economy to recover.

Pandemics are a real threat with a historic track record. It is not another Y2K—a threat that turned out to be a nonevent. Pandemics do approach with many uncertainties or unknowns. However, waiting to prepare while waiting for facts will be too late. Once confirmed, an organization will be hard-pressed to catch up to the speed in which the risks and fear of a pandemic will start occurring. We have all received the equivalent of football's 2-minute warning. The question is—what will you do with it? ■

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