Is it for the birds?

Avian or similar influenza could become a pandemic. **Interviewed by Chelan David**

**DAVID PEGUES**
Professor of clinical medicine
UCLA Medical Center

First, focus on what you do and the business that you’re in. Who are your essential employees? Who are your suppliers? What is the potential implication on your business plan?

For us in the health care industry, our essential employees are the direct caregivers, the people who keep the hospital running and the people who supply our critical patient-care supplies. We’ve identified the supplies that we need in order to keep people alive in an influenza pandemic and determined how we will run our business if a pandemic strikes. We’re going to shut down and stop delivering services to all but the most critically ill. Elective services will be stopped and patients will be discharged from the hospital whenever possible to alternate care sites or home.

The other thing that we work on regularly at the hospital is a disaster drill. If you have a plan but it’s just on a piece of paper, it doesn’t really serve anyone’s best interest. Businesses not only need a preparedness plan, but also need to know how and when to implement it.

What are some challenges that health officials are faced with in developing and distributing an effective vaccine?

The first thing that we’re trying try to do is predict what the pandemic flu strain will be. There is a great risk involved in our current strategy of manufacturing millions of doses of vaccine against the current avian influenza strain, because many think that this is not likely to be the strain of virus that adapts, circulates and causes a pandemic. It doesn’t do much good if you have 40 million doses of avian influenza vaccine and it’s not the avian influenza strain that causes the pandemic.

What we’re really focusing on right now is looking at new ways to more rapidly produce, and get out on the market, effective influenza vaccines once the pandemic strain is identified.

**H**istorically, influenza pandemics have occurred three to four times each century. With the last one taking place nearly 40 years ago, health experts agree that another is inevitable. Some believe that avian influenza, an infectious disease of birds, will be responsible for the next human plague. Of the 15 avian influenza virus subtypes, H5N1 is of particular concern because of its ability to mutate quickly.

Fortunately, it is improbable that the strain will surface on American soil without at least some advance warning, says David Pegues, professor of clinical medicine at the UCLA Medical Center. “We’re planning for something that nobody knows when it will strike or how severe it will be. These viruses come from China and the Far East, so we’ll have a matter of weeks or months to increase our preparedness.”

**Smart Business** spoke with Pegues about how the pandemic is being tracked, how businesses should prepare for an outbreak and the challenges involved with distributing effective vaccines.

How serious is the current pandemic risk?

To date, there have been just over 200 cases reported in humans since 1997, although the case fatality rate (over 55 percent) is high. In contrast, each year about 7.5 percent to 8 percent of all deaths in the United States are related to seasonal influenza or pneumonia. I think this puts things into perspective.

Right now, there is very little evidence that supports direct person-to-person spread of avian influenza. These are bird-adapted, not human-adapted, viruses. But the possibility remains that these viruses could adapt, change and become easily contagious to humans while retaining their ability to cause high fatality rates.

What would be some warning signs that a pandemic is about to start?

The warning signs would be based on laboratory detection, or what we call laboratory surveillance. The WHO (World Health Organization) along with the CDC (Centers for Disease Control and Prevention) participate in a worldwide network of laboratories that identify and characterize, or type, influenza strains. It would be on the basis of this laboratory surveillance network that we would identify the emergence of a new influenza virus strain and — very early on — know that we’re dealing with a potential pandemic.

What policies can be implemented to help stop the spread of a deadly virus?

When you’re coughing, cover your mouth with your hand.
When you’re sneezing, cover your mouth with a tissue.
Always clean your hands with soap and water or alcohol hand gel after coughing or sneezing.

The other commonsense thing is to avoid going into a workplace when you’re ill with an influenza-like illness: fever, cough and muscle aches. Employees who go into work sick have the potential of transmitting the infection to coworkers as well as to people in the community at large during their commute. The best thing you can do when you’re sick with a flu-like illness is to stay home.

How should a business owner prepare for an outbreak?

To prepare, you need to know how to recognize the warning signs. To date, there have been just over 200 cases reported in humans since 1997, although the case fatality rate (over 55 percent) is high. In contrast, each year about 7.5 percent to 8 percent of all deaths in the United States are related to seasonal influenza or pneumonia. I think this puts things into perspective.

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