



A PUBLIC HEALTH NOTICE: Avian (Bird) Influenza (Flu) A – H5N1 (Bird Flu)

Departing from the topics of our usual e-reports, we are writing to discuss a currently high-profile public health topic — the Avian Flu. As part of our continuing commitment to provide our clients with the best advice and action to ensure the health of their people and their buildings, all of us at ICTM, BHS and NMAS have become increasingly involved in emergency preparedness. One matter with which we are currently involved is the Avian Flu, in collaboration with Steve Prior, PhD, National Security Health Policy Center.

According to the World Health Organization's position concerning the Bird Flu, there are "no illusions about the danger the world is in, because we are dealing with a virus that is unpredictable, firmly entrenched and continue to spread". Preparation is critical. The migration from Asia to Europe as reported last week and the predicted mutation enabling having human to human transmission has intensified the media coverage discussions and the public concern about this issue. Since this public health issue is on the national radar screen and in our current repertoire of consulting activities, we would like to share some observations. We will try not to duplicate what you have already read, but to answer questions which may be of concern to you and to offer some suggestions for potential future responses.

Avian flu is an infection caused by the H5N1 Avian Influenza virus. This flu virus and others occurs naturally among birds. Wild birds worldwide carry the H5N1 virus in their intestines, but usually do not get sick from it. However, bird flu is readily transmitted to domesticated fowl and can devastate infected flocks. In fact, tens of millions of birds have been killed by the disease. Many are wondering why, if these viruses are ever present, is there particular concern now about the potential for a human pandemic? Most human cases have been traced to contact with birds, but health experts fear the virus could mutate to a form that easily spreads from human to human causing serious illness and deaths.

To date, approximately 119 people in Asia have been infected with this strain of avian flu virus. There is little human resistance to this strain and of the 119 people infected so far, 65 of them have died. While it is not clear whether any human to human infection has yet occurred, slight viral mutations or combination with the more common human flu virus could readily lead to a new capability of transmission from person to person. When and if this occurs, the likelihood of a worldwide pandemic becomes substantial. It is this risk -- viral mutation permitting transmission from person to person, not merely theoretical, but reasonably likely, along with its lethality -- that has attracted the intense attention of the public health community worldwide. We do not know whether this will occur tomorrow, next year, or not at all, but the probability of its happening is sufficiently high to warrant preparation and expanded public information. We've seen, in Katrina, the results of poor planning. One expert group trying to insure that we are better prepared when it comes to the Bird Flu is The National Security Health Policy Center. They have issued the following statement:

We are on the verge of a major threat to global health. All activities will be disrupted in a pandemic flu. Everyone will have their social expectations turned sideways. Family, business, community and social relationships will be dislocated by the diseases and the measures needed to face the spread of a new flu strain. We are potentially on the precipice of an outbreak we have not seen since 1918. As inconceivable and unprecedented as a Red Sox World Series victory (that happened again in 2004!!) there are projections of more than 150 million fatalities worldwide.

While this may seem inconceivable, until this past year, few people would have believed the difficulties we encountered due to Hurricane Katrina or that the Boston Red Sox would win a World Series title. Estimates of the probability that this pandemic will occur vary significantly, but it is likely greater than was the probability that New



Electronic Report

Volume 4, No. 4

Orleans would be destroyed by a hurricane. Moreover, if person-to-person transmission occurs, the resulting, human suffering will be far greater, by orders of magnitude, than what resulted from Katrina. Thus, the take-away message is not to panic, but to consider rational, comprehensive preparedness and response in the event of a pandemic.

The first thing to do is to pay attention to news reports. The movement of the Bird Flu virus to Europe is important, but this is far less important than its spread to people. Thus, our antennae must be tuned to human infection and, particularly, to the first case or cases of person-to-person transmission. If this occurs, certain preventive measures are essential:

1. Minimize travel
2. Avoid crowded places
3. Wash hands with soap and water and use hand sanitizers
4. Eventually, if the outbreak becomes significant and proximate to your area:
 - a. Wear a protective mask in public
 - b. Stay at home if possible
 - c. Keep your children out of school

Even absent a pandemic, simple preparedness measures are in order. Our staff of medical doctors and public health experts recommends that you have a general prevention and preparedness plan for both home and work. Some of the items to consider are:

- Developing a telecommuting plan to encourage ill employees to stay home and prevent transmission of illnesses to the remainder of the workforce
- Acquiring properly-fitting N-95 filtering facepiece respirators for necessary tasks, e.g. Travel, care of sick family members, etc.
- Acquiring and storing an adequate supply of food and water

If you are interested in additional information, please feel free to contact us.

Regards,

Ronald E. Gots, MD, PhD – info@ictm.com

Hung K. Cheung, MD, MPH, FACOEM – info@buildinghealthsciences.com

Barbara A. Gots, MD – ictm@ictm.com

David G. Lukcso, MD, MPH – info@nmas.com

Steve Prior, PhD – sprior@potomacinstitute.org