THE CITY OF NEW YORK

DEPARTMENT OF HEALTH AND MENTAL HYGIENE

Michael R. Bloomberg
Mayor

Thomas R. Frieden, M.D., M.P.H.
Commissioner

nyc.gov/health

2004 ADVISORY #4: Update on Avian Influenza A (H5N1) and SARS in Asia, and Request for Health Care Providers to be Alert for Cases of Severe Respiratory Disease Among Travelers to Affected Countries

1) **The New York City Department of Health and Mental Hygiene (DOHMH) reminds providers of the importance of OBTAINING A TRAVEL HISTORY from all patients being hospitalized for pneumonia, Acute Respiratory Distress Syndrome (ARDS) or other unexplained severe respiratory disease. This will allow the rapid identification and reporting of suspect cases of SARS and/or Influenza A (H5N1) upon admission to health care facilities;**

2) **DOHMH continues to request immediate reporting of patients who have traveled during the 10 days preceding symptom onset to a country with confirmed avian and/or human Influenza A (H5N1) activity or confirmed SARS activity AND who meet the following clinical criteria:**

   - **Severe respiratory disease, including unexplained pneumonia or ARDS**

   - **Milder illness, defined as fever and respiratory symptoms (e.g., cough or shortness of breath), among patients who, while traveling in a country with Influenza A (H5N1) activity, ALSO report contact with either a) live birds (e.g., at a live poultry market or farm), or b) a confirmed human case;**

3) **Brief updates on avian Influenza A (H5N1) and SARS activity worldwide;**

4) **The Centers for Disease Control and Prevention (CDC) recommends that health care workers practice <u>airborne</u> and <u>contact</u> precautions (including eye protection) for all patients with suspected Influenza A (H5N1) until 14 days after the onset of illness or until an alternative diagnosis is established.**

Please distribute to staff in the Departments of Critical Care, Emergency Medicine, Family Practice, Internal Medicine, Infectious Disease, Pediatrics, Pulmonary Medicine and Laboratory Medicine

March 2, 2004

Dear Colleagues,

We are writing to provide updated information on the outbreak of avian Influenza A (H5N1) in Asia and to request that providers continue to immediately report patients with unexplained pneumonia, adult respiratory distress syndrome or other severe respiratory disease, who have traveled during the 10 days preceding symptom onset to a country with confirmed or suspected avian and/or human influenza A (H5N1) activity (currently includes Cambodia, mainland China, Indonesia, Japan, Laos, South Korea, Thailand and/or Vietnam). In addition, SARS should continue to be included in the differential diagnosis of severe, respiratory illness among travelers returning from China (especially the Guangdong province), Hong Kong and Taiwan.

<u>Categories of urgency levels for NYC DOHMH Broadcast Notification System:</u>
Health Alert: conveys the highest level of importance; warrants immediate action or attention
Health Advisory: provides important information for a specific incident or situation; may not require immediate action
Health Update: provides updated information regarding an incident or situation; unlikely to require immediate action

In order to rapidly identify patients at risk for Influenza A (H5N1) or SARS, we request that providers obtain a travel history as early as possible on all patients being hospitalized for pneumonia, ARDS, or other severe unexplained respiratory disease. This will enable the rapid institution of appropriate infection control measures, diagnostic testing, and reporting to public health authorities.

Update on avian Influenza A (H5N1)

Widespread epizootics due to a highly pathogenic avian influenza virus, Influenza A (H5N1), continue to be reported among wild and domestic birds in Asia. Countries with confirmed Influenza A (H5N1) include China, Thailand, Vietnam, Laos, Indonesia, Cambodia, South Korea and Japan. Also, in Hong Kong, a single peregrine falcon with H5N1 has been reported, but there is no epizootic among domestic poultry in Hong Kong. In China alone, 49 outbreaks of avian Influenza A (H5N1) have been reported in 16 provinces and over 7 million chickens have been slaughtered in attempts to control the virus. Large culling operations have also taken place in other Southeast Asian countries to prevent further spread of the virus among fowl, and to reduce the risk of transmission to humans. The World Health Organization (WHO) has also reported that the H5N1 virus has been identified in two domestic cats in Thailand; these cats were among 14 in a single household that died following exposure by one of the cats to a dead chicken. Influenza A (H5N1) has also been reported in a clouded leopard in captivity in Thailand. The significance of these findings with respect to transmission to humans or other mammals is unclear at this time.

There have been 33 confirmed cases of human Influenza A (H5N1) in Vietnam (23) and Thailand (10). Among these, 22 patients have died. Hundreds of additional cases are under investigation in both countries. Clinical and epidemiologic data on a series of confirmed human H5N1 cases are available in the Weekly Epidemiologic Record published by the WHO website at http://www.who.int/csr/disease/avian_influenza/guidelines/WERAvianinfluenza/en/. The median age among initial cases was reported to be 13 years; cases have ranged from 16 months to 58 years of age. Patients have presented primarily with fever, cough, shortness of breath and progression to respiratory failure over the course of 1-2 weeks. Laboratory analyses revealed leukopenia, absolute lymphopenia and thrombocytopenia in many of the patients with confirmed H5N1.

There is still no evidence of person-to-person transmission of Influenza A (H5N1). It is believed that all human H5N1 cases resulted from contact with infected birds or surfaces contaminated with excretions from infected birds. However, the concern for reassortment among avian and human influenza viruses still exists, particularly since Influenza A (H3N2) is currently circulating among humans in Asia. Such a reassortment could allow for sustained person-to-person transmission and has the potential to set off a global influenza pandemic.

At this time, neither the Centers for Disease Control and Prevention (CDC) nor the WHO have issued travel restrictions or advisories for persons planning travel to Asia. However, the CDC does recommend that travelers to these countries avoid direct contact with live poultry or other birds that could be infected with the H5N1 virus. Detailed precautions for travelers and airline personnel are available at http://www.cdc.gov/flu/avian/index.htm.

To improve global preparedness for a possible pandemic due to H5N1, the WHO in collaboration with CDC and other partners are working to develop a vaccine candidate for the prevention of influenza A (H5N1); this is expected to take at least 3-6 months. In addition, WHO has recommended as a primary preventive measure rapid and safe culling of infected poultry in all affected countries to minimize the risk of further transmission to humans.

Update on SARS Activity Worldwide

There has been no documented person-to-person transmission of SARS anywhere in the world during the 2003-4 winter respiratory viral season. Only three confirmed and one probable case of SARS have been reported this winter, all from the Guangdong Province of China. There were no epidemiologic links between these four patients and the source(s) of their exposures is unknown and remains under investigation. All four patients have recovered, and investigations of their close contacts (including healthcare worker contacts) revealed no evidence of secondary spread.

Surveillance for Influenza A (H5N1) and SARS in New York City:

To rapidly detect the importation of influenza A (H5N1) into New York City, and given the concerns about the potential for a recurrent SARS outbreak, DOHMH requests that providers remain vigilant for respiratory disease among travelers returning from Asia, and report immediately all patients who have:

A history of travel within the 10 days before illness onset to a country with confirmed or suspected influenza A (H5N1) in either birds or humans (currently includes Cambodia, mainland China, Indonesia, Japan, Laos, South Korea, Thailand, or Vietnam) and EITHER:

- **Severe respiratory illness requiring hospitalization, with radiographic evidence of pneumonia or ARDS, OR**

- **Milder illness, defined as fever $\geq$ 38 ^{o}C AND respiratory symptoms (e.g., cough or shortness of breath) AND either a) contact with live birds (e.g., at a live poultry market or farm) or b) a confirmed human case of H5N1, while traveling in an affected country**

All hospitalized patients meeting the above clinical and epidemiologic criteria should be placed under airborne and contact precautions. Once avian influenza and/or SARS have ruled out, these patients may be placed under droplet precautions; or if the cause of illness is determined to be non-contagious, no further infection control precautions are needed. Report suspect cases immediately to the New York City DOHMH:

- **During business hours, call the Bureau of Communicable Disease at 212-788-9830.**
- **At all other times call the Poison Control Center at 212-764-7667 or 1-800-222-1222.**

To ensure that individuals meeting the above criteria are rapidly identified, it is recommended that acute care facilities institute routine screening for travel history among all patients with suspected pneumonia or severe respiratory infections at the time of triage or on initial medical evaluation.

(Since SARS is also a concern for travelers returning from Taiwan and Hong Kong, DOHMH also requests that providers report hospitalized patients with pneumonia or ARDS who have recently returned from these countries. CDC recommends that *droplet* precautions be used for these patients and that SARS testing be considered if the cause of infection remains unknown after 72 hours.)

Please note that the list of countries with H5N1 and/or SARS activity may change. We recommend monitoring the following web sites for the most up-to-date information on current avian influenza and SARS activity worldwide:

Centers for Disease Control and Prevention:	http://www.cdc.gov/ncidod/sars/
World Health Organization:	http://www.who.int/en/
NYC DOHMH	http://www.nyc.gov/health

For additional details on SARS surveillance in New York City, please refer to the *City Health Information* bulletin, "Severe Acute Respiratory Syndrome: Preparing for the Possibility of an Outbreak", available at http://www.nyc.gov/html/doh/pdf/chi/chi22-8.pdf and the health advisory issued by DOHMH on January 15, 2004, available on our website at http://www.nyc.gov/html/doh/html/cd/wtc1hcp.html.

Airborne Infection Control Recommendations for Patients with Suspected Influenza A (H5N1) or SARS

The CDC has recommended that health care workers observe airborne and contact precautions (including wearing eye protection) when caring for all patients with suspected Influenza A (H5N1) (and for patients with suspected SARS who have recent history of travel to Guangdong province, China.). Usually, even in the hospital setting, influenza requires only droplet precautions. The rationale for recommending airborne precautions for Influenza A (H5N1) includes a) the possibility that once transmissible from person-to-person it is not known exactly how H5N1 transmission will occur, and could include airborne transmission, b) the high mortality rate of this virus among humans, and c) the attempt to minimize the spread of the virus in the hopes of averting a global pandemic.

Laboratory Testing for Influenza Among Patients Who Meet H5N1 Surveillance Criteria:

When providers call to report suspect cases, DOHMH will provide guidance on specimen collection and will assist with transportation of specimens to appropriate reference laboratories. For influenza testing, it is best if specimens are obtained as early in the course of illness as possible. Please refer to instructions issued previously in the recent DOHMH health advisory from 1/29/2004 (available at http://www.nyc.gov/html/doh/html/cd/wtc1hcp.html).

Viral culture is not recommended at this time on specimens from patients with suspected influenza A (H5N1), due to biosafety concerns.

Avian Influenza in the United States

Outbreaks of Influenza A (H7N2) (a low pathogenic strain) have been reported among domestic poultry in Delaware and New Jersey in recent weeks; an additional outbreak of Influenza A (H5N2) has been reported in Texas. Both these events have required depopulation of domestic poultry flocks in the US. These viruses are NOT the same virus as the avian Influenza A (H5N1) causing widespread disease in Asia and are not thought to pose immediate public health risks. However, CDC has issued guidance for the protection of persons involved in avian influenza control and who have contact with domestic poultry from affected flocks. These guidelines are available on the CDC website at http://www.cdc.gov/flu/avian/protectionguid.htm.

As always, the NYC DOHMH greatly appreciates the cooperation of the medical community in these important efforts.

Sincerely,

Annie Fine, MD
Annie Fine, Medical Epidemiologist
Bureau of Communicable Disease

Marcelle Layton, MD
Marcelle Layton, MD, Assistant Commissioner
Bureau of Communicable Disease