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Health Update April 12, 2013

Human Infections with Avian Influenza A:H7N9

SITUATION: As of April 11, 2013, Chinese public health officials have reported to the World Health Organization (WHO) a total of 38 human cases of laboratory-confirmed Avian influenza A:H7N9 in China, including ten deaths, 19 cases with severe respiratory illness, and nine mild cases. Cases were reported from 4 different provinces in China. These are the first known human infections with this influenza strain. Thirty seven cases have occurred in adults aged 25-87 years and one case occurred in a child aged 4 years. Dates of illness onset ranged from February 19 to April 4, 2013. No ongoing person-to-person transmission or epidemiologic link between the cases has been identified; investigations by Chinese public health officials are ongoing. Preliminary data from the viruses isolated from the first three cases suggest that they are susceptible to neuraminidase inhibitors. At this time, no cases of human infection with Avian influenza A:H7N9 have been detected in the United States.

Currently, CDC does not recommend any travel restrictions to China. CDC is repeating its standard advice to travelers and Americans living in China to follow good hand hygiene and food safety practices and to avoid contact with animals. For additional recommendations go to CDC's travel website at http://wwwnc.cdc.gov/travel/notices/watch/avian-flu-h7n9-china.htm

ACTIONS REQUESTED OF CLINICIANS

- 1. IMPLEMENT Standard, Droplet, Contact and Airborne Precautions¹, including eye protection, for healthcare personnel caring for patients under investigation for Avian influenza A:H7N9 until more is known about the transmission characteristics of this virus. Place a surgical mask on the patient to reduce spread of respiratory secretions and have the patient avoid public settings (e.g. public transportation).
- 2. REPORT suspected Avian influenza A:H7N9 in patients who meet the exposure criteria described below. Call San Francisco Department of Public Health, Communicable Disease Control Unit at (415) 554-2830; after hours, weekends and holidays press "1" and "1" again to page the on call physician.
- 3. COLLECT specimens for testing and, <u>after</u> obtaining approval from SFDPH Communicable Disease Control, send specimens to SFDPH Public Health Laboratory per instructions below.
- 4. Consider empiric TREATMENT with influenza antiviral medications (oral oseltamivir or inhaled zanamivir) as soon as possible, without waiting for laboratory confirmation in hospitalized patients or others at high risk of severe disease (i.e. age <5 or >=65 or underlying medical conditions).
- 5. CONSULT an infectious disease specialist and/or the CDC webpage for clinical information: http://www.cdc.gov/flu/avianflu/h7n9-virus.htm

¹ <u>www.cdc.gov/HAI/settings/outpatient/basic-infection-control-prevention-plan-2011/transmission-based-precautions.html</u>

EXPOSURE & TESTING CRITERIA

Avian influenza A:H7N9 testing by public health reference laboratories will be considered for patients who have an illness compatible with influenza (i.e., acute onset of fever and cough) who have the following exposures:

- 1. Recent travel to countries where human cases of Avian influenza A:H7N9 infection have recently been detected, especially if there was recent direct or close contact with animals (such as wild birds, poultry, or pigs) or where Avian influenza A:H7N9 viruses are known to be circulating in animals. Currently, China is the only country that has recently reported Avian influenza A:H7N9 human cases.
- 2. Recent contact with confirmed human cases of infection with Avian influenza A:H7N9 virus.

Testing may be prioritized for patients whose exposures were within 10 days of illness onset and/or patients with severe respiratory illness such as radiographically confirmed pneumonia or Acute Respiratory Distress Syndrome of unknown etiology.

SPECIMEN COLLECTION AND ROUTING

Obtain a nasopharyngeal swab or aspirate, using Standard, Droplet, Contact and Airborne Precautions, including eye protection. Place in viral transport medium that has been kept refrigerated at 2-8 degrees Celsius and ensure that the specimen is promptly refrigerated and maintained at this temperature. Call the San Francisco Department of Public Health, Communicable Disease Control Unit at (415) 554-2830; after hours, weekends and holidays press "1" and "1" again to page the on call physician for consultation and approval <u>before</u> sending specimens to the Public Health Laboratory.

Viral culture of these specimens should <u>not</u> be attempted by local laboratories. Specimens should be transported at 2-8 degrees Celsius to the San Francisco Public Health Laboratory for preliminary testing. If positive for Influenza A testing by reverse transcription polymerase chain reaction (RT-PCR) but unsubtypeable, specimens will then be screened by the California Department of Public Health, Viral and Rickettsial Diseases Laboratory (CDPH-VRDL). CDPH-VRDL will forward suspect Avian influenza A:H7N9 specimens to the Centers for Disease Control and Prevention (CDC) for confirmatory testing.

FOR MORE INFORMATION

Since only a few cases have been confirmed, information about this disease may be changing. Please check the following websites as new information becomes available.

- CDC Avian Influenza A (H7N9) information page: cdc.gov/flu/avianflu/h7n9-virus.htm
- CDC Health Advisory, Human Infections with Novel Influenza A (H7N9) Virus: <u>emergency.cdc.gov/HAN/han00344.asp</u>
- WHO Global Alert and Response page: who.int/csr/don/en/index.html
- SFDPH Health Alerts page: <u>sfcdcp.org/healthalerts</u>