

DATE: April 17, 2013
TO: Medical Providers
FROM: Karen Furst, MD, MPH, Health Officer

Please distribute to all medical providers in your office.

Health Advisory Novel Influenza A (H7N9) and Novel Coronavirus

This is to update you on two emerging infections that are occurring in different parts of the world that have the potential to appear here in patients who have traveled to or from those areas.

Novel Influenza A (H7N9)

On April 1, 2013, the World Health Organization (WHO) reported three human infections with a novel influenza A (H7N9) virus in China. These are the first known human infections with this avian influenza strain. The virus has also been detected in birds from poultry markets in China. As of April 15, 2013, a total of 60 human cases had been reported. Most cases had severe respiratory illness, and 13 died. New cases continue to be reported and case counts are likely to increase (updates are available at the WHO website: <http://www.who.int/csr/don/en/>). At this time, no human cases of novel influenza A (H7N9) have been detected outside of China. While investigations are ongoing, no person-to-person transmission or epidemiologic link between any of the cases has been identified thus far.

Who is at Risk: With the large volume of international travel between California and China, suspected cases of novel influenza A (H7N9) are likely to occur. The California Department of Public Health (CDPH) has issued guidance on testing for suspect novel influenza A (H7N9) cases. Clinicians should consider the possibility of novel influenza A (H7N9) virus infection in persons who present with respiratory illness compatible with influenza within 10 days of the following exposures:

- Recent travel to countries where human cases of novel influenza A (H7N9) virus 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 influenza A (H7N9) viruses are known to be circulating in animals. Currently, China is the only country that has recently reported novel influenza A (H7N9) human cases; or
- Recent contact with confirmed human cases of infection with novel influenza A (H7N9) virus.

Reporting: Clinicians should immediately notify San Joaquin County Public Health Services (SJCPHS) of any suspected case of influenza A (H7N9) so appropriate testing can be arranged. Call the Communicable Disease Program at (209) 468-3822. After hours, please call (209) 468-6000.

Lab Testing: Respiratory specimens from patients with potential novel influenza A (H7N9) virus infection should be submitted to the SJCPHS Laboratory for testing regardless of any influenza rapid test results. For instructions on how to submit a specimen, please call (209) 468-3460.

Infection Control: Healthcare personnel (HCP) caring for patients under investigation for novel influenza A (H7N9) should adhere to Standard Precautions plus Droplet, Contact, and Airborne Precautions, including use of respirators (N95 or PAPR) and eye protection, until more is known about the transmission characteristics of the virus. All clusters of respiratory illness in HCP caring for patients with severe acute respiratory illness should be investigated. For the Centers for Disease Control interim guidance for infection control, go to:
<http://www.cdc.gov/flu/avianflu/h7n9-infection-control.htm>

Treatment: Preliminary data suggest that the virus is susceptible to neuraminidase inhibitors. Antiviral treatment is most effective when started as soon as possible after illness onset. Empiric treatment should be started with oral oseltamivir or inhaled zanamivir as soon as possible without waiting for laboratory confirmation on the following individuals:

- Persons hospitalized with suspected influenza, including suspected Novel Influenza A (H7N9) infection.
- Persons at high risk for developing flu-related complications, including children younger than 5, adults 65 years of age and older, pregnant women, and those with certain underlying medical conditions.

Additional information:

- WHO Situation Updates: <http://www.who.int/csr/don/en/>
- CDC Health Advisory (April 5, 2013): <http://emergency.cdc.gov/HAN/han00344.asp>
- CDC avian influenza A (H7N9) information page: <http://www.cdc.gov/flu/avianflu/h7n9-virus.htm>
- CDC interim guidance for infection control: <http://www.cdc.gov/flu/avianflu/h7n9-infection-control.htm>

Novel Coronavirus

Since April 2012, a strain of coronavirus previously unseen in humans has been identified in seventeen individuals in countries of the Arabian Peninsula. (Arabian Peninsula includes: Saudi Arabia, United Arab Emirates, Iran, Iraq, Yemen, Qatar, Israel and Jordan.) There were also cases in the United Kingdom who had a link to the Arabian Peninsula. Among the 17 cases, 11 were fatal. No cases have been reported in the United States. This novel coronavirus is associated with severe respiratory illness (i.e., cough, shortness of breath, pneumonia, fever) and renal failure. There is evidence of person-to-person transmission, though the risk seems to be low.

Suspected cases of novel coronavirus should be based on a combination of travel history to the Arabian Peninsula or neighboring countries or contact to an ill traveler and clinical presentation.

Clinicians should immediately notify San Joaquin County Public Health Services of any suspected case of novel coronavirus so appropriate laboratory testing can be arranged. Call the Communicable Disease Program at (209) 468-3822. After hours, please call (209) 468-6000.