

April 8, 2013

To: All Health Care Practitioners

Subject: Human infections with influenza A (H7N9)

Dear colleague:

Public Health Authorities in Canada are monitoring a situation in China involving a number of severe cases of human infection with avian influenza H7N9. Cases were first reported on March 31, 2013 by Chinese authorities to the World Health Organization (WHO) and are continuing to be reported this week. At this time there are an increasing number of lab-confirmed cases with a wide range in age (4 - 87 plus years old). Initial symptoms included high fever, cough, and respiratory tract infection at the early stage of disease. After several days, symptoms progressed into severe pneumonia and rapidly into acute respiratory distress syndrome (ARDS). Laboratory analysis suggests this avian influenza virus is derived from a reassortant of existing avian viruses. This virus is considered of low-pathogenicity in avian species but apparently of high virulence in humans.

These are the first identified cases of influenza A (H7N9) in humans and the first cases where human infection with an avian influenza A virus of low pathogenicity in poultry has been associated with fatal outcomes. In the past, influenza A (H7) viruses have been almost exclusively associated with birds, with a few sporadic reports of transmission to humans amongst persons who had close contact with poultry during outbreaks of high-pathogenicity influenza A (H7). To date, influenza A (H7) viruses have not shown evidence of sustained human-to-human transmission, and have not parented pandemic strains. There is currently no evidence to suggest otherwise for H7N9, although this may change in the light of ongoing investigations. Based on current information, the risk to Canada associated with A (H7N9) avian influenza virus from China is considered low.

Health authorities in China and the WHO are continuing to investigate this situation through case contact follow-up and further laboratory analysis, including susceptibility testing. NB Public Health is monitoring the situation closely and will keep you informed of new developments when and if they arise. In light of the severity of illness and rapid deterioration in the health of status in these reported cases you are requested to take the following actions:

- Be vigilant for cases of severe acute respiratory illness, which may include symptoms of fever, cough and indications of pulmonary parenchymal disease (e.g. pneumonia or acute respiratory distress syndrome [ARDS]) based on clinical or radiological evidence of consolidation.
- If infectious diseases have not been ruled out, obtain information on travel history within 10 days of disease onset and contact with others who have travelled or have been affected by severe acute respiratory illness. Note especially any travel to China.
- Preliminary tests suggest that the virus is susceptible to the neuraminidase inhibitors (oseltamivir and zanamivir)

- Implement infection control measures in your healthcare setting as per your Infection Control Guidelines for acute respiratory illness. In addition to Routine Practices:
 - Droplet Contact precautions be implemented for all acute respiratory infections until an infectious etiology is ruled out. If H7N9 is suspected , HCWs when performing aerosol generating procedures should implement airborne precautions as per the NB Pandemic Influenza Plan for the Health Sector: Infection Prevention and Control Annex, Version 2.3, section 1.3.4 guidance document
- Obtain appropriate specimens as per routine protocol within your organization. Please submit all relevant clinical information with specimens including information required to prioritize testing: travel history within 10 days of onset, exposure to animals particularly birds or swine
- Report promptly to the regional MOH, any cases with severe respiratory illness and travel history within 10 days of onset- especially travel to China. Also continue to report clusters of respiratory illness to the regional MOH
- Please advise patients travelling to China to follow usual preventative measures against any influenza, such as receiving a flu vaccine. For additional information please see the Public health Agency's website : <http://www.phac-aspc.gc.ca/phn-asp/2013/h7n9-0403-eng.php>
- Please share this information with other appropriate personnel

Thank you for your attention to this matter.

Sincerely,



Dr. Eilish Cleary
Chief Medical Officer of Health