



December 21, 2007

Dear Colleagues,

**Re: Avian Influenza and Severe Respiratory Illness Surveillance**

Reports of avian influenza A/H5N1 among wild birds and poultry continue to occur in countries in Asia, Europe, and the Middle East. As of December 15, 2007 a total of 340 human cases (209 deaths) have been reported by the World Health Organization (WHO) with Indonesia and China reporting the greatest number recently. In the past week a cluster of 8 suspect human cases of H5N1 influenza in Pakistan has been reported to the WHO. To date the majority of confirmed human cases have had a history of exposure to sick or dead poultry although a number of family clusters have been described. At this time there is no evidence of significant or sustained human-to-human transmission of the disease. However, concern continues that the H5N1 influenza A strain may mutate to one capable of efficient human to human transmission and the potential for a human influenza pandemic.

Local health organizations are asked by the WHO, Public Health Agency of Canada and Alberta Health & Wellness to continue to carry out surveillance for Severe Respiratory Illness (SRI) and/or Severe Influenza-like Illness (SILI) related to travel to countries experiencing avian influenza in birds/poultry.

**Case Definition**

- Symptoms including history of fever  $> 38^{\circ}\text{C}$  and cough plus pneumonia, acute respiratory distress syndrome (ARDS), encephalitis or other severe and life-threatening complications;  
**AND**
- A positive response to one of the following questions:
  - "Did you travel to Asia, Africa or Europe in the 10 days before you got sick?"  
Updated list of affected countries is available at [Public Health Agency of Canada: Countries of Interest - website address: http://www.phac-aspc.gc.ca/h5n1/index.html](http://www.phac-aspc.gc.ca/h5n1/index.html)
- OR**
- "Do you live with or were you in close contact with someone who has a similar illness and who traveled to a country of interest in the 10 days before he/she became sick?"

Information about recommended infection control strategies and laboratory investigations is included as well as a current list of countries with H5N1 outbreaks in poultry.

**Reporting Requirements**

Emergency departments and other areas in acute care facilities are asked to report all people meeting the case definition of SRI or SILI cases associated with travel to concerned areas to the Medical Officer of Health (780) 413-7946 or after hours (780) 433-3940.

Thank you for your anticipated cooperation.

Sincerely,

*(original signed)*

Marcia M. Johnson MD, MHSc, FRCPC  
Deputy Medical Officer of Health

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## **Infection Control Strategies:**

- Anyone presenting with fever and cough should be asked to cover their mouth and nose when they cough and sneeze, wash hands frequently, and if unable to be isolated or to maintain a distance of a meter from others, be asked to wear a surgical/procedure mask.
- Patients meeting the case definition of SRI or SILI (as defined on previous page) should be asked about:
  - travel within the last 10 days to an area experiencing H5N1 outbreaks (see website or list attached) **OR**
  - contact with a person who has a similar illness and who traveled in the 10 days before they became ill.

### **If "yes" to either question above:**

- Isolate the patient immediately - negative pressure isolation is not required. If unable to isolate immediately patient should be asked to wear a procedure/surgical mask and minimize contact with others by maintaining a 1 meter (3 feet) spatial separation.
- Staff in direct contact with the patient should:
  - don appropriate Personal Protective Equipment (PPE) for organisms spread through droplet and contact (gloves, gowns, mask and face shield)
  - perform hand hygiene before and after use of gloves
  - wear eye protection as a routine practice to prevent exposure to respiratory droplets.

NOTE: Procedure/surgical masks are considered adequate for routine care. N95 masks should be used by staff for aerosol producing procedures (e.g., intubation, bronchoscopy). If new information about transmission routes is identified or national/provincial recommendations change, PPE recommendation may be revised.

## **Recommended Laboratory investigations:**

- Nasopharyngeal swab (aspirate): for respiratory screen sent in Universal Transport Media (UTM) - available through Provincial Laboratory
- Blood: Aerobic/Anaerobic Culture, AFB (if indicated),
- Sputum: Gram Stain, Aerobic Culture, AFB (if indicated),
- BAL (if clinically indicated): Gram Stain, Aerobic Culture, AFB (if indicated), respiratory virus panel, CMV and HSV (if indicated)

Notify receiving laboratory and arrange urgent transport of specimens, marking them as high priority for anyone with a positive travel history.

Table 2: OIE<sup>2</sup> confirmed Avian Influenza H5N1 Activity in Poultry (Sept. 1, 2007 - present)  
(Updated 19 December 2007)

Country	Date of Outbreaks		Total number of Outbreaks (Sept. 1, 2007 - present)
	Initial	Most recent	Total
<b>Asia &amp; the Pacific</b>			
Bangladesh	24-Oct-07	10-Dec-07	8
China	14-Sep-07	14-Sep-07	1
Myanmar	19-Oct-07	04-Nov-07	2
Pakistan	19-Oct-07	28-Nov-07	4
Vietnam	14-Sep-07	05-Nov-07	17
<b>West Asia (Middle East)</b>			
Saudi Arabia	12-Nov-07	12-Nov-07	1
<b>Europe</b>			
Germany	01-Sep-07	14-Dec-07	2
Poland	30-Nov-07	12-Dec-07	7
Romania	27-Nov-07	27-Nov-07	1
Russia	07-Sep-07	01-Dec-07	2
United Kingdom	11-Nov-07	14-Nov-07	2
<b>Africa</b>			
Benin	07-Nov-07	03-Dec-07	3