



Health and Community Services

## NEWFOUNDLAND AND LABRADOR PUBLIC HEALTH LABORATORY

### INFLUENZA SURVEILLANCE

#### TESTING FOR INFLUENZA 2009

Collect specimens within the **first three days after onset** of symptoms. Specimens taken later are less likely to yield the virus.

For the current influenza season, the PHL will use three approaches for the detection of influenza virus.

1. Direct immunofluorescence (DFA) test for Influenza A/B performed on exfoliated cells from the upper respiratory tract.
2. Virus culture to isolate and identify Influenza A/B and for further subtyping.
3. Real-time PCR which provides a sensitive and rapid method of detection/typing of influenza virus directly from the clinical specimens.

#### Collection of Specimen/storage/transportation:

**Nasopharyngeal swab in viral transport medium is recommended as the preferred specimen.**

**Throat gargle in saline is NOT suitable for PCR methodology; therefore, submission of gargle is discouraged.**

Follow protocol for collection of nasopharyngeal swab(s). Place the swab in the UTM transport medium and break off the shaft of swab at the molded breakpoint. Replace cap securely.

Refrigerate (2-8°C) specimens promptly after collection and ship to the PHL as soon as possible or within 72 hr on ice packs. If a longer delay is anticipated, specimens must be frozen at -70°C or colder and shipped on dry ice.

Collection swabs and UTM transport medium are available through the Microbiology Laboratory in your area.

Nasopharyngeal swab procedure

May 13, 2009; 1300

- 1) Use the swab supplied with the viral transport media.
- 2) Explain the procedure to patient.
- 3) When you collect the specimens, wear gloves and a mask. Change gloves and wash your hands between each patient.
- 4) If the patient has a lot of mucus in the nose, this can interfere with the collection of cells. Either ask the patient to use a tissue to gently clean out visible nasal mucus or clean the nostril yourself with a Q-tip.
- 5) How to estimate the distance to the nasopharynx: Prior to insertion, measure the distance from the corner of the nose to the front of the ear and insert the shaft only half this length.
- 6) Seat the patient comfortably. Tilt the patient's head back slightly to straighten the passage from the front of the nose to the nasopharynx to make insertion of the swab easier.
- 7) Insert the swab provided along the medial part of the septum, along the floor of the nose, until it reaches the posterior nares; gentle rotation of the swab may be helpful. (If resistance is encountered, try the other nostril; the patient may have a deviated septum.)
- 8) Allow the swab to sit in place for 5-10 seconds.
- 9) Rotate the swab several times to dislodge the columnar epithelial cells.  
*Note: Insertion of the swab usually induces a cough.*
- 10) Withdraw the swab and place it in the collection tube.
- 11) Refrigerate immediately.
- 12) Remove gloves.
- 13) Wash hands.
- 14) Attach completed requisition.
- 15) Transport to the laboratory.

For a video on collection of an NP swab see:

<http://www.youtube.com/watch?v=TFwSefezIHU>