

## First seasonal Influenza cases confirmed in Toronto

Last week Toronto Public Health received three laboratory reports confirming that both Influenza A and Influenza B are circulating in Toronto. Specific subtyping and strain information is pending. Individual cases were interviewed and none had a travel history that might indicate importation of influenza.

Please be reminded that seasonal influenza can present with a spectrum of symptoms from mild to severe. These include:

- Sudden onset of fever, headache, chills, muscle aches, physical exhaustion, and a dry cough.
- Subsequent onset of sore throat, stuffy or runny nose, and worsening cough.
- Children may also feel sick to their stomach, vomit, or have diarrhea.
- Elderly and immune compromised people may not develop a fever.
- Most recover in 7 to 10 days.

While the best way of preventing the flu is vaccination, the arrival of the 2006-07 influenza vaccine is delayed until mid-November due to difficulties growing one of the strains. While a limited quantity of vaccine has been sent to long term care homes for their residents and staff, vaccine delivery to community physicians is anticipated in early November. Initial supplies of vaccine should be used for high risk patients (e.g. those with chronic illness) only. Once further quantities of the vaccine are available they should be used first for adults over 65 years of age and then for the general public. Toronto Public Health will begin its community clinics on November 13<sup>th</sup>.

Given the non-specific symptoms of influenza infection, laboratory confirmation of the virus is necessary to ensure an accurate diagnosis. Rapid tests can detect presence of the virus quickly for those who might require immediate treatment (e.g. long term care residents). See the attached table for a summary of the most common diagnostic tests for influenza.

For those interested in tracking seasonal influenza trends and reports, please visit our website for weekly updates in our Influenza Bulletin. The first seasonal bulletin will be posted on Tuesday October 17, 2006 and updated weekly on Tuesdays thereafter.

Bulletins can be viewed at the following URL:

[http://www.toronto.ca/health/cdc/communicable\\_disease\\_surveillance/statistics\\_and\\_reports/weekly\\_influenza\\_news/index.htm](http://www.toronto.ca/health/cdc/communicable_disease_surveillance/statistics_and_reports/weekly_influenza_news/index.htm)

Reports can also be accessed by visiting [www.Toronto.ca/health](http://www.Toronto.ca/health) and choosing 'Communicable Disease - Reports, Seasonal' from our A to Z index.

**Please be reminded that influenza is a reportable communicable disease. Cases of influenza infection should be reported to Toronto Public Health by calling our surveillance reporting line at 416-392-7411 (or 416-690-2142, after hours) within one working day. Any suspect outbreaks of respiratory infections in institutions are immediately reportable.**

**SUMMARY OF COMMON DIAGNOSTIC TESTS FOR INFLUENZA**

Test type	Specimen types	Time for result*	Type of result	Testing Sites
<b>Preliminary testing for Influenza A and B</b>				
Rapid antigen detection	Nasopharyngeal and throat swabs; nasopharyngeal aspirate	Same day	Screen for Influenza A or Influenza B antigen (primarily used for outbreak samples)	PHL and licensed hospital laboratories
Viral culture	Nasopharyngeal and throat swabs; sputum; nasopharyngeal aspirate; lung tissue	10 days	Presumptive positive cultures for Influenza A and Influenza B (confirmed by DFA)	PHL and licensed hospital laboratories
Immunofluorescence DFA staining	Nasopharyngeal and throat swabs; sputum; nasopharyngeal aspirate	Same day	Confirmation of Influenza A or Influenza B antigen	Licensed hospital laboratories
Serology	Acute and convalescent blood samples	4 weeks	Rise in Influenza A or B antibodies	PHL
RT-PCR	Nasopharyngeal and throat swabs; sputum; nasopharyngeal aspirate; lung tissue	Same day	Confirmation of Influenza A or B RNA	NML and select hospital laboratories. Used for reference testing ONLY. Consult lab.
<b>Strain identification</b>				
Hemagglutination inhibition	Culture samples	2 days	Specific strain of influenza	Most tests done at NML (although PHL also has capacity)

\*Time for result represents how long it can take to process a specimen and get a final result.

Abbreviations: DFA= Direct Fluorescent Antibody, NML = National Medical Laboratory, PHL = Public Health Laboratory, RNA = Ribonucleic Acid, RT-PCR= Reverse Transcriptase Polymerase Chain Reaction

**Source: Toronto Pandemic Influenza Plan, November 2005**