

February 8, 2007

**TO: ALL PEEL REGION EMERGENCY DEPARTMENTS, INFECTIOUS DISEASE
PHYSICIANS AND INFECTION CONTROL PRACTITIONERS**

**FROM: EILEEN DE VILLA, ASSOCIATE MEDICAL OFFICER OF HEALTH AND PEEL
SURVEILLANCE UNIT**

Alert: Outbreak of Invasive Pneumococcal Disease Serotype 5 in Western Canada

- Vancouver, Calgary and Edmonton are experiencing outbreaks of severe Invasive Pneumococcal Disease (IPD) among non-elderly adults. *Streptococcus pneumoniae* serotype 5 is the cause in most cases.
- Risk factors identified include:
 - homelessness or living in shelters/rooming houses
 - use of crack cocaine and other illicit drugs
 - underlying medical conditions (e.g., HIV and hepatitis C infection)
- Cases are presenting to hospital with severe community-acquired pneumonia and sepsis; many requiring ICU admission.
- Invasive pneumococcal disease is reportable in Ontario. To date, there has been no increase in the number of cases of IPD in Peel Region or Ontario and no identified cases of this previously rare strain (serogroup 5).

***Streptococcus pneumoniae* infection**

- Transmitted by respiratory droplets contained in coughs and sneezes, direct oral contact or indirectly through objects contaminated with respiratory discharges.
- Common signs and symptoms of streptococcal pneumonia include:
 - Fever
 - Chills
 - Cough
 - Shortness of breath
 - Fatigue
 - Chest pain
 - Fever

Specimen Collection and Laboratory Diagnosis

- To facilitate early diagnosis, treatment and reporting of this strain, please ensure appropriate collection of sterile site specimens (blood or CSF) for laboratory testing as serotyping is not routinely performed on non-invasive pneumococcal isolates.
- If available, please also provide any risk factor information on the lab requisition.

Vaccination strategy

- The Public Health Agency of Canada recommends continued immunization with 23-valent pneumococcal polysaccharide vaccine for:
 - persons 65 years of age and older;
 - persons two years of age and older who are at risk for pneumococcal disease (see current National Advisory Committee on Immunization guidelines at: <http://www.phac-aspc.gc.ca/publicat/ccdr-rmtc/02pdf/acs28-2.pdf>)
- As many homeless/underhoused individuals will meet the high risk eligibility criteria for the pneumococcal polysaccharide vaccine, Peel Public Health is planning to meet with community partners to discuss a vaccination strategy for this population.

If you have any questions, please contact Peel Public Health at (905) 799 7700.