
Toronto Public Health (TPH) Investigating Two Reportable Disease Clusters**1. *E. coli* O157:H7 Cluster**

A cluster of five *E. coli* O157:H7 cases has been reported since March 1st, 2011. All five cases have the same DNA fingerprint pattern which also matches a sixth case recently reported in a neighbouring health unit. Four cases visited an emergency department. Two were hospitalized, and are recovering. Most of the cases in this cluster reside in the west area of Toronto. The investigation is ongoing into the source of this cluster. This cluster is not related to the ongoing outbreak associated with in-shell hazelnuts in the United States and Canada.

The signs and symptoms of *E. coli* O157:H7 include: diarrhea, bloody diarrhea, abdominal pain, nausea, or vomiting. Complications include dehydration and haemolytic-uremic syndrome (HUS). The incubation period is typically 3-4 days (range 2 to 10 days). It is highly contagious and spread by consuming contaminated food, or direct person-to-person contact.

Laboratory diagnosis of *E. coli* O157:H7 includes stool culture, which should be submitted in the enteric transport media (pink liquid). Blood cultures for Verotoxin-producing *E. coli* can also confirm infection if indicated. All samples potentially related to this outbreak should be sent to the Ontario Public Health Laboratory (OPHL) for testing; please include the outbreak number **OB# 0000-2011-003** on the requisition forms.

2. Hepatitis A Cluster among Korean-Canadians in Toronto

TPH is also investigating a cluster of hepatitis A cases in the Korean-Canadian community in Toronto. On average, TPH receives 54 reports of hepatitis A cases a year; however, since August 2010, 16 reported cases have been in individuals of Korean background. The majority of the cases in this cluster did not travel during their incubation periods, and live in the north area of Toronto. The source(s) for this cluster is still under investigation.

Hepatitis A is spread by the fecal-oral route and has a long incubation period (range 15 to 50 days). Hepatitis A virus may cause fever, malaise, anorexia, nausea, and abdominal discomfort and these symptoms are often followed by jaundice. The infection is generally self-limited. TPH does provide hepatitis A vaccine to close contacts of cases for post-exposure prophylaxis when indicated. Vaccine is also publicly funded for certain high-risk groups. While it is not publicly funded for travellers, it is recommended for travellers who may be exposed in endemic countries.

If you suspect Hepatitis A in a patient, order a blood sample for serology for anti-HAV IgM and anti-HAV IgG antibody. If you receive a reactive anti-HAV-IgM result for one of your patients, submit 2.5 ml frozen serum or frozen plasma to the OPHL for Hepatitis A genotyping and RNA fingerprinting as soon as possible; include outbreak number **OB# 0000-2011-001** on the requisition.

Hepatitis A and Verotoxin-producing *E. coli* infections are reportable to the Medical Officer of Health. Report all suspect and confirmed cases immediately to Toronto Public Health at 416-392-7411 (or 3-1-1 after hours).

Fact sheets for patients are available:

Hepatitis A: http://www.toronto.ca/health/cdc/factsheets/hepatitisA_factsheet.htm

E. coli: http://www.toronto.ca/health/cdc/factsheets/ecoli0157_factsheet.htm