



August 17, 2010

Dear Physician:

VEROTOXIGENIC *E. COLI* (VTEC)

The Winnipeg Regional Health Authority (WRHA) has identified a significant increase in suspected VTEC cases since the beginning of August. Although only one case has been laboratory confirmed, the number of suspected cases currently under investigation (N=16) with onset of illness between August 1, 2010 and August 16, 2010 approximates the number of cases normally expected for the months of June, July and August combined. Based on initial epidemiologic investigations, attendance at the Russian pavilion between August 2nd and 5th was the most likely source of this outbreak, and it is believed that an ongoing source of transmission does not exist. Nevertheless, monitoring will continue over the next couple of weeks to ensure that cases do not occur beyond the outer limit of a VTEC incubation period, and to confirm that all control measures taken are successful.

CLINICAL PRESENTATION

VTEC presents with a wide range of symptoms. Some infected individuals may only have mild diarrhea or they may be asymptomatic. Most cases presenting to a physician for assessment will likely have more severe diarrhea associated with abdominal cramps and/or blood in the stool. Usually little or no fever is present. Symptoms usually appear 1 to 10 days after exposure, with a mean incubation of 3-4 days. Most patients infected with VTEC recover within 4 to 8 days without antibiotics or other specific treatment.

In some patients, especially children under five years of age, VTEC infection can lead to hemolytic uremic syndrome (HUS). This is a serious complication marked by severe renal insufficiency and hemolytic anemia requiring dialysis and/or transfusions of blood or clotting factors. A prolonged hospital stay often ensues. Although most patients with HUS recover completely, it can be fatal.

TESTING

- **All patients presenting to your clinic within the next two weeks with the above symptoms (especially those with bloody diarrhea) should have a fresh (unpreserved) stool specimen submitted as soon as possible to a microbiology laboratory for VTEC testing.**
- Testing involves culturing the stool to detect the presence of *E. coli* O157:H7, followed by confirmatory testing at Cadham Provincial Laboratory to confirm the presence of a verotoxigenic-producing strain of *E. coli*.
- Please ensure the laboratory requisition clearly identifies the need for VTEC testing.

TREATMENT

- **Antibiotics are not recommended for the empiric management of VTEC, as their use has been associated with higher rates of complications including HUS.** Therefore, patients with suspected VTEC should receive supportive management only (rehydration and intensive care as necessary), along with reinforcement of infection control practices, especially strict hand washing.

REPORTING

HUS is a reportable communicable disease under The Public Health Act. If you are aware of a case of HUS, please notify the Medical Officer of Health on call, regardless of VTEC testing results, by calling 788-8666.