



island health

Infectious Diarrhea

“Diarrhea” is an alteration to a normal bowel movement characterized by:

- An increase in the water content, volume, or frequency of stools
- A decrease in consistency (i.e., soft or liquid)
- An increase in frequency of bowel movements to >3 stools per day

Infectious diarrhea - can be caused by many organisms including *Escherichia coli (0157)*, *Salmonella*, *Campylobacter* and *Rotavirus*. Other causes of diarrhea to consider are *Clostridium difficile* (bacteria) and *Norovirus* (viral diarrhea). It is often accompanied by symptoms of nausea, vomiting, or abdominal cramps.

Did You Know... *Infectious diarrhea is the most common cause of diarrhea worldwide and is responsible for more deaths than gastrointestinal cancers, peptic ulcer, or inflammatory bowel disease. Diarrheal disease is the leading cause of childhood death and the second most common cause of death worldwide.*

BMJ: Management of Infectious Diarrhea, Volume 53, Issue 2

Island Health: Infection Prevention & Control (IPAC)

1 February, 2018

Methods of Transmission of Infection - transmission of organisms, which cause diarrhea and/or vomiting:

- Mainly by the fecal-oral route (unwashed hands after visiting the toilet and handling patient’s soiled clothing, bed linen etc.)
- By direct contact
- Through droplets while the patient is actively vomiting

There is a high risk of widespread environmental contamination during bouts of diarrhea and/or vomiting.

Additional Precautions – Hand hygiene is to be performed as per **Four Moments for Hand Hygiene**. Appropriate PPE to be used; Gown, gloves (and mask with face shield if indicated by point of care risk assessment).

Communication - It is important that everyone is aware of the additional precautions that are required for the patient. Staff involved in patient care must be informed of the potential risks and appropriate IPAC measures necessary for safe care.

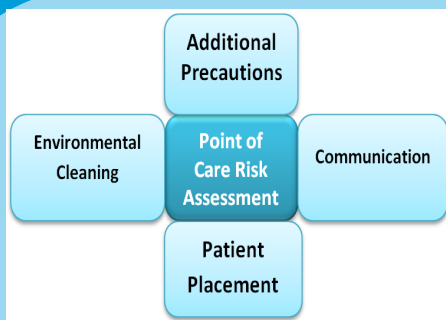
Disclaimer: All content in this reference guide is presented only as of the date printed or indicated, and may be superseded by subsequent documents or for other reasons. In addition, you are responsible to ensure you are receiving the most up to date information.



Salmonella: Symptoms of acute gastroenteritis with Salmonella include sudden onset of diarrhea, abdominal cramps, fever (almost always present), nausea, vomiting and headache may occur. Onset after exposure is 6 to 24 hours (up to 48 hours). Duration of illness is 4 to 7 days (untreated) and may lead to severe dehydration. Salmonella bacteria may be shed for several weeks after symptoms resolve (3-4 weeks). Treatment is antibiotic therapy for severe infection.



Campylobacter jejuni: Symptoms can vary and can include self-limiting bloody diarrhea, headache, myalgias, fever and abdominal pain. Onset after exposure is 3 to 5 days with a duration of illness of 2 to 10 days. Primary treatment of campylobacter gastroenteritis is supportive care. Antibiotics are recommended in patients with high fever, bloody diarrhea, prolonged illness, immunosuppression and for patients who attend daycare or reside in a group home/facility.



A Point of Care Risk Assessment (PCRA) is completed where the patient, the healthcare worker and the environment interact. The purpose of a PCRA is to assess:

- The degree of exposure likely during an encounter
- To determine the actions, additional precautions and equipment necessary to interact safely with the patient and their environment



Shiga Toxin Producing E. coli : The most common infectious diarrhea in Canada is E. coli O157. Symptoms can vary but often include severe stomach cramps, diarrhea (often bloody), vomiting, fever. Onset after exposure is 3 to 4 days with a duration of illness of 5 to 7 days. Non-specific supportive therapy, including hydration.



Giardia Lamblia: Most common waterborne illness. Symptoms include diarrhea (without blood), abdominal pain, flatulence, malabsorption and weight loss. Onset delayed to 5-25 days after exposure, diarrheal illness persists 1 to 3 weeks and may persist with intermittent exacerbations. Send stool for ova and parasites. Treatment is antibiotic therapy for symptomatic patients (50% asymptomatic).



Rotavirus: Symptoms include watery diarrhea, abdominal cramping, and fever. There are 5 strains, A, B, C, D, and E. The A strain is the most common and causes 90% of infections in people. Duration of illness is 3 to 8 days. Non-specific supportive therapy, including hydration. Primary mode of transmission is via the fecal-oral route. The virus is stable in the environment and transmission can occur through ingestion of contaminated water or food and contact with contaminated surfaces or objects.