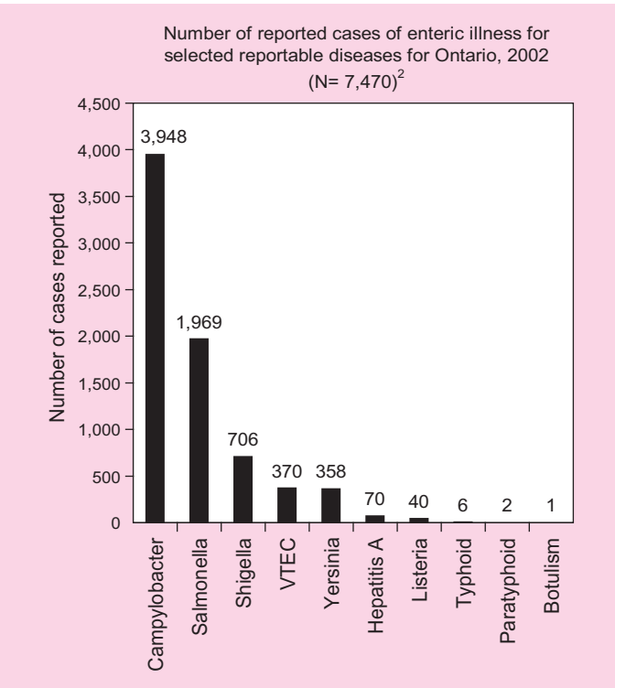
Diarrhea

Consider an Infectious Agent

All cases of diarrhea should be regarded as infectious unless a microbiological cause can be excluded. Most causes of diarrhea result from infection with a bacterial or viral agent and are generally short-lived, self-limiting conditions.[1]



It could be an index case

Physicians are likely to be the first to see the index case of an outbreak. The index case is the first person to be infected with a disease and could be the source of an outbreak.

1. Ask Questions

The first step in evaluating a patient who presents with diarrhea is to obtain a thorough history, including both clinical and epidemiological features.[1]

a. Clinical questions[1]

- ✓ when and how illness began
- ✓ stool characteristics
- ✓ frequency of bowel movements
- ✓ presence of dysenteric symptoms
- ✓ symptoms of volume depletion
- ✓ other associated symptoms & their frequency and intensity
- ✓ recent or regular medications
- ✓ underlying medical conditions

b. Epidemiological risk factors[1]

- ✓ travel to a developing area
- ✓ consumption of unsafe foods or water
- ✓ swimming in untreated fresh water
- ✓ visiting a farm or petting zoo
- ✓ contact with other ill persons
- ✓ occupation as a food-handler or caregiver
- ✓ day care center attendance or employment
- ✓ anal intercourse or oral-anal sexual contact

2. Test

Order a stool test for[1]:

- ✓ Diarrhea lasting more than 3 days
- ✓ Diarrhea lasting more than one day that is accompanied by fever, bloody stools, systemic illness, recent antibiotic use, recent hospitalization, or dehydration
- ✓ Diarrhea lasting more than one day that is associated with travel or daycare attendance
- ✓ Clients who are part of a suspected or known outbreak

If patient has:	Test for:
Community-acquired diarrhea or Travellers Diarrhea	✓ Salmonella ✓ Shigella ✓ E coli O157:H7 ✓ Campylobacter ✓ Yersinia
Persistent diarrhea for more than seven days	✓ Giardia ✓ Cryptosporidium ✓ Cyclospora ✓ Amebiasis
Recent Antibiotic Use or Recent Hospitalization	✓ Clostridium difficile

Why test?

- ✓ Early diagnosis can lead to interventions that alleviate symptoms and **prevent secondary transmission**.[1]
- ✓ Testing can contribute the information necessary to identify the source of an outbreak. [3]
- ✓ An accurate diagnosis can prevent the following[1]:

1. **Undesirable consequences from inappropriate treatment.**
   For example, Hemolytic Uremic Syndrome (HUS) in clients with *E. coli* O157:H7 infections may result from antibiotics used to treat the initial diarrhea.
2. **The emergence of drug resistant pathogens such as Methicillin-Resistant *Staphylococcus aureus*.**
   An organism-specific diagnosis allows for more judicious use of antibiotics.
3. **Unnecessary procedures or interventions.**
   For example, a diagnosis of *Campylobacter* infection in a patient with severe abdominal cramps or bloody stools can prevent unneeded colonoscopy.