

OBJECTIVE

Alberta clinicians use a single initial stool test sample to improve the accuracy of stool testing for infectious diarrhea and stool collecting convenience for

TARGET POPULATION

Children and adults with suspected infectious diarrhea

EXCLUSIONS

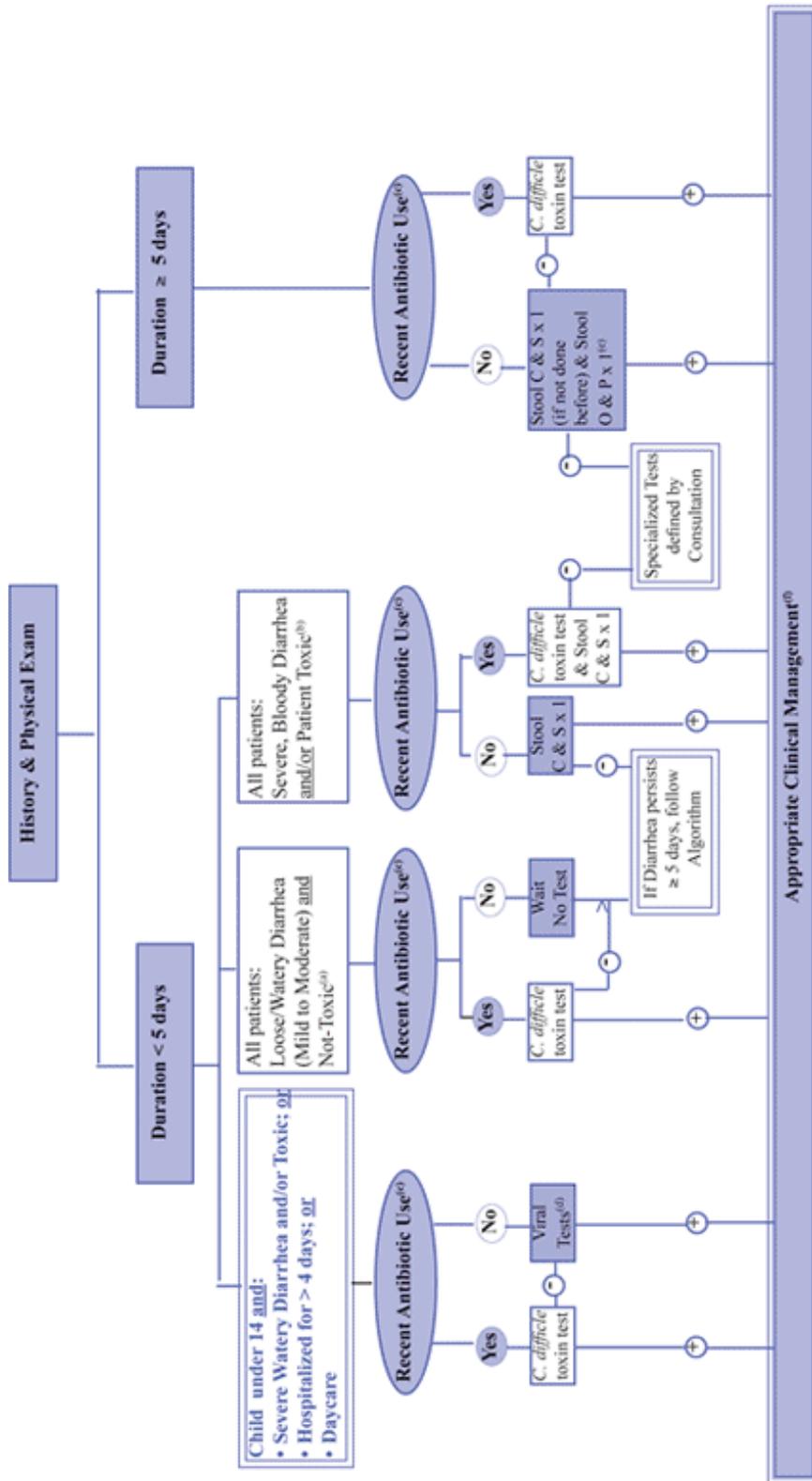
Patients involved in a community or hospital outbreak
Food handlers to whom Public Health regulations apply
When an infectious etiology is not suspected

RECOMMENDATIONS

Stool testing may be required for patients with diarrhea. The following recommendations should guide the ordering of stool bacterial cultures (C & S), stool ova & parasite (O & P) tests and *C. difficile* toxin tests:

- ✓ A CLINICAL HISTORY should be provided to the laboratory, including the type and duration of symptoms, underlying medical conditions, recent travel and recent or current antibiotic therapy.
- ✓ A SINGLE stool test should be initially ordered where indicated (see [algorithm](#)).
- X Stool C & S and/or stool O & P tests are usually NOT clinically indicated for patients with onset of diarrhea – four days after hospitalization (see [algorithm](#)).
- ✓ Consultation with an appropriate specialist is recommended in circumstances where additional stool tests may be useful. Additional stool test(s) may be done if there is continued suspicion of enteric bacterial infection when an initial sample is negative, and recent travel to areas where *E. histolytica*, *Giardia lamblia* or *helminth infections* are common.

Algorithm for Investigation of Suspected Infectious Diarrhea



Notes:

- Some cases of watery diarrhea in these patients do not require investigation and are self limiting.
- Bacterial enterocolitis is most often acquired in Alberta from late spring (May/June) to fall (Oct/Sept). Cases outside of these peak months occur most frequently in travellers/migrants from developing countries.
- Antibiotic associated colitis (AAC) due to *C. difficile* may occur up to eight weeks after antibiotics have been stopped. AAC is the most common cause of diarrhea in hospitalized patients.
- Rotavirus infections occur predominantly in young infants/children ≤ age 3 years0 and are epidemic in Alberta each year from early winter (Nov/Dec) to early spring (Apr/May). Rotavirus infections may also be nosocomially transmitted between hospitalized children. Adenovirus 40/41 and other enteric viral infections occur much less frequently throughout the year.
- Multiple, sequential stool ova and parasite examinations may be necessary for patients who have recently travelled and/or immigrated (i.e., usually within the past six months) from an underdeveloped country in order to diagnose *E. histolytica*, *G. lamblia* and/or enteric helminth infections.
- Rehydration is central to the management of patients with infectious diarrhea.