

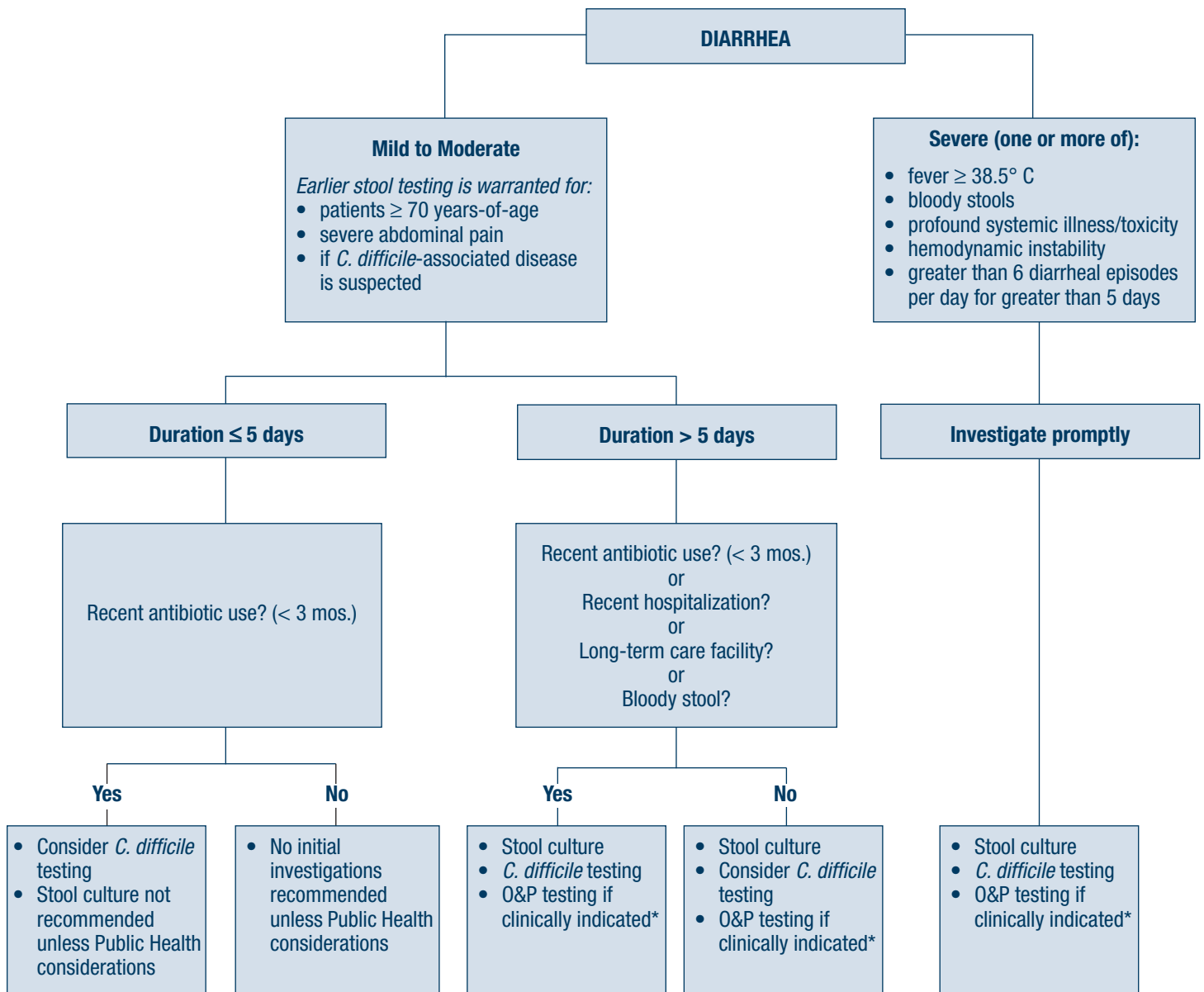
SUMMARY OF GUIDELINE

INFECTIOUS DIARRHEA – GUIDELINE FOR ORDERING STOOL SPECIMENS

Effective Date: March 16, 2009

For full Guideline please go to website: [www.BCGuidelines.ca](http://www.BCGuidelines.ca)

**Scope:** This algorithm applies to patients > 3 years-of-age presenting with suspected infectious diarrhea. It does not apply to the investigation of diarrhea in immunocompromised patients or in an outbreak situation.



**\*At-risk for parasitic infection**

- travel to or immigration from an endemic area
- prolonged diarrhea (> 2 wks)
- consumption of unsafe food or untreated water
- children attending daycare
- swimming in unsafe water
- men who have sex with men

Note: Stool for viral pathogens are not routinely tested, but should be considered when an outbreak of viral gastroenteritis is suspected. Contact local Public Health for consultation.

**INFECTIOUS DIARRHEA – COMMON PATHOGENS**  
[www.BCGuidelines.ca](http://www.BCGuidelines.ca)

VIRAL	<p>Norovirus Rotavirus Adenovirus Astrovirus</p>	<ul style="list-style-type: none"> <li>Norovirus and rotavirus most commonly recognized GI viruses; associated with community &amp; hospital-related outbreaks.</li> <li>Usually self-limiting, but may cause debilitating illness in very young, elderly and hospitalized patients.</li> <li>In children: rotavirus, adenovirus, astrovirus can be associated with substantial morbidity.</li> </ul>
BACTERIAL	<i>Campylobacter</i> *†	<ul style="list-style-type: none"> <li>Tend to be food/water-borne &amp; self-limited.</li> <li><i>Campylobacter jejuni/coli</i> commonly associated with bloody diarrhea.</li> </ul>
	<i>Salmonella</i> *†	<ul style="list-style-type: none"> <li>Contaminated and/or undercooked food or exposure to certain animals (e.g. turtles, lizards, chickens).</li> <li><i>Salmonella</i> ser. Typhi and <i>Salmonella</i> ser. Paratyphi are found in returning travellers most often presenting with systemic illness, with or without diarrhea. Blood cultures are recommended in the work-up or if other invasive or disseminated infections are suspected.</li> </ul>
	<i>Shigella</i> *†	<ul style="list-style-type: none"> <li>Primarily a human pathogen and is highly infectious.</li> <li>Risk factors: daycare, returning travellers, men who have sex with men.</li> <li>Commonly associated with bloody diarrhea.</li> </ul>
	Enterotoxigenic <i>E. coli</i> (ETEC)	<ul style="list-style-type: none"> <li>Significant pathogen causing self-limited, watery diarrhea.</li> <li>Currently, no routine laboratory tests are available to identify ETEC in BC.</li> </ul>
	Enterohaemorrhagic <i>E. coli</i> *† (EHEC)	<ul style="list-style-type: none"> <li>Commonly associated with bloody diarrhea; may cause haemolytic uremic syndrome in children, thrombocytopenic purpura in adults (rare).</li> <li>Bloody stools are routinely tested for <i>E. coli</i> O157:H7, with further testing for EHEC available at reference laboratories. Indicate a history of bleeding diarrhea on the laboratory requisition.</li> </ul>
	<i>Yersinia</i> *†	<ul style="list-style-type: none"> <li>Sometimes isolated from patients with diarrhea, but not all species are pathogenic.</li> </ul>
	<i>Clostridium difficile</i> associated disease (CDAD)	<ul style="list-style-type: none"> <li>Recognized cause of diarrhea (often bloody) in hospital and long-term care settings &amp; classically associated with exposure to antimicrobial agents.</li> <li>Emergence of highly virulent strains of <i>C. difficile</i> in the community is of particular concern with disease reported in patients with no known, or with remote risk factors.</li> <li>Recurrence of CDAD symptoms occurs in a significant number of patients.</li> </ul>
	<i>Vibrio</i> *†	<ul style="list-style-type: none"> <li><i>Vibrio parahaemolyticus</i> is associated with consumption of undercooked or raw shellfish; usually in summer season &amp; symptoms self-limited.</li> <li><i>Vibrio cholera</i> is rare in BC; requires specialized testing.</li> </ul>
PARASITIC	<i>Giardia lamblia/intestinalis</i> †	<ul style="list-style-type: none"> <li>Most common cause of parasitic diarrhea in BC.</li> <li>Returning travellers or from patients exposed to untreated water sources in BC.</li> </ul>
	<i>Entamoeba histolytica</i> †	<ul style="list-style-type: none"> <li>Can cause severe and bloody diarrhea.</li> <li>Routine ova and parasite investigation cannot differentiate between pathogenic <i>Entamoeba histolytica</i> and non-pathogenic <i>Entamoeba dispar</i>. Definitive identification requires specialized testing.</li> </ul>
	<i>Cryptosporidium</i> spp.†	<ul style="list-style-type: none"> <li>Hardy parasite present in certain treated and untreated water supplies. Diarrhea is self-limited in most patients, but can be severe and prolonged in the immunocompromised, the young, and the elderly.</li> </ul>
	<i>Cyclospora</i> †	<ul style="list-style-type: none"> <li>Returning travellers, and exposure to contaminated, usually imported, food sources (e.g. raspberries, basil).</li> </ul>
	<i>Dientamoeba fragilis</i>	<ul style="list-style-type: none"> <li>Commonly identified in children which may be associated with intermittent diarrhea, abdominal pain, and bloating.</li> </ul>
	<i>Blastocystis hominis</i>	<ul style="list-style-type: none"> <li>Commonly recovered parasite whose role as a pathogen is controversial.</li> </ul>

\* Pathogens routinely tested in bacterial stool cultures in BC. Consult your local laboratory.

† Reportable. For complete list of reportable pathogens in BC, consult Reportable Communicable Disease List at [www.bccdc.org](http://www.bccdc.org)