

Features of viral, bacterial, protozoal parasite and toxin-mediated diarrhoea

	Viral	Bacterial	Protozoal parasite	Toxin-mediated [NB1]
Clinical features	prominent upper gastrointestinal symptoms such as vomiting and nausea	fever, tenesmus, severe abdominal cramps, mucus in stool, bloody stool	abdominal distension, flatulence, nausea and anorexia often less severe than other causes; some causes (eg amoebiasis) can be severe at onset and difficult to distinguish from bacterial diarrhoea	vomiting, nausea and abdominal pain; diarrhoea, if present, occurs later in the course of illness
Symptom onset and duration	typically acute onset and resolves within 24 to 48 hours	typically acute onset with typical duration of 4 to 7 days	typically gradual onset (over several weeks) but can be acute	short incubation period (typically several hours only) closely clustered cases; infections arise from a single point source
Risk factors	history of contact with a person who has acute infectious diarrhoea (person-to-person transmission) may be part of an outbreak with secondary cases	recent travel immune compromise recent antibiotic use or hospital admission – test for <i>Clostridioides difficile</i> (formerly known as <i>Clostridium difficile</i>)	recent travel immune compromise household contacts for giardiasis, close contact with animals	close contacts
Examples	rotavirus norovirus adenovirus astrovirus	<i>Campylobacter</i> species <i>Clostridioides difficile</i> enterohaemorrhagic <i>Escherichia coli</i> nontyphoidal <i>Salmonella</i> species <i>Shigella</i> species <i>Vibrio cholerae</i> noncholera <i>Vibrio</i> species <i>Yersinia enterocolitica</i>	<i>Blastocystis</i> species <i>Cryptosporidium</i> species <i>Cylospora cayetanensis</i> <i>Cystoisospora belli</i> <i>Dientamoeba fragilis</i> <i>Entamoeba histolytica</i> <i>Giardia duodenalis</i> microsporidia	preformed toxins produced by <i>Staphylococcus aureus</i> and <i>Bacillus cereus</i>

NB1: Several preformed bacterial toxins cause acute gastroenteritis, commonly referred to as food poisoning. Rarely, toxin-mediated gastroenteritis may be caused by nonbacterial toxins (eg ciguatoxins, tetrodotoxins).