

## GASTRO-INTESTINAL TRACT INFECTIONS

### Infectious Diarrhoea

Infectious diarrhoea remains a significant cause of morbidity across all age groups, with implications for clinical management, infection control and public health.

#### Organisms

**Most causes infective diarrhoea are likely viral infections and are particularly common in young adults.** This includes norovirus, rotavirus, adenovirus, astrovirus and others.

#### Bacterial causes include:

- *Salmonella sp*
- *Campylobacter sp*
- *Shigella sp*
- *E. coli* - includes *E.coli* 0157 (STEC) and other diarrhoeagenic strains of *E.coli*
- *Clostridioides difficile* - if recent antibiotic therapy or therapy with Proton Pump Inhibitors
- *Clostridium perfringens*
- *Staphylococcus aureus*
- *Bacillus cereus*
- *Yersinia enterocolitica*

#### Parasitic causes include:

- Cryptosporidiosis
- Amoebiasis
- Giardia
- *Cyclospora* or *Cystoisospora*

#### Investigations:

Arrange for stool culture and sensitivity testing if indicated.

This is *not* routinely needed for children and adults presenting with acute diarrhoea, but should be considered, depending on clinical judgement, if:

- The person is systemically unwell or immunocompromised.
- There is acute painful diarrhoea or blood, mucus and/or pus in the stool (suggesting possible dysentery, such as caused by Shiga toxin-producing [Escherichia coli](#) [STEC] infection 0157, particularly in children).
- The person has had recent antibiotic or proton pump inhibitor treatment, or recent hospital admission (to exclude *Clostridium difficile* infection). See the CKS topic on [Diarrhoea - antibiotic associated](#) for more information.
- Diarrhoea has not resolved by day 7.
- There is suspected [food poisoning](#).
- The person has recently travelled abroad to anywhere other than western Europe, North America, Australia, or New Zealand.
- Diarrhoea is recurrent or prolonged (lasts over 14 days).
- There is diarrhoea in a person at risk of transmission of infection, such as:
  - A food handler (work involves preparing or serving unwrapped ready to eat food and drink).
  - Clinical, social care, or nursery staff who work with young children, the elderly, or any other particularly vulnerable people.
  - Any person who is unable to perform adequate personal hygiene due to lack of capacity or ability to comply.
  - All children aged 5 years old or under (up to the sixth birthday) who attend school, pre-school, nursery, or other similar childcare or childminding groups (due to the increased risk of *E. coli* infection 0157).
- There is uncertainty about the diagnosis, to help exclude alternative causes for symptoms.

If a stool sample is being sent, ensure clinical details of exposure history and travel are included so samples are processed appropriately in the lab.

Also indicate if the patient has been on **antibiotics** within 4 weeks of onset so that *C. difficile* is tested for.

If parasitic infection is suspected, send an additional three specimens (5 mL each) for ova, cysts, and parasites 2–3 days apart.

NHS stool sample collection patient information leaflet [here](#)

**Management:**

- Fluid replacement is essential
  - Further advice for children can be found [here](#).
- Advise on methods to prevent transmission of infection
  - Advise that children should not attend school or other childcare/social settings until at least 48 hours after the last episode of diarrhoea or vomiting and not attend work or other institutional/social settings for adults
  - if [cryptosporidiosis](#) or [giardiasis](#) is suspected or confirmed, children should not go swimming for 2 weeks after the last episode of diarrhoea.
  - for some gastrointestinal infections, longer periods of exclusion are needed, and 'microbiological clearance' with negative stool testing may be required before return to specific settings
- **Most bacterial infections are self-limiting.**

**Antibiotics are NOT required routinely.** Antibiotics may only reduce the duration by 1-2 days but can select for resistance and are contraindicated in patients with *E.coli* 0157 where they enhance toxin release leading to haemolytic uraemic syndrome.

They should only be considered if the patient has persistent severe diarrhoea or if the patient is elderly or immunocompromised and the case should be discussed with a medical microbiologist as infective agent and antibiotic sensitivity cannot be assumed.

- Some medicines may need to be stopped during periods of acute illness that can cause dehydration:
  - [Medicines and Dehydration – Sick day Rules](#)
  - [Medicines and your kidneys PATIENT INFORMATION LEAFLET](#)
- **Avoid anti-motility agents acutely, especially for bloody diarrhoea, until an infectious cause has been excluded.**

Please notify suspected cases of food poisoning via online platform ([Report a notifiable disease - GOV.UK](#)) or via telephone to UKHSA HPT on 0344 2254 524.

Accessibility checked.