

# Diarrhoea and vomiting (gastroenteritis)

## Description

Gastroenteritis (or 'gastro') is a general term for an illness of the digestive system. Typical symptoms include abdominal cramps, diarrhoea and vomiting. In many cases, it does not need treatment, and symptoms disappear in a few days. Gastroenteritis can cause dehydration because of the large amount of fluid lost through vomiting and diarrhoea. A person suffering from severe gastroenteritis may need fluids intravenously.

Infectious causes of gastroenteritis include:

- viruses such as rotavirus, adenoviruses and norovirus
- bacteria such as *Campylobacter*, *Salmonella* and *Shigella*
- bacterial toxins such as staphylococcal toxins
- parasites such as *Giardia* and *Cryptosporidium*.

Non-infectious causes of gastroenteritis include:

- medication such as antibiotics
- chemical exposure such as zinc poisoning
- introducing solid foods to a young child
- anxiety or emotional stress.

The exact cause of infectious diarrhoea can only be diagnosed by laboratory tests of faecal specimens. In mild, uncomplicated cases of diarrhoea, doctors do not routinely conduct faecal testing.

Children with diarrhoea who also vomit or refuse extra fluids should see a doctor. In severe cases, hospitalisation may be needed. The parent and doctor will need to know the details of the child's illness while the child was at the education and care service.

## How does it spread?

Gastrointestinal diseases spread when the germ enters the body by the mouth. This can happen when:

- people eat contaminated food or drink contaminated water
- infected people do not wash their hands effectively after using the toilet—contaminated hands can then contaminate food that may be eaten by others, or surfaces that other people may touch before touching their mouth
- a person changes the nappy of an infected infant and does not wash their hands effectively.

## Incubation period

Viral and bacterial gastroenteritis usually take 1–3 days for symptoms to appear. Symptoms of parasitic gastroenteritis can take 5–15 days to appear.

## Infectious period

People are infectious for as long as the germs are present in their faeces. The germs causing gastroenteritis can be in faeces even if the person does not have any symptoms, or after the symptoms have stopped.

## Exclusion period

Children, educators and other staff with infectious diarrhoea should be excluded until the diarrhoea has stopped for at least 24 hours.

## Responsibilities of educators and other staff

- Advise the parent to keep the child home until they are feeling well and they have not had any symptoms for at least 24 hours.
- Make sure staff and children always practise effective hand hygiene.
- Educators and other staff who handle food must not return to work until they have been symptom free for 48 hours.
- Ensure that appropriate cleaning practices are being followed in the education and care service.
- Contact your local public health unit if two or more people are ill. Public health workers may be able to identify how the germ has spread through the education and care service, and help prevent further infection. They may also advise if any particular cleaning or disinfecting is required.

## Responsibilities of parents

- Ensure that babies are vaccinated against rotavirus.
- Keep the child at home until they are feeling well and have not had any symptoms for at least 24 hours.
- Encourage effective hand hygiene at home.

## Controlling the spread of infection

- Ensure that adults or children who are ill are excluded for the appropriate period.
- Ensure that staff and children always practise appropriate hand hygiene.
- Ensure that appropriate cleaning practices are followed.
- Ensure that staff who have diarrhoea do not prepare food for others.
- Keep cold food cold (below 5 °C) and hot food hot (above 60°C) to discourage the growth of bacteria.

## Treatment

The main risk of gastroenteritis is dehydration, especially in children—a child with gastroenteritis may become very ill, and may need to go to hospital. People with diarrhoea need extra fluid to replace what they lose through vomiting and diarrhoea. However, many fluids have too much sugar and the wrong amount of salt—giving an ill child the wrong kind of fluid can cause more diarrhoea and dehydration.

## Safe drinks

The best fluids to give contain a mixture of special salts (electrolytes) and sugars. You can buy oral rehydration solution from the chemist. Mix the sachet of powder with water (not any other kind of fluid) according to the manufacturer's instructions.

If oral rehydration solution is not available, or your child will not take it, you can dilute other fluids with plenty of water, as shown in Table 5.1.

Table 5.1 Quick-check dilution table

Kind of drink	How much drink	How much water
Cordial (undiluted)	10 mL	160 mL
Fruit juice (undiluted)	20 mL	80 mL
Flat soft drink	20 mL	80 mL
Glucose (e.g. Glucodin)	2 level teaspoons	240 mL
Sugar	2 level teaspoons	240 mL

Source: Women's and Children's Health Network 2001, *Parenting and child health—gastroenteritis*, Government of South Australia, Adelaide, viewed 17 May 2011, [www.cyh.com/HealthTopics/HealthTopicDetails.aspx?p=114&np=303&id=1845#33](http://www.cyh.com/HealthTopics/HealthTopicDetails.aspx?p=114&np=303&id=1845#33).

Do not give undiluted fruit juice, fizzy drinks, low-calorie soft drinks, sports drinks, energy drinks or full-strength cordial to children with diarrhoea—this can increase diarrhoea and dehydration.

### Breastfed children

Breastfeeding mothers should continue to breastfeed and offer the breast more often. Offer water (boiled if the infant is less than 6 months old) or oral rehydration solution between feeds.

### Bottle-fed or formula-fed infants

It is not necessary or recommended to stop feeding your child formula if they have diarrhoea or vomiting. Continue normal-strength formula or milk if the child is hungry, and offer oral rehydration solution or safe drinks as recommended above. If you do decide to withhold formula, you must give the child other safe drinks.

### Reintroducing food

Reintroduce food within 24 hours of the onset of symptoms, even if the diarrhoea has not settled. Suitable foods to start off with include bread, plain biscuits, potatoes, rice, noodles, vegetables, plain meats, fish and eggs. Gradually reintroduce other foods, such as dairy foods, and sweet foods, such as jelly, honey and jam.