

Diarrhoea in Young Children

Diarrhoea is an increase in the frequency, runniness or volume of the faeces. Acute diarrhoea may be a symptom of infection of the digestive system (gastroenteritis) which is usually caused by a virus, but sometimes is caused by bacteria or parasites. It may also occur in association with other communicable diseases such as measles and malaria.

The exact cause of diarrhoea can only be diagnosed by laboratory tests of faecal specimens. Sometimes several specimens must be tested.

Signs and Symptoms:

Infections of the gut cause diarrhoea and sometimes vomiting and fever. Other symptoms typically include stomach cramps and headache. Vomiting usually settles quickly but diarrhoea may last for a week or more. When the cause is bacterial, the diarrhoea may contain blood and mucous.

Illness due to viruses and bacteria usually develops in 1 – 3 days after exposure to the organism. Diarrhoea due to parasites usually develops 5 – 15 days after exposure to the organism.

The danger of diarrhoea in young children is the loss of fluids from the body, which can quickly lead to dehydration. This can be life-threatening. The child must be watched closely because he/she can get worse very quickly.

Duration of the illness depends on what organism is the cause and what treatment is used. The child is infectious for as long as the organism is in their faeces, whether or not they are ill.

Treatment:

In many cases the condition is self-limiting and resolves in a few days. A child with diarrhoea who is drinking well and who is alert and responsive can usually be looked after at home. The most important treatment for diarrhoea in young children is to provide fluids, which will not cure the diarrhoea but will prevent dehydration.

You should take your child to see a doctor if:

- he/she looks unwell
- vomiting is frequent and he/she can't keep anything down
- the vomit is brown or green
- there is lots of watery diarrhoea
- the diarrhoea is increasing
- you can see blood in the diarrhoea
- there is severe stomach pain
- he/she develops a high fever
- he/she is under six months of age
- he/she is difficult to wake
- he/she has diarrhoea and vomiting and refuses extra fluids.

Fluids and feeding

The most appropriate fluids contain a mixture of special salts (electrolytes) and sugars. Oral rehydration solution can be purchased from pharmacies and should be mixed only with water and according to manufacturer's instructions.

Children who refuse oral rehydration solution should be encouraged to drink water. They may also be given diluted drinks such as:

- diluted cordial 10ml + 150ml water
- diluted soft drink 50ml + 150ml water
- diluted fruit juices 50ml + 150ml water

The aim is to give as much fluid as normal as well as replacing the fluid that is being lost. As a guideline:

- children aged less than two years should be given 50ml every 30 minutes while awake
- older children can be given 50–100ml every 30 minutes

The fluids should be given slowly, e.g. one teaspoonful every 1–2 minutes for a child aged less than two years. If the child vomits, wait 10 minutes, then give the fluid more slowly e.g. one teaspoonful every 2–3 minutes.

Breastfeeding should be continued whenever possible. Offer the breast more often and give babies boiled water between feeds.

If bottle feeding, offer oral electrolyte solutions or other suitable fluids first (see above). If the child is hungry, offer normal strength formula as well and allow the child to eat food. Weight loss may occur if feeding is not continued.

Food should be re-introduced within 24 hours, even if the diarrhoea has not settled. Suitable foods include bread, plain biscuits, potatoes, rice, noodles, vegetables, plain meats, fish and eggs. Other foods such as dairy foods and sweet foods such as jelly, honey and jam can be gradually re-introduced.

Do not give your child:

- undiluted fruit juice and cordial, or fizzy drinks, 'sports drinks' or 'energy drinks' may make the diarrhoea or dehydration worse
- drugs to stop the vomiting or diarrhoea are not recommended because they may slow down the recovery of the bowel and cause serious side effects
- antibiotics may prolong the infection and are rarely needed except for certain bacterial or parasitic infections.

Transmission:

Viruses, bacteria and parasites in the faeces of an infected child may be passed on directly by germs on the hands. They may also be spread indirectly via objects, surfaces or contaminated foods. Children are more likely than adults to be affected and may suffer one or more episodes per year.

Prevention:

There are no specific treatments/vaccinations to prevent infection with the organisms that commonly cause diarrhoea in Queensland except rotavirus. The most important way to prevent illness is to ensure that food is properly stored, prepared and cooked and to maintain good hygiene standards.

With any type of diarrhoea it is crucial that:

- parents and carers wash their hands thoroughly after changing infants' nappies, after supervising children at the toilet, after going to the toilet themselves, and before preparing or handling food
- children should also wash their hands after going to the toilet and before eating
- babies' bottles should be cleaned and sterilised
- meat products should be cooked well and raw meat should not be given to young children
- raw meat and chicken should be stored in a covered container at the bottom of the fridge and meat juices should not contaminate other food.

Health outcome:

Viral diarrhoea is very infectious and can rapidly spread to other young children. Therefore, a child with diarrhoea

should be excluded from any child care facility until there has not been a loose bowel motion for 24 hours and the child is well.

Any parents or carers experiencing vomiting or diarrhoea and who are likely to handle food in child care or health care facility should also be excluded until they have not had any vomiting or diarrhoea for 48 hours.

If there are more than two cases with loose bowel motions in the same child care facility, the nearest Public Health Unit should be notified.

Other resources:

Related content

- [Gastroenteritis fact sheet](http://conditions.health.qld.gov.au/HealthCondition/condition/14/33/60/Gastroenteritis) (<http://conditions.health.qld.gov.au/HealthCondition/condition/14/33/60/Gastroenteritis>)
- [Rotavirus fact sheet](http://conditions.health.qld.gov.au/HealthCondition/condition/14/217/121/Rotavirus) (<http://conditions.health.qld.gov.au/HealthCondition/condition/14/217/121/Rotavirus>)

Footnotes

Heymann, D.L (2015). *Control of Communicable Diseases Manual*, 20th edition. Washington, DC: American Public Health Association.

National Health and Medical Research Council (2013). *Staying healthy: Preventing infectious diseases in child care, 5th edition*. Canberra: Australian Government.

Help and assistance:

If you are in an emergency situation, call 000

Contact

- Get qualified health advice 24/7 for the cost of a local call. 13 HEALTH (13 43 25 84)

Health Insite:

[Diarrhoea and vomiting in children](https://www.healthdirect.gov.au/diarrhoea-and-vomiting-in-children) (<https://www.healthdirect.gov.au/diarrhoea-and-vomiting-in-children>)