

Gastroenteritis in Children

What is gastroenteritis?

Gastroenteritis, also called 'gastro', is an infection of the gut that causes diarrhoea. Its symptoms often include vomiting, fever and abdominal pain. It is a common illness that is infectious and easily spread. It tends to be more serious in babies and small children, as they are more likely to become dehydrated.



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What causes gastroenteritis?

It is usually caused by viruses, the most common being rotavirus. Sometimes other types of germs, including bacteria and parasites, may also cause gastroenteritis. Rotavirus is less common in older children and adults, and other viruses such as norovirus may be responsible.

How is it spread?

It is most commonly spread by contact with another person with the illness. Some infections can also be spread from contaminated food and water.

Gastroenteritis is highly infectious, so your child should not attend school, day care or kindergarten while they are sick or while they still have diarrhoea.

Good hand washing with soap and water before preparing and eating food, after going to the toilet, after changing nappies and before and after handling any ill person is important in helping to stop the spread of infection.

What are the signs and symptoms?

Vomiting often occurs at the start of the illness and usually lasts for 1 to 3 days. Diarrhoea may last for up to 10 days. Your child may also have a fever and abdominal

You should see a doctor if your sick child is:

- Very young or small (less than 6 months old or weighs less than 8 kg)
- Born preterm or has other chronic conditions
- Passing any blood in the stool (poo)
- Having dark green (bile) vomits
- Having severe abdominal (tummy) pain
- Less than 3 years old and has a fever above 38.5°C
- Having less than four wet nappies a day
- Showing signs of dehydration (very thirsty, cold hands and feet, dry lips and tongue, sunken eyes, sunken fontanelle, sleepy or drowsy)
- Unable to tolerate any oral intake because of severe vomiting

(tummy) pains with the illness. Vomiting may start before the diarrhoea in the first 24 to 48 hours of gastroenteritis. Children who are vomiting but do not have diarrhoea after the first 24 to 48 hours should be assessed by a doctor to see if there is another cause of the vomiting, as should those who are unwell or dehydrated and are unable to tolerate oral intake of fluids.

How do I treat it?

The main treatment is to give enough fluids to prevent your child becoming dehydrated. Babies and children younger than 3 years are most at risk and may need to be checked by a doctor. Give them small amounts of fluids frequently, as they can usually tolerate this better than a large volume all at once. You should keep giving fluids even if they are vomiting. Many common medicines to reduce vomiting or diarrhoea are often not helpful and may instead be harmful for children. Antibiotic treatment is also unnecessary and unhelpful in most cases because the infection is usually caused by viruses, which do not respond to antibiotic treatment.

What fluids should I use?

The best fluids to use are oral rehydration solutions (e.g., Hydralyte, Gastrolyte, Repalyte), which are available from your local chemist. They contain glucose and different salts that tend to be lost from the body during vomiting or diarrhoea. Make up the solution **exactly** as it says on the packet. Breastfed babies should continue to be breastfed but may need to be fed more frequently. An oral rehydration solution or water (boiled first and then cooled if the baby is less than 6 months old) may be offered to babies in addition to breastfeeds. Bottle-fed babies may need to have both an oral rehydration solution and their formula at normal strength. Children may need more than their normal amount of fluid intake because of the fluid they lose from vomiting or diarrhoea.

What can I do if they refuse to take the oral rehydration solution?

Chilling the fluid or making it into ice blocks may help your child to take it. If your child still refuses to drink it, water or other fluids, such as diluted juice or soft drinks, may be given. These fluids are not as good as oral rehydration solutions because they do not contain all the extra salts in the correct amounts, and they have different types of sugars that are not as well absorbed by the gut. **Do not give undiluted juice, sodas, sports drinks or other soft drinks**, as they have too much sugar and may make the diarrhoea worse. Chicken broth is also not recommended because it has too much salt and no sugar.

How much fluid do they need?

This depends on the age and size of the child, as well as their degree of dehydration.

The minimum daily fluid requirements for children are:

Child's weight (age)	Fluid intake
3–10 kg (1–12 months)	100 mL/kg
10–20 kg (1–5 years)	1000 mL + 50 mL/kg for each 1 kg over 10 kg
>20 kg	1500 mL + 20 mL/kg for each 1 kg over 20 kg

You may also need to give an extra 2 mL/kg for every vomit and 10 mL/kg for each episode of diarrhoea.

Giving small volumes of fluid often is better tolerated than a larger volume at once, so encourage frequent 'sips' or give small volumes of fluid every 5 to 15 minutes, rather than drinking the whole required volume every hour. Using a baby bottle or drink bottle can help you keep track of the amount that has been given.

What about food?

Doctors no longer recommend restricting food intake during gastroenteritis. Your child may not feel like eating at first, which is okay as long as they are drinking good amounts of fluids; however, they should be allowed to eat once they feel hungry. The main foods to avoid are those with a lot of sugar (e.g., undiluted juice, cordials, soft drinks, jelly, jam, sweets, chocolate), as they may make the diarrhoea worse. Babies bottle-fed with infant formula should be given their formula at normal strength, not diluted down.

Lactose intolerance is uncommon in young Australian children but may occur temporarily after an episode of gastroenteritis. This may be suspected if their diarrhoea worsens and is watery, frothy and explosive after drinking milk or formula. If this happens, a lactose-free or soy formula may be used for a few weeks until the child's gut recovers.

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