

# Rotavirus

Rotaviruses are a group of viruses that can cause severe viral gastroenteritis in infants and young children. Before vaccines became available, rotavirus caused about half of all hospitalised cases of gastroenteritis in children less than 5 years of age. It is estimated that in Australia, about 4% of children were admitted to hospital with rotavirus gastroenteritis in their first 5 years of life.

The virus is highly contagious and can cause outbreaks among children in childcare. By 5 years of age, almost every child will have been infected with rotavirus.

In temperate climates, rotavirus diarrhoea occurs in seasonal peaks during cooler months. In tropical climates, cases occur throughout the year.

## Signs and Symptoms:

The main symptoms are vomiting, fever and watery diarrhoea. Symptoms can be mild, but some children, especially those under 2 years, can require hospital treatment for dehydration. Onset is often sudden. The illness mainly affects infants and young children under 3 years of age.

The time from contact with the virus to the development of symptoms is usually between 24 and 72 hours. The diarrhoea usually lasts from 2 to 5 days.

## Treatment:

A child with vomiting and diarrhoea should be taken to the doctor who will advise if treatment is needed. Most rotavirus infections resolve without treatment. It is very important for the child to drink plenty of fluids to avoid dehydration. Rehydration with oral glucose/electrolyte solution is particularly effective. If children refuse this solution, or it is unavailable, diluted fruit juice or soft drinks may be given (1 part juice/soft drink to 3 parts water). Babies should continue to be offered their normal milk feeds plus extra fluids in between feeds.

## Control

To prevent the spread of rotavirus, ensure good overall hygiene. Hands should be washed thoroughly with warm soapy water for at least 15 seconds and dried thoroughly on a disposable or clean towel after going to the toilet, before preparing or handling food and after changing soiled linen. If changing an infected infant's nappy:

- never change nappies on tables or counters where food is prepared or eaten
- clean change areas with warm soapy water and disinfectant after every nappy change
- wash hands thoroughly after each nappy change.

Because vomit and diarrhoea can be very infectious, it is most important that any spills are cleaned up quickly and appropriately. Ensure you also clean books, toys, equipment, furnishings, floors and toilets regularly (including toilet door handles).

People with diarrhoea should:

- not prepare or handle food that will be eaten by others
- not attend childcare/school/work until the diarrhoea has stopped
- not swim, wade or paddle in a public pool.

Health professionals and people who work in the food industry should not return to work until 48 hours after diarrhoea has stopped.

## Transmission:

Rotaviruses are highly infectious and can be passed from person to person very easily. The virus is in the faeces of a person while they have diarrhoea and for some days after the diarrhoea stops.

Rotavirus infections are spread when:

- infected people do not wash and dry their hands adequately after going to the toilet.
- contaminated hands spread the virus to other people and surfaces that may be touched by others.
- hands can become contaminated while changing the nappy of an infected infant.

### Prevention:

Vaccination will reduce the risk of developing severe rotavirus gastroenteritis by 85-100% and any rotavirus gastroenteritis by around 70%. It is important to prevent the severe diarrhoea and vomiting caused by rotavirus in young infants.

Immunisation against rotavirus is recommended for infants as part of the National Immunisation Program Schedule, with 2 oral (swallowed) doses given at 6 weeks and 4 months of age.

There are strict upper age limits for the administration of this vaccine due to a theoretical increased risk of intussusception (a form of bowel obstruction) if administered to older children. The upper age limit for receipt of the 1st dose of Rotarix is immediately prior to turning 15 weeks old, and the upper age limit for receipt of the 2nd dose is immediately prior to turning 25 weeks old while maintaining a minimum interval of 4 weeks between doses. No further 'catch up' doses can be given after the child reaches 25 weeks of age. It is important to discuss this with your doctor or vaccine service provider. To ensure full protection, it is important that your child receives both recommended doses of the vaccine at the recommended times.

Like all medications, vaccines may have side effects. Most side effects are minor, last a short time and do not lead to any long-term problems. Serious side effects are extremely rare. Contact your immunisation provider if your child has a reaction following vaccination which you consider serious or unexpected.

Recent investigations have suggested that rotavirus vaccination may cause a slightly increased risk of a rare bowel condition called intussusception. The Australian Technical Advisory Group on Immunisation (ATAGI) and Therapeutic Goods Administration (TGA) have reviewed recent evidence and found that the benefits of rotavirus vaccination outweigh the risks associated with it. More information can be found on the Immunise Australia website. If your child has previously had intussusception, he/she should not receive rotavirus vaccine.

For the most up to date recommendations regarding vaccination for your child refer to the [Queensland Health Immunisation Program](#)

(<https://www.health.qld.gov.au/clinical-practice/guidelines-procedures/diseases-infection/immunisation/schedule#schedule>)

and discuss with your immunisation provider.

### Help and assistance:

For more information:

- see your local doctor
- call 13 HEALTH (13 43 25 84) to get qualified health advice 24/7 for the cost of a local call.
- contact the nearest [public health unit](#)  
(<https://www.health.qld.gov.au/system-governance/contact-us/contact/public-health-units>)

### Related Content

- [Gastroenteritis fact sheet](#)  
(<http://conditions.health.qld.gov.au/HealthCondition/condition/14/217/60/gastroenteritis>)
- [Having a vaccination fact sheet](#)

(<http://conditions.health.qld.gov.au/HealthCondition/condition/14/119/70/having-a-vaccination-what-to-expect>)

### Other resources

- [Immunise Australia](http://immunise.health.gov.au/) (<http://immunise.health.gov.au/>) (call 1800 671 811)
- National Centre for Immunisation Research and Surveillance. Rotavirus vaccines for [Australian children: information for immunisation providers](http://www.ncirs.edu.au/provider-resources/ncirs-fact-sheets/) (<http://www.ncirs.edu.au/provider-resources/ncirs-fact-sheets/>)
- [National Health and Medical Research Council. 2013.](http://www.ncirs.edu.au/provider-resources/ncirs-fact-sheets/) (<http://www.ncirs.edu.au/provider-resources/ncirs-fact-sheets/>) [The Australian Immunisation Handbook](http://www.health.gov.au/internet/immunise/publishing.nsf/Content/Handbook10-home) (<http://www.health.gov.au/internet/immunise/publishing.nsf/Content/Handbook10-home>) (10th Ed).
- Australian Government, Department of Health and Ageing. [Staying Healthy: Preventing infectious diseases in early childhood education and care services \(5th Edition\) 2013](https://www.nhmrc.gov.au/guidelines-publications/ch55) (<https://www.nhmrc.gov.au/guidelines-publications/ch55>).