



# Rotavirus

## What is rotavirus?

Rotavirus is an infection of the digestive system ([gastroenteritis](#)) that causes severe diarrhoea and vomiting, particularly in infants and young children.

It is the most common cause of infectious diarrhoea in children around the world and is associated with approximately one-third to one-half of hospitalisations related to diarrhoeal illness in infants and children less than five years of age.

In temperate areas of Australia, rotavirus infections are more common in mid to late winter, while in the northern tropical and arid regions there is no seasonal pattern. Epidemics of rotavirus can occur.

## How do you get rotavirus?

Rotavirus spreads easily because the virus can live on objects for several days unless it is killed by a disinfectant (cleaning agent that kills germs).

Infection is mainly spread when infected people do not wash their hands effectively after going to the toilet and then prepare food for other people, or touch surfaces or objects that are used by other people (e.g. toys, changing tables, or doorknobs).

Infection can also be spread when a person's mucous membrane (the thin, moist lining of many parts of the body such as the nose, mouth, throat and genitals) comes into contact with infected airborne droplets.

## Who is most at risk?

Infants and children between 6 and 24 months of age are most susceptible to catching rotavirus. By 3 years of age most

children will have developed rotavirus antibodies.

Children can be infected with rotavirus several times during their lives. Children and adults with impaired immunity may experience severe or prolonged rotavirus gastroenteritis.

## Signs and symptoms

The onset of illness after exposure to an infected person is 24-72 hours and symptoms last for an average of 3 to 7 days. Symptoms include:

- vomiting
- fever
- stomach pain
- watery diarrhoea

Watery diarrhoea can lead to severe dehydration which may require treatment in hospital and can cause death in young infants.

Carers of children experiencing watery diarrhoea should watch for signs of dehydration, such as:

- thirst
- decreased urination
- lethargy
- dry mouth
- sunken eyes
- if the child reports feeling faint on standing.

## Outbreaks of rotavirus infection are more common in:

- child care centres
- family homes
- homes for the elderly.



## How do I know that I have rotavirus infection?

If you or your children experience symptoms of rotavirus infection you should see your doctor who will arrange tests to confirm diagnosis.

## Diagnosis

Your doctor will ask for a faecal (stool) sample. This will be sent to the laboratory for tests which look for the presence of rotavirus.

## Treatment of rotavirus

Oral rehydration therapy is the most effective treatment for rotavirus. There is no specific antiviral treatment available and antibiotics are not effective.

## While you have, or are caring for someone with, the infection

- Take or give plenty of fluids. Oral rehydration solution is highly recommended for children with mild to moderate dehydration and is available at pharmacies. Follow the dosage instructions on the packaging.
- Ensure mildly unwell children drink more often. Carbonated (fizzy) drinks or undiluted juice should be avoided.
- Do not take or give medicines to prevent vomiting or diarrhoea (especially in children), except where specifically advised by a doctor.
- Continue to breastfeed breastfed babies throughout their illness.
- Restart children who usually take formula or solids, on their normal diet (including full strength lactose containing milk) after rehydration with oral rehydration solution.

## How can rotavirus infection be prevented?

- Wash hands regularly with soap and water for at least 15 seconds before preparing or eating food, after using the toilet or changing nappies, after blowing your nose with a tissue and after any contamination of the hands with body fluids such as blood or vomit.
- Do not expose infants and young children to people with gastroenteritis.
- Ensure good hygiene and house cleaning practices are adopted to remove the virus from surfaces, objects, door and toilet handles etc.
- Ensure babies and small children who are not toilet trained wear tight fitting waterproof pants or swimming nappies in swimming pools and are changed regularly in the change room. When faecal accidents occur, inform swimming pool staff so they can ensure the pool is properly disinfected.
- Rotavirus is a vaccine preventable disease. Vaccination is recommended for children from 2 months (6 – 8 weeks). Vaccination is available through the childhood immunisation program.

## Recommendations for child care centres

Child care centres should undertake regular, effective cleaning with detergent and water, followed by rinsing and drying to remove the bulk of germs from environmental surfaces (refer to your school/day care policy or [Staying Healthy in Child Care \(external site\)](#) for recommended cleaning guidance.



## Recommendations for food handlers

If working as a food handler in a food industry contact your local [public health staff](#) for advice if you or a staff member has been infected with rotavirus.

**People with rotavirus infection must be excluded from childcare, preschool, school and work until there has been no vomiting or diarrhoea for at least 24 hours.**

## Notifiable disease

Rotavirus is a notifiable disease. This means doctors, hospitals and laboratories must inform the Department of Health of your diagnosis. Notification is confidential.

Department of Health staff may talk to you or your doctor to find out how the infection occurred, to identify other people at risk of infection, to let you know about immunisation and to tell you if you need to stay away from work, school or other group gatherings.

## Is there a vaccine for rotavirus?

The rotavirus vaccine (Rotarix) provides good protection against most common strains of rotavirus. It is recommended for all infants as a 2 dose course administered as oral drops (drops in the mouth). The 1<sup>st</sup> dose is given at 2 months (can be given as early as 6 weeks) followed by a 2<sup>nd</sup> dose at 4 months.

It is important for immunisation providers and parents to know that there is an upper age limit of 25 weeks, for the vaccine course to be completed. Before 2007, when the vaccine was introduced in Australia, approximately 10,000 children less than 5 years of age were hospitalised each year with rotavirus. Prior to the availability of vaccination, there was on average one death

each year attributed to rotavirus infection in Australia.

## Where to get help

- See your doctor.
- Contact your local [Public Health Unit](#).
- Visit a GP after hours.
- Ring Healthdirect Australia on 1800 022 222.

## Remember

- Vaccination protects young infants from rotavirus infection.
- Practice good hygiene, wash hands after changing nappies, going to the toilet and before preparing food or feeding bottles.
- Young infants are at greatest risk of severe dehydration see/contact your doctor for advice.
- Stay away from work, childcare or school until diarrhoea has ceased for 24 hours.

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### Acknowledgements

Public Health

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## See also

- [About immunisation](#)
- [Childhood immunisation schedule](#)
- [Vaccination safety](#)
- [Where can I get my vaccination?](#)



## Related sites

- [Staying Healthy 5th edition – Preventing infectious diseases in early childhood education and care services \(external site\)](#)
- [Guidelines for the Prevention and Management of Gastroenteritis Outbreaks in Residential Care Facilities \(external site\)](#)
- [Immunise Australia rotavirus and intussusception information \(external site\)](#)

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