

# Rotavirus infection



Rotavirus infection is a type of gastroenteritis, also known as 'gastro' caused by a virus (rotavirus).

There are several different types of rotavirus.



Rotavirus infection is a notifiable condition<sup>1</sup>

## How rotavirus is spread

Rotavirus infection is spread through contamination of hands, objects, food or water with infected faeces. The virus is taken in by the mouth. Such routes of infection are common in:

- > day care centres
- > family homes
- > homes for the elderly.

It may also be spread by mucous membrane (the thin moist lining of many parts of the body such as the nose, mouth, throat and genitals) contact with infected airborne droplets produced by coughing and sneezing.

## Signs and symptoms

Rotavirus infection is the most common cause of severe diarrhoea in infants and children worldwide.

### Symptoms include:

- > vomiting
- > fever
- > watery diarrhoea.

The onset is sudden and symptoms last for an average of 3 to 7 days. The illness may cause severe dehydration and require treatment in hospital. Mainly infants up to

3 years of age are affected, but older children and adults may also have symptomatic infection.

Children can be infected with rotavirus several times during their lives. Children and adults with impaired immunity are at increased risk of more severe infection.

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.

## Diagnosis

The infection is diagnosed by detecting rotavirus in a [faecal sample](#) using a PCR (polymerase chain reaction) test in a pathology laboratory.

## Incubation period

*(time between becoming infected and developing symptoms)*

About 24 to 72 hours (1 to 3 days)

## Infectious period

*(time during which an infected person can infect others)*

Children can spread rotavirus 2 days before and up to 8 days after develop diarrhoea.

Rotavirus is not usually detectable in the faeces after the 8th day of illness.

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## Treatment of rotavirus

Gastroenteritis is a common illness which can be particularly serious in young children. No specific antiviral treatment is available and antibiotics are not effective.

The following are general recommendations for the treatment of gastroenteritis:

- > Give plenty of fluids. Oral rehydration solution is highly recommended for children with mild to moderate dehydration. It is available at pharmacies and should be administered following the instructions on the packaging.
- > Mildly unwell children should be given their usual fluids more often. Carbonated (fizzy) drinks or undiluted juice should be avoided.
- > Medicines to prevent vomiting or diarrhoea should not be given (especially in children), except where specifically advised by a doctor.
- > Breastfed babies should continue to be breastfed throughout their illness.
- > Children on formula or solid diets should restart their normal diet (including full strength lactose containing milk) following rehydration with oral rehydration solution.
- > Children who are hungry or ask for food should be given small portions of their usual foods, but avoid foods high in sugar or fat.

## When to seek medical attention

Seek medical advice if there are any of the following symptoms:

## Adults

- > signs of dehydration, such as thirst and decreased urination, lethargy, dry mouth, feeling faint on standing
- > fever
- > severe abdominal pain
- > bloody diarrhoea.

## Children

- > signs of dehydration, such as thirst and decreased urination, lethargy, dry mouth, sunken eyes, feeling faint on standing
- > fever
- > abdominal pain
- > bloody diarrhoea
- > any symptoms in a child less than 12 months of age.

## Prevention

- > Exclude people with rotavirus infection from childcare, preschool, school and work until there has been no vomiting or diarrhoea for at least 24 hours. If working as a food handler in a food business, the exclusion period should be until there has been no diarrhoea or vomiting for 48 hours.
- > The rotavirus vaccine provides good protection against the most common types of rotavirus. Rotavirus vaccine is recommended for all infants. The first dose of rotavirus vaccine, in combination with other vaccines, is now recommended to be given at 6 weeks of age. It is important for immunisation providers and parents to remember that there are upper age limits for the doses of vaccine. For more information see the rotavirus vaccine page.

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- > Follow good hand washing and keeping areas clean procedures including objects (including toys) that may be shared.
- > Babies and small children without diarrhoea who are not toilet trained should wear tight fitting waterproof pants or swimming nappies in swimming pools and changed regularly in the change room. When faecal accidents occur, swimming pools should be properly disinfected.

## Useful links

SA Health website

[www.sahealth.sa.gov.au](http://www.sahealth.sa.gov.au)

- > Hand hygiene
- > Exclusion periods from childcare, preschool, school and work
- > Keeping areas clean
- > Collecting a faecal sample
- > When you have a notifiable disease

Women's and Children's Health Network

<https://www.cafhs.sa.gov.au/>

Rotavirus Vaccines for Australian Children

<https://ncirs.org.au/>

## You've Got What? 5th Edition

Communicable Disease Control Branch

Telephone: 1300 232 272

Email: [HealthCommunicableDiseases@sa.gov.au](mailto:HealthCommunicableDiseases@sa.gov.au)

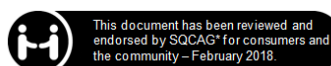
The SA Health Disclaimer for this resource is located at

[www.sahealth.sa.gov.au/youvegotwhat](http://www.sahealth.sa.gov.au/youvegotwhat)

Official

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