

# Rotavirus Infection

This is an infection of the bowel caused by a virus (rotavirus). There are several different types of rotavirus. 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 three to seven days. The illness may cause severe dehydration and require treatment in hospital. Mainly infants up to three 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.

The infection is diagnosed by testing a faecal specimen.

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 and homes for the elderly. It may also be spread by mucous membrane (lining of nose and mouth) contact with infected airborne droplets produced by coughing and sneezing.

## Incubation period

*(time between becoming infected and developing symptoms)*

About 24 – 72 hours (1 – 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 they become unwell with diarrhoea. Rotavirus is not usually detectable in the faeces after the 8th day of illness.

## Treatment

Gastroenteritis (inflammation of the stomach and intestines) is a common illness which can be particularly serious in young children. No specific antiviral treatment is available and antibiotics are not effective. Drugs to decrease diarrhoea should not be given.

Seek medical advice if any of the following symptoms occur:

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

The following are general recommendations for the treatment of gastroenteritis:

- > Give plenty of fluids. Oral rehydration solution (ORS) 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.

# Rotavirus Infection (cont.)

## Control of spread

- > Exclude from child care, preschool, school or work until there has been no diarrhoea or vomiting for at least 24 hours.
- > Follow good hand washing and keeping areas clean procedures including objects (toys) that may be shared.
- > Two oral (by mouth) rotavirus vaccines are now available in Australia. Free childhood immunisation with rotavirus vaccine started in July 2007 in South Australia. The vaccine provides good protection against the most common rotavirus serotypes. It is important for immunisation providers and parents to note there are upper age limits for the administration of the first and final doses of rotavirus vaccines.

The two oral vaccines are:

1. Rota Teq®, three doses recommended for children at two, four and six months of age.
2. Rotarix®, two doses recommended for children at two and four months of age.



**Rotavirus infection is a notifiable disease**

- > Serotype
- > Hand Hygiene
- > Keeping Areas Clean
- > Immunisation
- > Collecting a Faecal Sample

## Useful websites

- > Immunisation Fact Sheet – Rotavirus  
<http://www.health.sa.gov.au/pehs/immunisation/imm-fs-rotavirus.pdf>
- > Child and Youth Health Parenting and Child Health – Health Topic – Rotavirus gastroenteritis  
<http://www.cyh.com.au/HealthTopics/HealthTopicDetails.aspx?p=114&np=303&id=1437>