



FREQUENTLY ASKED QUESTIONS: ROTAVIRUS



1. What is rotavirus infection?

Rotavirus is the most common cause of severe diarrhoeal disease in infants and young children all over the world, with distinct winter seasonality in temperate climates and year round exposure in tropical countries.

2. What are the symptoms of rotavirus disease?

The clinical manifestation of rotavirus infection varies from asymptomatic, to mild or severe diarrhoea with occasional fatal dehydrating illness.

Acute gastroenteritis is characterised by:

- watery diarrhoea
- vomiting
- fever
- dehydration
- if not treated, death follows

3. Why is rotavirus a health problem in South Africa and the world?

- Worldwide, rotavirus infection is the most common cause of severe diarrhoea in infants and young children and is responsible for 20-50% of hospitalisations.
- All children are infected with rotavirus during their first few years of life.
- The incidence rate of rotavirus infection does not vary significantly between developed and developing countries, indicating that socioeconomic improvements in water and sanitation may have less impact in reducing morbidity and mortality associated with rotavirus disease.
- Annually, throughout the world, rotavirus infection is estimated to cause 111 million episodes of gastroenteritis requiring home care, 25 million clinic visits, 2 million hospitalisations and approximately 600 000 deaths in children under 5 years of age. Most children experience rotavirus gastroenteritis by the age of 5, 1 in 5 will visit the clinic, 1 in 65 will be hospitalised, and approximately 1 in 293 will die.
- In Sub-Saharan Africa the annual mortality rate of gastroenteritis associated with rotavirus infection alone is estimated to account for approximately 145 000 in children less than 5 yrs of age.
- Epidemiological studies in South Africa indicate that rotavirus infection occurs during the cooler and drier months of the year.

4. How is rotavirus transmitted?

Rotavirus is transmitted primarily via the faecal-oral route, or through person to person contact by merely touching contaminated hands, and contact with contaminated surfaces. Transmission of rotavirus by other modes such as the respiratory route or by ingestion of virus aerosol has been suggested.

5. Who is at risk?

Rotavirus infections can affect anyone but infants and young children are more at risk of rotavirus disease.

6. How do I know if I have or have had rotavirus disease?

Since the causes of gastroenteritis are many, the only way to confirm if this is due to rotavirus, is to conduct a laboratory test.

7. What is the treatment following rotavirus infection?

There is no specific treatment for rotavirus infection and treatment is primarily directed at symptomatic relief and the restoration of normal physiological function.

8. How is rotavirus prevented?

Rotaviruses are infectious and relatively resistant to inactivation by chemical disinfectants and antiseptics. Furthermore, control and prevention of rotavirus infection are difficult because the virus is environmentally stable and shed in high concentrations in the faeces of infected patients, and is transmitted easily in the hospital setting, day care facilities, etc, and therefore a fully effective method of prevention and control is important. However, improvement to sanitation and access to clean water is unlikely to reduce the rate of rotavirus infection.

Infection control is the primary key to prevent rotavirus infection. This includes: isolation of infected children from others; hand cleaning agent containing alcohols should be used before and after contact with infected children; and disinfecting environmental surfaces with effective agents. Rotavirus vaccines are considered to be the most cost effective public health measure to reduce mortality and morbidity associated with rotavirus disease. Thus:

- Washing hands thoroughly and frequently is the best tool to reduce the spread of rotavirus.
- Rotavirus infected individuals should be isolated so as to limit the spread of infection.
- Rotavirus vaccine can also be used.

9. Who should get the rotavirus vaccine?

The rotavirus vaccine is given to children under the age of five.

10. How and when is the rotavirus vaccine given?

There are two vaccines available. Rotarix: two doses are given orally 4 weeks apart between the ages 6 weeks and 24 weeks. RotaTeq: three doses are given orally 4 weeks apart between the ages 6 weeks and 32 weeks.

11. Should HIV positive individuals be vaccinated against rotavirus?

At the moment there is insufficient data on safety and efficacy of both RotaTeq and Rotarix for administration to immunocompromised individuals.

12. What are the side effects of rotavirus vaccine?

The most common side effects are irritability, loss of appetite, diarrhoea, vomiting, and flatulence, and abdominal pain, regurgitation of food, fever and fatigue. Intussusception is a rare occurrence.

Where to find us:

South African Vaccination and Immunisation Centre (SAVIC)
PO Box 173, University of Limpopo – Medunsa Campus
0204, PRETORIA, Gauteng Province, South Africa

Tel: + 27(12)521 3077, Fax: + 27(12)521 4284, Email: info@savic.ac.za; <http://www.savic.ac.za>