

Rotavirus infections and vaccination

Frequently asked questions and answers about rotavirus infections.

1. What are rotaviruses?

Rotaviruses are round viruses that cause disease in humans and animals. They are highly resistant to various disinfectants and can be destroyed by alcohols, phenols and various acids. They are highly contagious and spread rapidly, causing outbreaks and epidemics in kindergartens, nursing homes, among medical staff, etc.). Children aged between 6 and 24 months are most often affected.

2. How common are rotavirus infections?

Rotavirus infections are very common in Slovenia, with 1,982 cases reported in 2014 (96/100,000). Most of the reported patients were younger than 5 years. Infections occur most frequently in winter and early spring.

3. What are the symptoms of rotavirus infection?

Rotavirus infection causes diarrhoea, vomiting, cramping abdominal pain and fever, and there may be signs of a cold. In adults in particular, the infection may be without symptoms. Disease symptoms appear after one to three days after infection. The average duration of the illness is 5 to 7 days. Very young children, especially those under 3 years of age, are most susceptible and at risk. In them, fluid loss due to vomiting and diarrhoea can very quickly lead to dehydration, which can be life-threatening for the baby. The disease can occur repeatedly because there are several different types of rotavirus. Re-infections are possible, but not as serious as the first.

4. How are rotaviruses transmitted?

Rotaviruses are highly infectious and very easily transmitted. Large quantities of rotavirus are shed in the faeces of infected persons and can be transferred by hand to various objects. Children can excrete rotavirus both before and after the onset of diarrhoea. Within the family, these viruses are often passed on to other family members and close contacts. Viruses can also be transmitted through the air, e.g. by inhaling the aerosol produced when vomiting.

5. How are rotavirus infections treated?

Replacing lost fluid is very important in rotavirus infections. We recommend consuming any kind of fluid, but not highly carbonated drinks. The child should drink a little several times a day. Pharmacies also stock a range of solutions to replace lost fluid and electrolytes. No special diet is required. If the baby is breastfed, breastfeeding should be continued. It is not reasonable to treat the condition with animal charcoal or other preparations. The disease is not treated with antibiotics.

6. How are rotavirus infections prevented?

Transmission of infection is prevented by frequent and correct hand washing. Proper and hygienic disposal of used nappies is important. If the sick person vomits, the sputum should be removed as soon as possible with cloths, which should be thrown into garbage bags and tied up. The patient room should be ventilated several times a day and surfaces thoroughly cleaned with hot water and detergent.

7. Is there a vaccine against rotavirus infection?

Two vaccines are available against rotavirus infection. After vaccination, the immune system (the body's defence mechanism) makes antibodies against many types of rotavirus, which most commonly cause diarrhoea. Antibodies only protect against the disease caused by these types of viruses and do not protect against other causes of vomiting and diarrhoea.

8. How rotavirus vaccination works?

The rotavirus vaccine is given by dropping it into the mouth, not by injection. Two or three doses are needed, with at least 4 weeks between each dose. A child can receive the first dose of the vaccine at 6 weeks of age, or at the latest by 16 weeks of age. The vaccination must be completed by 24 or 32 weeks of age, depending on the vaccine used. After vaccination, the vaccine virus can be shed in the faeces of the vaccinated child, especially around day 7 after vaccination. People caring for a child who has recently been vaccinated should take care of hygiene and wash their hands thoroughly after each diaper change.

9. Who is the rotavirus vaccine for?

The rotavirus vaccine is for young children from 6 weeks to 24 or 32 weeks of age. There are insufficient data on the safety and effectiveness of the vaccine in older children.

10. How long does protection last after vaccination against rotavirus infection?

Research to date has shown that protection against rotavirus infection by vaccination lasts for at least 2 years.

11. Is the rotavirus vaccine effective?

The vaccine is highly effective in preventing infections caused by the most common types of rotavirus, which cause vomiting and diarrhoea. Research has shown that vaccination prevents more than 80% of all rotavirus infections and more than 90% of serious rotavirus infections. This means that vaccination significantly reduces the need for hospitalisation for rotavirus infection. Vaccination against rotavirus infections is not a collective protection, because there is no lasting immunity either after the disease or after vaccination, and rotaviruses can be contracted repeatedly.

12. Is the rotavirus vaccine safe?

Research shows that the vaccine is safe. Millions of children have been vaccinated in different countries around the world. However, like all vaccines, it can have side effects. The most common symptoms are: loss of appetite, irritability, fever, fatigue, mild transient diarrhoea or vomiting, but in a very small number of children.

13. Who should not be vaccinated with the rotavirus vaccine?

Children should not be vaccinated with rotavirus vaccine if they have had a severe allergic reaction following a previous vaccination with this vaccine or if they have a severe allergy to any of the components of this vaccine. Children who have had an intestinal blockage, where one part of the intestine becomes trapped in the other, or who were born with a gastrointestinal abnormality, as well as children with serious immune disorders or diseases, should not be vaccinated. Vaccination should be delayed in children with high fever and in children with diarrhoea or vomiting.

14. Can a child be vaccinated with other vaccines together with rotavirus vaccination?

In addition to the rotavirus vaccine, the child may also receive other vaccines at the same time as part of the immunisation programme. It is advisable to vaccinate against rotavirus infections at the same time as against diphtheria, tetanus, pertussis, polio and haemophilus influenzae type b infections.