



Rotavirus Infections

What Is It?

Rotavirus is the most common cause of severe, seasonal diarrhea in infants and young children. It is most common in children between six months and two years of age. Virtually all children have had rotavirus infection by the time they are five years old. In the U.S., rotavirus causes outbreaks of diarrhea during the winter months, and it is a special problem in the child care setting and children's hospitals. In the US, 50,000 children are hospitalized a year with Rotavirus. Parents of a child with a first episode of rotavirus miss an average of three days of work if exclusion rules in child care are strictly enforced.

What Are the Symptoms?

Children with a rotavirus infection have fever (often high); nausea; frequent, intense vomiting; and watery diarrhea (gastroenteritis). After two days, the fever and vomiting usually stop, but the diarrhea can continue for five to seven days and sometimes longer. As with all viruses, some rotavirus infections, especially in children and adults who have had a prior rotavirus infection, cause few or no symptoms.

Children with rotavirus infection can become dehydrated if they lose too much body water due to vomiting and watery diarrhea. This is the primary cause for hospitalization of children with rotavirus. Check for signs of dehydration including dry lips and tongue, dry skin, sunken eyes, fewer than six wet diapers a day, or (in an older child) too few trips to the bathroom to urinate. Ask the parent to call the health care provider immediately if you see any of these signs. Infants can dehydrate quickly. Children with rotavirus should not be given clear liquids. Instead, offer oral rehydration solutions like Pedialyte, Infalyte, and Rehydralyte which contain the right mix of salt, sugar, potassium, and other minerals to help replace lost fluids and prevent dehydration.

Who Gets It and How?

Illness transmission is by the fecal-oral route. There are billions of Rotavirus particles present in the stool of an infected child. They are present one to two days

before the onset of symptoms and can persist for up to three weeks after. Rotavirus can survive on objects and surfaces in child care centers for long periods. Respiratory transmission also may have a role in disease spread. Transmission within families and institutions is common because of the ease of transmission. Rotavirus causes 20-45% of the outbreaks of diarrheal illnesses in child care settings. The rate of hospitalization from rotaviral diarrhea in infected children can be as high as 2.5 percent.

When Should People with this Illness Be Excluded?

Children with rotavirus should be excluded from child care if the stool cannot be contained by diapers or toilet use.

Where Should I Report It?

Report cases of rotaviral diarrhea to parents and staff.

How Can I Limit the Spread of Rotavirus Infections?

- Promote immunization since it is the only practical way to avoid rotavirus infection. There is a new vaccine called Rotateq* that is very effective in protecting children from rotavirus. The CDC recommends that infants receive three doses of the oral vaccine at two, four, and six months of age.
- Clean and sanitize toys and surfaces.
- Follow proper hand washing procedures.

*Trade name, licensed by the FDA in February, 2006.