Rotavirus

What is rotavirus?

- A virus that causes diarrhea and vomiting.
- Before the vaccine was released in 2006, the most common cause of diarrhea in children younger than 2 years.
- Disease occurs more frequently in cooler months (ie, late autumn to early spring).
- Nearly all children have been infected by the time they reach 3 years of age.
- Children can get infected more than once because the virus has many types.

What are the signs or symptoms?

- Fever.
- Non-bloody diarrhea.
- Nausea.
- Vomiting.
- Dehydration in severe cases.
- Generally lasts 3 to 7 days.
- Some children may have very mild or no symptoms.

What are the incubation and contagious periods?

- Incubation period: 1 to 3 days.
- Contagious period: Virus is present several days before diarrhea begins and can persist for more than a week after the illness.

How is it spread?

Fecal-oral route: Contact with feces of children who are infected. This generally involves an infected child contaminating their own fingers and then touching an object that another child touches. The child who touched the contaminated surface then puts their fingers into their own mouth or another person's mouth.

How do you control it?

- Rotavirus is vaccine preventable. Follow the most recent immunization schedule. Unlike other vaccines, rotavirus vaccine must be started by 4 months of age and can't be given past 8 months of age.
- Use good hand-hygiene technique at all the times listed in Chapter 2, especially after toilet use or handling soiled diapers and before anything to do with food preparation or eating.

- Ensure proper surface disinfection that includes cleaning and rinsing of surfaces that may have become contaminated with stool (feces) with detergent and water and application of a US Environmental Protection Agency–registered disinfectant according to the instructions on the product label.
- Ensure proper cooking and storage of food.
- Exclude infected staff members who handle food.
- Exclusion for specific types of symptoms (see the section Exclude from educational setting?).

What are the roles of the educator and the family?

- Usually, educators will not know a child has a rotavirus infection because the condition is not distinguishable from other common forms of watery diarrhea. The following recommendations apply for a child with diarrhea from any cause (see Diarrhea Quick Reference Sheet):
 - Report the condition to the staff member designated by the early childhood education program or school for decision-making and action related to care of ill children and staff members. That person, in turn, alerts possibly exposed family and staff members to watch for symptoms and notifies the Child Care Health Consultant.
 - Ensure staff members follow the control measures listed in the section How do you control it?
 - Report outbreaks of diarrhea (more than 2 children and/or staff members in the group) to the Child Care Health Consultant, who may report to the local health department.
- If a child has a known rotavirus infection, follow these steps.
 - Follow the advice of the child's or staff member's health professional.
 - Report the infection to the local health department, as the health professional who makes the diagnosis may not report that the infected child is a participant in an early childhood education program or school, and this could lead to delay in controlling the spread of the disease.
 - Reeducate staff members to ensure strict and frequent handwashing, diapering, toileting, food handling, and cleaning and disinfection procedures.
 - In an outbreak, follow the direction of the local health department.
- Encourage breastfeeding because it helps to protect infants against rotavirus.

Exclude from educational setting?

Yes, if

- The local health department determines exclusion is needed to control an outbreak.
- Stool is not contained in the diaper for diapered children.
- Diarrhea is causing "accidents" for toilet-trained children.
- Stool frequency exceeds 2 stools above normal for that child during the time the child is in the program because this may cause too much work for educators and make it difficult for them to maintain sanitary conditions.
- There is blood or mucus in stool.
- The ill child's stool is all black.
- The child has a dry mouth, no tears, or no urine output in 8 hours (suggesting the child's diarrhea may be causing dehydration).

- The child is unable to participate and staff members determine they cannot care for the child without compromising their ability to care for the health and safety of the other children in the group.
- The child meets other exclusion criteria (see Conditions Requiring Temporary Exclusion in Chapter 4).

Readmit to educational setting?

Yes, when all the following criteria are met:

- Once diapered children have their stool contained by the diaper (even if the stools remain loose) and when toilet-trained children do not have toileting accidents
- Once stool frequency is no more than 2 stools above normal for that child during the time in the child is in the program, even if the stools remain loose
- When the child is able to participate and staff members determine they can care for the child without compromising their ability to care for the health and safety of the other children in the group

Single copies of this Quick Reference Sheet may be made for noncommercial, educational purposes. The information contained in this publication should not be used as a substitute for the medical care and advice of a pediatric health professional. There may be variations in treatment that a pediatric health professional may recommend based on individual facts and circumstances.

The American Academy of Pediatrics is an organization of 67,000 primary care pediatricians, pediatric medical subspecialists, and pediatric surgical specialists dedicated to the health, safety, and well-being of all infants, children, adolescents, and young adults.

DEDICATED TO THE HEALTH OF ALL CHILDREN®

American Academy

of Pediatrics

American Academy of Pediatrics website—www.HealthyChildren.org © 2023 American Academy of Pediatrics. All rights reserved.