

Rotavirus (Viral Gastroenteritis)

Rotavirus is a virus that cause severe, watery diarrhea and vomiting in young children. It can cause serious illness, hospitalization, or death. **Rotavirus is preventable through vaccination.**

Transmission

Rotavirus is spread **person to person** through fecally-contaminated food, hands, or surfaces that are touched by objects or hands put into the mouth

Rotavirus can be found on toys, hard surfaces, water or food, and is often spread within families.

The virus is present before diarrhea begins and can be shed in the stool. On average, symptoms last four to six days, during which time the person is infectious, and shedding of virus can last up to 30 days in people who have compromised immune systems.

Symptoms

Rotavirus disease is characterized by vomiting and watery diarrhea for three to eight days. Fever and abdominal pain also are common. Additional symptoms include loss of appetite and dehydration.

Diagnosis

Diagnosis can usually be made by a laboratory test of stool specimens.

Treatment

There is no treatment for rotavirus. Most people with rotavirus will recover on their own. Fluids can be given to prevent and correct dehydration. Some individuals, particularly those with compromised immune systems or young children, may require hospitalization.

Prevention

- Children should receive two or three doses of rotavirus vaccine, depending on the brand of vaccine administered. The three-dose schedule should be given at 2, 4 and 6 months of age. The two-dose schedule should be given at 2 and 4 months of age. The first dose should be given between 6 and 14 weeks of age. Children should have received all doses by eight months of age. Children eight months of age and younger who attend early childhood facilities in North Dakota are required to submit documentation of vaccination against rotavirus.
- Hand washing is the most important prevention method. This should be done particularly after toileting or diapering and before any contact with food or surfaces involved in preparation and serving food.
- Thoroughly clean and disinfect contaminated surfaces immediately after an episode of illness by using a bleach-based household cleaner, or one with 70% ethanol alcohol concentration.

Public Health Division

Exclusion Guidance

A child should be excluded from child care if he/she has:

- Vomited two or more times within the previous 24 hours, unless the vomiting is determined to be caused by a noninfectious condition and the child is not in danger of dehydration.
- Diarrhea, if stool is not contained in the diaper or if diarrhea frequency exceeds two or more stools above normal for that child.
- A fever or is unable to participate and the staff determines that they cannot care for the child without compromising their ability to care for the health and safety of the other children in the group.
- A child or an adult should be excluded from school or work until diarrhea resolves. An adult who prepares or handles food should be excluded from work until 24 hours after diarrhea resolves.

For additional information about rotavirus, contact the North Dakota Department of Health and Human Services' Public Health Division at 800.472.2180.

Suspected cases should be reported immediately to the North Dakota Department of Health and Human Services.

Resources:

1. Centers for Disease Control and Prevention. (2021, March 26). *CDC Rotavirus*. Centers for Disease Control and Prevention. Retrieved June 28, 2023, from <https://www.cdc.gov/rotavirus/>.
2. Kimberlin, D. W., Barnett, E. D., Lynfield, R., Sawyer, M. H. (2021) Red Book: 2021-2024 Report of the Committee on Infectious Diseases. 32nd ed. American Academy of Pediatrics. [Management and Prevention of Infectious Diseases; Rotavirus Infections] [pages 644-648].

Revised August 23, 2024