

Rotavirus

What is Rotavirus infection?

Rotavirus is a common virus that infects the intestines causing diarrhea and vomiting in infants and young children. Outbreaks are common in settings where children are close to one another; for example, in hospitals and child care centres. It can also be a common cause of diarrhea in the elderly and an occasional cause of traveler's diarrhea in healthy adults.

Symptoms include vomiting followed by diarrhea and a low-grade fever. The illness usually lasts for 4-6 days.

How is Rotavirus spread?

The virus is found in the intestinal tract, and is most often spread to others when an infected person does not carefully wash their hands after using the washroom. The virus can also be found in the respiratory tract so there is a possible risk of spread through coughing and sneezing.

It usually takes about 24-72 hours for a person to develop symptoms once they come in contact with rotavirus. Infected people can spread the virus while they are sick and also may be able to spread the infection for up to 8 days after they are feeling better.

Treatment

There is no treatment for a rotavirus infection. Antibiotics are not used for infections caused by viruses. Occasionally the vomiting and diarrhea caused by Rotavirus may become so severe it leads to dehydration, so it is important to ensure that those affected are given lots of fluids.

Prevention

- **Thorough handwashing** is the best prevention. Make sure hands are properly washed after using the toilet, changing diapers, helping others toilet, before preparing food, etc.
- When visiting a health care facility or child care centre, visitors should wash their hands or use an alcohol based hand rub upon arrival and when leaving.

The best handwashing technique includes 6 steps:

- **Wet hands** with warm running water
- **Apply liquid soap**
- **Lather hands and scrub for 20 seconds**
- **Rinse** under running water
- **Dry** your hands with paper towels
- **Use the towel to turn off the taps**

If your hands are not visibly soiled, you may use an alcohol-based hand rub:

- **Apply the sanitizer to your hands.** About a thumbnail size amount is sufficient.
- **Rub your hands together until the alcohol has evaporated.** Hands will feel dry in about 15 seconds.

- **People ill with diarrhea or vomiting should be isolated from others.**
 - Children should not attend child care centres while they have vomiting and/or diarrhea and should remain away for at least 24 hours after the symptoms have resolved. If the child care centre is involved in an outbreak, where several children are ill at the same time, the length of time away is increased to 48 hours after the symptoms have resolved.
 - People who handle food for the public and have vomiting and/or diarrhea must stay away from food handling duties for at least 24 hours after the symptoms have resolved.

- **Clean and sanitize** washroom surfaces, and all hand contact surfaces at least daily.
 - Regular cleaning schedules in child care centres and health care facilities should be enhanced during the time of a rotavirus outbreak. Rotavirus is resistant to many commonly used disinfectants but is inactivated by chlorine (bleach).
 - A 1:50 household bleach solution (approximately 1000 ppm) is recommended to be used and can be prepared by mixing 100ml (7 tablespoons) household bleach to 5000ml (20 cups) water. Bleach is most effective on clean surfaces.

- **Dispose of feces and fecally contaminated material properly.**

- **Vaccination** Two oral vaccines, RotaTeq® and Rotarix™ are available for use in Canada for children up to 32 weeks of age. Rotarix™ vaccine is publicly funded. The vaccine is given by mouth in two doses. The first dose must be given before 15 weeks of age and second dose should be given before 24 weeks of age. Both of these vaccines help protect against diarrhea and vomiting caused by rotavirus. It does not protect against diarrhea and vomiting caused by anything else. You can discuss this vaccine with your doctor or public health nurse.

If you have any questions or concerns, please contact the Infectious Disease Control Team at 519-663-5317 ext. 2330 or go to www.healthunit.com

Reference:

Canadian Paediatric Society (2015). *Recommendation for the use of rotavirus vaccines in infants*. Retrieved from <http://www.cps.ca/documents/position/rotavirus-vaccines>

Heymann, D.L. (2015). *Control of Communicable Diseases Manual* (20th ed.) Washington, D.C.: American Public Health Association

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