

Fact Sheet

Rotavirus



What is Rotavirus?



Rotavirus is a contagious virus that can cause gastroenteritis (inflammation of the stomach and intestines). It is the most common cause of diarrhea in infants and children worldwide, according to the Centers for Disease Control and Prevention (CDC). Before the development of a vaccine, most children in the United States had at least one bout with rotavirus by age 5.

How is it Spread?

Rotavirus spreads easily among infants and young children. Children can spread the virus both before and after they become sick with diarrhea. They can also pass rotavirus to family members and other people with whom they have close contact.

People who are infected with rotavirus shed rotavirus (passed from a person's body into the environment) in their feces (stool). They shed the virus most when they are sick and during the first 3 days after they recover from rotavirus disease.

The virus spreads by the fecal-oral route; this means that the virus must be shed by an infected person and then enter a susceptible person's mouth to cause infection. Rotavirus can be spread by contaminated:

- § Hands
- § Food
- § Objects (toys, surfaces)
- § Water

Children are most likely to get rotavirus in the winter and spring (December through June).

Signs and Symptoms

Rotavirus disease is most common in infants and young children. However, older children and adults can also become infected with rotavirus. Once a person has been exposed to rotavirus, it takes about 2 days for the symptoms to appear.

Children who get infected may have severe watery diarrhea, often with vomiting, fever, and abdominal pain. Vomiting and watery diarrhea can last from 3 to 8 days. Additional symptoms include loss of appetite and dehydration (loss of body fluids), which can be especially harmful for infants and young children.

Children, even those that are vaccinated, may develop rotavirus disease more than once. That is because neither natural infection with rotavirus nor rotavirus vaccination provides full immunity (protection) from future infections. Usually a person's first infection with rotavirus causes the most severe symptoms.

Diagnosis

Rotavirus is often diagnosed based on symptoms and a physical exam. A stool sample may be analyzed in a lab to confirm the diagnosis.

Treatment

There is no antiviral drug to treat rotavirus infection. Antibiotic drugs will not help because antibiotics fight against bacteria not viruses.

Rotavirus infection can cause severe vomiting and diarrhea. This can lead to dehydration (loss of body fluids). During rotavirus infection, infants and young children, older adults, and people with other illnesses are most at risk of becoming dehydrated.

The best way to protect against dehydration is to drink plenty of liquids. Oral rehydration solutions that can be purchased over-the-counter in U.S. food and drug stores are most helpful for mild dehydration. Severe dehydration may require hospitalization for treatment with intravenous (IV) fluids, which are given to patients directly through their veins. If you think you or someone you are caring for is severely dehydrated, contact your doctor.

Symptoms of dehydration include:

- § Decrease in urination
- § Dry mouth and throat
- § Feeling dizzy when standing up
- § A dehydrated child may also cry with few or no tears and be unusually sleepy or fussy

Prevention

Rotavirus can spread easily. Good hygiene (hand washing) and cleanliness are important but are not enough to control the spread of the disease.

Rotavirus vaccines are very effective in preventing rotavirus gastroenteritis and the accompanying diarrhea and other symptoms. CDC recommends routine vaccination of infants with one of the two available vaccines. Both rotavirus vaccines are given orally. The vaccines are very effective (85% to 98%) in preventing severe rotavirus disease in infants and young children, including rotavirus infection that requires hospitalization. Rotavirus vaccines will not prevent diarrhea or vomiting caused by other viruses or pathogens.



For more sources of information on this topic visit:

ST. CLAIR COUNTY HEALTH DEPARTMENT www.scchealth.co

MICHIGAN DEPARTMENT OF HEALTH AND HUMAN SERVICES www.michigan.gov/mdhhs

CENTERS FOR DISEASE CONTROL AND PREVENTION www.cdc.gov