



Polio

(Poliomyelitis)

What is polio?

Polio is caused by the poliovirus. The virus grows in the intestinal tract or the throat. Although most cases do not have symptoms, some cases become symptomatic and the most severe cases can result in paralysis.

Who is at risk for polio?

Anyone who is not vaccinated can get polio. Although rare in the United States, there is still a risk of polio in some countries. The number of countries with polio is decreasing rapidly because of the work of the World Health Organization's program to eliminate polio.

What are the symptoms of polio?

About 95 percent of people have no signs or symptoms of polio. When symptoms do appear, they include fever, sore throat and stiff neck. Burning, itching or tingling of the skin can occur. Although rare, paralysis is the symptom most often associated with polio.

How soon do symptoms appear?

Symptoms can appear three to six days after exposure. The onset of paralysis is usually seven to 21 days in paralytic polio.

How is polio spread?

The poliovirus is found in the stool and throat of infected people. The virus is spread when people do not wash their hands after using the toilet, after changing a diaper or soiled sheets, and then touches their own mouths, prepare food for others, or touch others with their contaminated hands. The poliovirus must be swallowed to cause infection.

When and for how long is a person able to spread the disease?

An infected person can spread the disease from shortly before until several weeks after illness. After the onset of the illness, the virus remains in the throat for about one week and can be found in the stool for several weeks.

How is a person diagnosed?

A health professional will confirm a diagnosis of polio by laboratory testing.

What is the treatment?

There are no special medicines or antibiotics that can be used to treat a person; the only treatment is supportive care.

Does past infection make a person immune?

Yes. Once someone has been infected with the poliovirus, he or she is immune, but only to the specific type of polio virus he or she had.

Should children or others be excluded from child care, school, work or other activities if they have polio?

Exclusion guidelines from child care, school, work or other activities will be determined by the local and state health departments on a case-by-case basis.

What can be done to prevent the spread of polio disease?

The best way to prevent polio is by vaccination. The inactivated polio vaccine (IPV) is given as a shot and is the only type of polio vaccine available in the United States. The oral polio vaccine (OPV) was discontinued in 2000. Children should receive four doses of IPV vaccine starting at 2 months of age. At least one dose has to be administered at age four or older. Adults who are traveling to areas where polio cases are still occurring should receive one dose of IPV if they have previously been immunized against polio. If they have not been vaccinated against polio, a full vaccination series of three doses will be needed. For countries with polio still circulating, a booster dose of IPV is recommended.

Other steps to prevent the spread of polio include washing hands with soap and water after using the bathroom and changing diapers, and before preparing food and eating. If soap and water are not available, use an alcohol-based hand rub.

Additional Information:

Additional information is at www.ndhealth.gov/disease or by calling the North Dakota Department of Health at 800.472.2180.

This disease is a reportable condition. As mandated by North Dakota law, any incidence of this disease shall be reported to the North Dakota Department of Health.

Resource:

American Academy of Pediatrics. [Poliovirus Infections]. In: Kimberlin DW, Brady MT, Jackson MA, Long SS, eds. *Red Book: 2015 Report of the Committee on Infectious Diseases*. 30th ed. Elk Grove Village, IL: American Academy of Pediatrics; 2015: 644-650.