



POLIO

What is polio?

Polio is an infectious disease caused by a virus that lives in the throat and intestinal tract. It is most often spread through person-to-person contact with the stool of an infected person and also may be spread through oral/nasal secretions. Polio used to be very common in the United States (U.S.) and caused severe illness in thousands of people each year before polio vaccine was introduced in 1955. Most people infected with the polio virus have no symptoms, however for the less than 1 percent who develops paralysis it may result in permanent disability and even death.

What are the symptoms of polio?

As many as 72 percent of susceptible persons infected with polio have no symptoms. However, infected persons without symptoms can still spread the virus and cause others to develop polio. About 24 percent of infected susceptible persons have minor symptoms such as fever, sore throat, upset stomach, or flu-like symptoms and have no paralysis or other serious symptoms. About one percent to five percent develop aseptic meningitis with stiffness of the back or legs, and in some persons increased or abnormal sensations a few days after the minor illness resolves. These symptoms typically last from two to 10 days, followed by complete recovery. Less than 1% of polio cases result in paralysis of the limbs (usually the legs). Of those cases resulting in paralysis, five percent to 10 percent of the patients die when the respiratory muscles are paralyzed. The risk of paralysis increases with age.

How common was polio in the United States?

Polio was one of the most dreaded childhood diseases of the 20th century in the United States. Periodic epidemics occurred since the late 19th century and they increased in size and frequency in the late 1940s and early 1950s. An average of more than 35,000 cases were reported during this time period. With the introduction of Salk inactivated poliovirus vaccine (IPV) in 1955, the number of cases rapidly declined to less than 2,500 cases in 1957. By 1965, only 61 cases of paralytic polio were reported.

Is polio still seen in the United States?

The last cases of naturally occurring paralytic polio in the United States were in 1979, when an outbreak occurred among the Amish in several Midwestern states. From 1980 through 1999, there were 162 confirmed cases of paralytic polio cases reported. Of the 162 cases, eight cases were acquired outside the United States and imported. The last imported case caused by wild poliovirus into the United States was reported in 1993. The remaining 154 cases were vaccine-associated paralytic polio (VAPP) caused by live oral poliovirus vaccine (OPV).

What kind of polio vaccines are used in the United States?

IPV, which is given as a shot, is now used in the United States. OPV has not been used in the United States since 2000 but is still used in many parts of the world.

Who should get polio vaccine and when?

The poliovirus vaccine used in the United States is IPV. IPV is a shot, given in the leg or arm, depending on age. Polio vaccine may be given at the same time as other vaccines.

IPV is routinely given to children. Children get four doses at these ages:

- A dose at 2 months
- A dose at 4 months
- A dose at 6-18 months
- A booster dose at 4-6 years