

Poliovirus Infection, Including Poliomyelitis

Agent: Poliovirus

Mode of Transmission: Person-to-person transmission through ingestion of contaminated food or direct contact with fecal material from infected people.

Signs/Symptoms: Up to 90% of all polio infections are asymptomatic. Ten percent will develop into a non-specific syndrome with fever, malaise, headache, nausea, and vomiting. Flaccid paralysis occurs in less than 1% of poliovirus infections.

Prevention: Vaccine should be administered beginning at 2 months of age. Four doses of trivalent, inactivated poliovirus vaccine (IPV) are recommended with the last dose administered prior to kindergarten entry and after the fourth birthday.

Other Important Information: Polio eradication programs, which primarily utilize oral poliovirus vaccine (OPV), have led to the elimination of the disease in four of the six World Health Organization (WHO) designated regions. Polio incidence has dropped more than 99% since the launch of global polio eradication efforts in 1988, and 80% of the world's population now live in polio-free areas. Additional progress toward polio eradication was made in 2015 when type 2 poliovirus, one of the three serotypes, was declared eradicated. No cases of type 3 poliovirus have been detected since 2012. Type 1 poliovirus is the most pervasive and continues to circulate in endemic countries. The WHO recommended in 2015 that all countries using oral poliovirus vaccine change from trivalent (types 1, 2, and 3) to bivalent (types 1 and 3) to reduce the risk of vaccine-derived poliovirus transmission (VDPV). Worldwide, Nigeria reported no cases in 2015 after reporting six cases in 2014. Poliovirus remains endemic in Afghanistan and Pakistan. The number of cases reported in Pakistan declined from 306 cases in 2014 to 54 cases in 2015. Afghanistan also had a decrease in cases from 28 in 2014 to 20 in 2015. Until poliovirus transmission is interrupted in these endemic countries, all countries remain at risk of importation of polio, especially in the "wild poliovirus importation belt" stretching from west Africa to central Africa and the Horn of Africa. In 2011, Virginia's reporting requirements were changed to require reporting of any poliovirus infection, not only poliomyelitis.

No poliovirus infections were reported in Virginia in 2015. The last reported case of poliomyelitis in Virginia occurred in 1978.