

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 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. Poliovirus transmission continues in only three countries - Afghanistan, Nigeria, and Pakistan. In 2014, Pakistan reported the most cases of polio with 306, followed by Afghanistan with 28 cases and Nigeria with six cases. 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 2014, the WHO South-East Asia region, which includes eleven countries from Indonesia to India, was certified polio-free. This certification follows India's third year of not reporting any cases of polio. According to WHO, there were 359 cases of polio worldwide in 2014, down from 416 reported cases in 2013. The decline in cases could be a result of vaccination efforts done in 2013 in response to polio outbreaks in the Middle East. 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 2014. The last reported case of poliomyelitis in Virginia occurred in 1978.