

# Poliomyelitis:

**Def:** The term poliomyelitis is derived from Greek words referring to inflammation (itis) of the gray (polios) matter of spinal cord (myelosis)

Poliomyelitis is a highly infectious viral disease that sometimes results in paralysis.

There are only two countries which has never stopped transmission of polio i.e Pakistan and Afghanistan.

As per WHO; at July 2021, only 2 cases of wild polio virus have been recorded globally this year to date: one each in Afghanistan and Pakistan.

## Symptoms:

Mild form of disease is characterized by fever, headache, sore throat, fatigue, nausea and vomiting. This short-lived form of illness lasts only from hours to a few days. In more than 95% of cases, the disease gets no worse.

Sometimes, however, the virus may invade the nervous system, causing more severe forms of the disease. In most severe cases of polio infection the virus attacks the brain, causing bulbar poliomyelitis affecting various cranial and facial nerves along with the muscles of mastication. Sometimes the virus affects the part of the brain that controls breathing and heartbeat, resulting in death.



## Causes:

Polio is caused by a virus. People become infected with the virus through contaminated food and water, especially in areas where sanitation and hygiene are poor. Improper sewage disposal, for example, can contaminate a water supply.

Poliovirus typically enters the body through the mouth and proceeds through the digestive system/tract into the intestines. After multiplying in the body, the virus is shed in the faeces, from where it can spread and cause further infections, esp when infected people do not wash their hands and touch food or other people.

**Diagnosis:** Dx can be made by isolating the virus from an infected person using throat cultures, stool samples, or samples of fluids from the brain and spinal cord. Blood tests that indicate the presence of antibodies specific for the virus will also confirm a poliovirus infection.

## Treatment:

As yet there is no cure for polio. However, several medical treatments can lessen the severity of the disease. Simple treatments, including moist heat applied to affected muscles, can ease pain.

In case of breathing difficulties, artificial respirators can be used. Sabin oral vaccine should be used to prevent this disease.

Physical Therapy can also be used for rehabilitative purposes.



## Prevention:

There is no cure for polio. It can only be prevented. The most effective way to prevent polio is through vaccination. The oral polio vaccine (OPV) or inactivated polio vaccine (IPV) is administered to infants and children as part of routine immunization schedules.

- By improving hygiene and sanitation practices, such as promoting handwashing and ensuring access to clean water and sanitation facilities, can help reduce the risk of fecal-oral transmission of the poliovirus.
- Public awareness campaigns plays a crucial role in educating communities about the importance of vaccination programs.