Poliomyelitis

What Is It?

Poliomyelitis, commonly referred to as polio, is caused by infection with poliovirus. The initial infection occurs in the gastrointestinal tract but then spreads to lymph nodes and the nervous system. The illness can lead to partial or full paralysis. Due to the polio vaccine, this disease no longer occurs in the US.

How can you get it?

Polio is spread by person-to-person contact and only affects humans. Transmission occurs by contact with infected respiratory mucus or by contact with infected feces. You can get polio by:

- Eating or drinking contaminated food

What are the symptoms?

The symptoms of polio vary depending on which pattern of the disease a person has. A vast majority of those infected have subclinical infection while few will develop nonparalytic or paralytic polio.

The signs and symptoms of subclinical polio last approximately 72 hours and may include:

- No symptoms in some
- Headache
- General discomfort
- Sore throat
- Vomiting

The signs and symptoms of nonparalytic polio last approximately 1 – 2 weeks and may include:

- Diarrhea
- Fatigue
- Irritability
- Leg pain (particularly in the calf muscles)
- Fever
- Muscle stiffness or spasms
Drooling
Muscle pain, contractions, spasms
Muscle weakness (especially on only one side)
Abnormal sensations
Breathing difficulty
Bloating and/or constipation

The time to develop symptoms once infected with the virus varies from 5 - 35 days with an average of 7 - 14 days. Complications include paralysis, pneumonia, loss of intestinal function, high blood pressure, kidney and bladder infections. Post-polio syndrome can develop decades after the initial infection and present as weakness in various muscles.

How do you prevent it?

Polio is a vaccine preventable disease. “Between 1840 and the 1950s, polio was a worldwide epidemic.” Since the development of polio vaccines in the 1950s-60s, polio has been eliminated in a number of countries. The disease still exists in some developing countries and can be transmitted to unvaccinated travelers. The oral vaccine is used in various countries throughout the world but the injection is the only form available in the United States. Four doses of polio are given for full vaccination, typically during childhood.

Prevention:

- Make sure you have completed your full vaccination series
- Using Universal Precautions
  - Hand hygiene (wash with soap and water or using an alcohol based hand rub).
  - Personal protective equipment (PPE) (gloves, gowns, masks and goggles that offer mouth, nose and eye protection).
  - Proper handling and disposal of instruments/devices and clothing contaminated with blood or body fluids.
- Make sure all your children are vaccinated for Polio (age 2, 4, 6 months and 4 years)
What should you do if you are exposed to the disease or get the disease?

Contact your health care provider if you have not been vaccinated and you are in contact with someone who has developed poliomyelitis. “Brain or spinal cord involvement is a medical emergency that may result in paralysis or death (usually from respiratory difficulties)” and needs to be evaluated by medical professionals.

Treatment for polio may be unnecessary for many as the disease can result in no symptoms. Those with nonparalytic or paralytic polio may need medical supportive care in the form of antibiotics, pain control, physical therapy and possibly life-saving respiratory interventions.

For More Information and Frequently Asked Questions (FAQs), Check Out:

  - CDC, Polio Vaccination: [http://www.cdc.gov/vaccines/VPD-VAC/polio/default.htm](http://www.cdc.gov/vaccines/VPD-VAC/polio/default.htm)