

Assignment = 01

General Science & Ability Topic - Polio

Polio is a severe acute infectious disease caused by the poliovirus, which can spread from person to person damaging the central nervous system and motor neurons, resulting in flaccid paralysis, the inability to move limbs, difficulty breathing, and eventually leading to paralysis and death, particularly in unvaccinated children.

In Thailand, from July 1, 2023 a new polio vaccine regimen is instituted to help boost immunity while reducing the risk of paralysis. Parents should bring their children who have reached the vaccination age to receive the new polio vaccinations available at all hospitals.

→ Causes of Polio

Polio, or poliomyelitis, is due to one of the three strains of poliovirus in the same family of enteroviruses that causes hand, foot, and mouth disease and meningitis, which enters the mouth through eating contaminated food or water. One inside the body.

The virus travels to the tonsils, multiplies in the throat, moves to the stomach and the colon, serving as the disease reservoir, and multiplies in the lymph nodes, liver, and spleen. Only 1-2% of the virus will spread to the bloodstream, spinal cord neurons, and brainstem, damaging the central nervous system (CNS) and motor neurons that control neurons that control muscle function, resulting in muscular atrophy, muscle weakness, and paralysis.

→ Polio Spread :-

Polio is a contagious disease that can readily spread from person to person via the secretion or excretion of an infected person through the following routes:

1. Oral-oral route
2. Fecal-oral route

→ Polio Symptoms :-

People infected with the polio virus have varying symptoms but can spread the disease to others while asymptomatic. The vast majority of infected people exhibit no symptoms.

Only 1-2 percent of infected persons develop severe forms of the disease with muscle weakness and flaccid paralysis.

Polio symptoms are of the following four groups.

- 1- Asymptotic
- 2- Abortive Poliomyelitis
- 3- Non-Paralytic Poliomyelitis
- 4- Paralytic Poliomyelitis

→ Polio Treatment

Polio is a disease for which there is no cure. Polio treatment, therefore, focuses on symptomatic care and physical and avoid complications that may occur with the following measures:

- Getting enough rest and providing intimate care
- Using pain relievers such as ibuprofen to alleviate pain.
- Using portable ventilators to help with breathing.
- Using warm compresses to help relieve muscle pain and spasms.
- Swallowing exercises of the oral and tongue muscles; practice drinking water or a liquid diet.

- Using a splint or body brace to help align the spine and limbs in a proper position.
- Physical therapy to prevent bone deformity and loss of muscle mass.

→ Preventive Measures :-

The best prevention for Polio is with a series of five scheduled vaccinations, as well as the following hygienic practice:

Polio vaccination (IPV and OPV):

Doctors recommend a series of five vaccinations at 2, 4, 6 and 18 months, with the final booster dose at age 4.

Proper hygiene measures include washing your hands before meals and adhering to hygienic bowel elimination practices.