

## Polio Q and A

### 1. What is polio or poliomyelitis? How can my child get infected?

Poliomyelitis (polio) is a highly contagious disease that mainly affects children under 5 years of age. The virus is transmitted by person-to-person spread mainly through contact with the feces of an infected person and ingestion of contaminated water or food. The virus can live in an infected person's feces for many weeks. It can contaminate food and water in unsanitary conditions. For example, if your child's hands get in contact with polio-contaminated feces on objects, and he touches his mouth, he can then become infected. The virus then multiplies in the intestine, from where it can invade the nervous system and cause paralysis. All children with polio, with or without symptoms, can pass the virus to others and make them sick.

### 2. What are the signs and symptoms of polio?

Majority of children infected with the polio virus are asymptomatic. However, if symptomatic, they may present with any of the following: fever, fatigue, headache, vomiting, stiffness of the neck, and pain in the limbs. A smaller proportion of people with poliovirus infection will develop other, more serious problems that affect the brain and spinal cord such as:

- Paresthesia - feeling of pins and needles in the legs
- Meningitis - infection of the covering of the spinal cord and/or brain, which occurs in about 1 out of 25 people with poliovirus infection
- Paralysis or weakness in the arms, legs, or both, which occurs in about 1 out of 200 people with poliovirus infection. Among those paralyzed, 5% to 10% die when their breathing muscles become affected.

### 3. Is there a treatment for Polio?

There is no antiviral treatment for Polio. Treatment is mainly supportive.

### 4. How can I protect my child from getting the virus?

Polio vaccine protects children by preparing their bodies to fight the poliovirus. Almost all children (99 children out of 100) who get all the recommended doses of the polio vaccine will be protected from polio.

There are two types of vaccines that can prevent polio:

- Inactivated poliovirus vaccine (IPV) is given as an injection.
- Oral poliovirus vaccine (OPV) is still used throughout much of the world. This is routinely given in health centers and mass vaccination.

5. What is the difference between OPV and IPV? Why is the health center giving my child both types of polio vaccine?

Oral polio vaccine is given 2 drops by mouth. It builds protection in the intestine and blood and protects not only the child who received the vaccine but, also the people around the vaccinated child. Several doses should be given to every child in places where polio is a threat.

IPV or Inactivated polio vaccine is given through injection, and it builds protection in the blood and helps boost the immune system against polio. However, it does not prevent the spread of disease to other children.

OPV and IPV are given in health centers to provide intestinal and blood protection against polio, which remains a threat in our country.

6. How many doses of polio vaccine does my child need to be considered protected? How long will his protection last?

Here in our country, a child is considered to be fully vaccinated if he/she has received:

- three doses of IPV at least 1 month apart, or
- three doses of OPV at least 1 month apart and at least 1 dose of IPV, which is given together with the last dose of OPV

In addition, booster doses are needed to maintain a long-term protection.

- **Duration of protection of the vaccine** is not known, but they are most likely protected for many years after a complete series.
- Depending on the polio situation locally, the DOH may recommend additional doses of polio vaccine in the future.

7. Is there any danger in giving extra doses of polio vaccine to my child if he has completed the recommended number of doses for his age?

It is safe to administer multiple doses of polio vaccine to children. The vaccine is designed to be administered multiple times to ensure full protection. In the tropics, several doses of polio vaccine are required for a child to be fully protected – sometimes more than ten. This vaccine is safe for all children. Each additional dose further strengthens a child's immunity level against polio.

8. Can my 6 year old daughter still be given polio vaccine since she missed her booster doses?

Yes, your daughter can be given polio vaccine. You can ask your pediatrician.

9. Why did we have polio cases despite being declared polio-free in 2000?

Polio does not respect borders. With increased migration, decline in immunization together with poor sanitation practices, and inadequate sewerage system, the Philippines was always at risk for a resurgence of polio cases.

Once the polio virus is present in the country, it will be hard to detect and prevent polio from spreading. For every case of paralysis, there are between 200 and 1000 children infected

without symptoms. Furthermore, the inadequate reporting of cases of paralysis to differentiate polio from other causes, has aggravated the problem. If the problems stated above are not resolved, the Philippines will remain at risk.

The best defense against polio is to eradicate the virus through vaccination. Only then will all children be safe.

References:

<https://polioeradication.org/polio-today/faq/>

<https://www.cdc.gov/vaccines/vpd/polio/hcp/effectiveness-duration-protection.html> Vaccines and vaccine preventable diseases. CDC.