Polio Vaccine

Polio, short for poliomyelitis, is a highly contagious viral infection that primarily affects children. The virus can lead to paralysis and, in severe cases, death. Fortunately, the **polio vaccine** is a safe and effective way to protect against this disease, which has been eradicated in many parts of the world but remains a concern in certain areas.

What is Polio?

Polio is caused by the poliovirus, which spreads from person to person, usually through contaminated food or water. The virus can invade the nervous system and lead to paralysis within hours. Although most people infected with polio do not show any symptoms, about 1 in 200 infections can lead to irreversible paralysis, typically affecting the legs.

Symptoms of polio can include:

- Fever
- Fatigue
- Headache
- Stiffness in the neck and back
- Muscle weakness

In severe cases, polio can result in paralysis or even death, making vaccination crucial for prevention.

How Does the Polio Vaccine Work?

The polio vaccine helps protect individuals by stimulating the immune system to produce antibodies against the poliovirus. There are two types of polio vaccines:

- 1. **Inactivated Polio Vaccine (IPV)**: This vaccine contains killed poliovirus and is administered as an injection.
- 2. **Oral Polio Vaccine (OPV)**: This vaccine contains weakened live poliovirus and is given as drops in the mouth.

In South Africa, the IPV is primarily used in the Expanded Programme on Immunisation (EPI) to ensure that children receive effective protection against polio.



Vaccination Schedule

In South Africa, the polio vaccine is administered according to the following schedule:

- At birth: The first dose is given within the first few days after birth.
- **6 weeks old**: The second dose is administered.
- 10 weeks old: The third dose is given.
- 14 weeks old: A fourth dose is provided.

Children are also given booster doses as part of school health programs to ensure continued immunity against the virus.

Why is the Polio Vaccine Important?

- 1. **Prevents Paralysis**: The vaccine is effective in preventing polio, particularly paralysis, which can have lifelong consequences.
- 2. **Community Immunity**: High vaccination rates create herd immunity, protecting those who cannot be vaccinated, such as infants and individuals with certain health conditions.
- 3. **Global Health**: Vaccination against polio is crucial to achieving worldwide eradication of the disease. By vaccinating children, South Africa plays a role in preventing the spread of polio.

Is the Polio Vaccine Safe?

Yes, the polio vaccine is considered safe and effective. Most individuals experience only mild side effects, such as:

- Soreness at the injection site (for IPV)
- Mild fever or fatigue

Severe side effects are extremely rare, and the benefits of vaccination far outweigh any potential risks.

Common Misconceptions

Some people might believe that polio is no longer a threat or that it is only a disease of the past. However, polio still exists in some parts of the world, and outbreaks can occur if vaccination rates drop. It's crucial to keep up with immunisation schedules to protect against this disease.

References:

1. South African Department of Health

