



QUESTIONS

Q & A

FOR PARENTS

ANSWERS

POLIO VACCINES

ACVIP : 2020 - 2021

What is Polio?

- ✦ Polio is a very serious and a highly infectious viral disease, that can cause paralysis of the limbs or other body parts. It is caused by any of three poliovirus serotypes (types 1, 2 or 3).
- ✦ It primarily affects children under five years of age.

The last reported case of wild polio in India was in West Bengal on 13 January 2011.

However, two neighboring countries, Pakistan and Afghanistan, are still reporting cases of Polio. Hence continued polio immunization is necessary to maintain high vaccination coverage in the community to protect against this deadly disease.

Which are the vaccines available against Polio and what are the schedules?

There are two types of vaccines:

- 1. Inactivated (Injectable) Polio Vaccine (IPV) –IPV** is given by injection and contains all the three virus serotypes PV1, PV2 and PV3. It is administered at 6 – 10 – 14 weeks with boosters at 15-18 months and at 4-5 years. IPV is often administered as a combination vaccine with DPT, Hib and Hepatitis B. The Indian Academy of Pediatrics recommends an all-IPV based schedule, with OPV given only at birth.

In the Universal Immunization Program (UIP) by Govt. of India, two doses of IPV are given at 6 and 14 weeks, within the layers of the skin (intradermally), mentioned in the card as fIPV, along with five doses of OPV to be given at birth, 6,10,14 weeks and at 15-18 months.

- 2. Oral Polio vaccine (OPV)** –given orally as drops and available as a bivalent formulation, containing serotypes 1 and 3.

Monovalent (containing only 1 type) OPVs are also available but not used routinely. They are reserved by Govt. for handling outbreak situations.

OPV is administered as 2 drops directly into the mouth. In the schedule of the Govt of India (UIP), it is recommended as a dose soon after birth and three more doses at 6, 10 and 14 weeks of age and a booster at 15-18 months. It is also used in supplementary immunization activity (Pulse Polio days).

All IPV/OPV immunized children should receive OPV on all “Pulse Polio” days till five years of age.

While IPV is the preferred vaccine, in situations wherein IPV is not available or feasible, the child should be offered three doses of OPV at 6-10-14 weeks. In such cases, the child should be referred for two fractional doses of IPV at a Government facility at 6 and 14 weeks.

Are these vaccines safe?

OPV is a safe vaccine. Very rarely, it might cause paralysis, a condition known as Vaccine-associated paralytic polio (VAPP) either in the vaccinated or in close contacts. The vaccine virus may revert to a disease-causing state and spread through the environment. This is known as Vaccine-derived polioviruses (VDPVs).

IPV is considered very safe, whether given alone or in combination with other vaccines. Minor adverse events are transient and include local redness (0.5%–1%), swelling (3%–11%) and pain (14%–29%)

Who should receive this vaccine?

All infants and children must receive this vaccine.

Who should not receive the vaccines?

- ✦ OPV should not be given to children with weakened immune systems caused by diseases (incl. HIV) or medications (prolonged high dose steroids/immunosuppressive therapies) and to individuals who had a severe allergic reaction to a previous dose of the vaccine like anaphylaxis or a known, severe allergy to any vaccine components.

For more information, please contact your doctor.