What is Polio?

Poliomyelitis (Polio) is a highly infectious disease that is caused when the polio virus invades the nervous system of an infected person. Polio can cause lameness and even death. There are three types of poliovirus – type 1, type 2, and type 3. There have been no cases of type 2 wild poliovirus reported since 1999 in the whole world.

How is Polio transmitted?

The Polio virus enters the body through the mouth, often with food or drinking water that is contaminated with faeces from a person who carries the Polio virus. The virus multiplies in the intestines and is passed through faeces.

What are the symptoms of Polio?

Polio symptoms include fever, fatigue, headache, vomiting, and stiffness in the neck, pain and weakness in the limbs, followed by paralysis usually in the arms of legs. If a child, adolescent, or adult suddenly shows signs of a weakness in the arms or legs, this must be reported immediately to the nearest health facility and/or health worker.
Who is most at risk of getting Polio?

Polio virus usually affects children under 5 years of age who are not fully immunised. Most children who are infected will show only minor symptoms but as many as 1 in 200 infected children will be paralysed. The virus can also affect or be carried by adolescents and adults.

Is there a cure for Polio?

No, there is no cure for Polio and the disease can cause severe lameness or kill an infected child. Polio can only be prevented through full immunisation.

How can Polio be prevented?

Polio can be prevented by immunising all children under 1 year of age with Polio vaccines. Since 1988, when the Global Polio Eradication Initiative was formed, the world wide number of new cases has been reduced by more than 99%, and the number of countries with endemic Polio transmission has fallen from 125 to 3: Pakistan, Afghanistan and Nigeria. Every Polio-free country in the world eliminated Polio through the use of the Oral Polio Vaccine (OPV). However, all countries remain at risk of Polio re-infection or re-emergence, until the disease has been eradicated everywhere.

In an effort to wipe out Polio worldwide there will now be a combined use of the Oral Polio Vaccine (OPV) and the Injectable Polio Vaccine (IPV) to strengthen children’s immunity to protect themselves against Polio.
Why is Injectable Polio Vaccine (IPV) being introduced?

Thanks to the power of vaccines, a comprehensive approach is being adopted for achieving Polio eradication and elimination of all Polio disease.

Since the Global Polio Eradication Initiative was formed in 1988, the incidence of Polio has been reduced by 99% worldwide, from more than 350,000 cases every year to 416 cases in 2013. This progress is thanks to large-scale use of Oral Polio Vaccine (OPV) and its unique ability to build immunity, required to interrupt person-to-person spread of the virus.

To capitalise on this progress, the global community has put together a plan to secure a lasting Polio-free world – the Polio Eradication and Endgame Strategic Plan 2013-2018.

Although IPV has a limited capacity to induce immunity when used alone, new evidence shows that when used together, OPV and IPV can strengthen immunity even more effectively than OPV alone.
By introducing IPV into routine immunisation, and used alongside OPV:

- Polio-free countries are better protected against Polio re-infection or re-emergence
- Children are better protected from all Polio viruses
- Eradication of remaining strains of Wild Polio Virus transmission will be accelerated

**How is Injectable Polio Vaccine (IPV) administered?**

IPV is given as an injection on the right thigh of the child.

**What is the difference between IPV and OPV?**

Both vaccines protect children from lifelong Polio lameness and possibly death. Oral Polio Vaccine (OPV) is able to build immunity, required in the body to stop person-to-person spread of the virus (necessary for eradication). However, new evidence shows that when IPV is used together with OPV, it is even better at building immunity in the body, than when OPV is used alone, thereby both increasing protection to the individual and to the community. To maximise childhood immunity and accelerate eradication, both vaccines should be used together.
Is IPV safe?

Yes, IPV is considered very safe, whether given alone or in combination with other vaccines. It protects children against all three strains of Poliovirus, and when used together with OPV, can boost immunity.

Are there any potential serious side effects?

No serious side effects have ever been reported following vaccination with IPV, including when used alone or in combination with other vaccines. Minor local reactions, such as redness and tenderness, may occur following IPV administration.

Is it safe to receive both Polio vaccines at the same time?

Both IPV and OPV can be administered to the child at the same time. It is in the best interests of the child to receive both vaccines at the same time to maximise protection against Polio and minimise missed opportunities to fully immunise children.

Can IPV be given along with other injections in one visit?

Many years of monitoring children in many countries that have received multiple injections in one visit have shown that it is safe to have multiple injections at the one time. Most middle and high-income countries have been safely using multiple injections for more than a decade. The IPV vaccine is effective when taken alone or with other vaccinations. It is better for a child to experience one brief moment of discomfort than pain on two separate days/visits.
How many doses of IPV are needed?

At least one dose of IPV should be given to the child in addition to multiple doses of OPV, as part of routine immunisation activities. Ask your health worker for details of the routine immunisation schedule to ensure that your child is immunised at the right time.

Should the child continue to receive OPV after receiving IPV, when offered in the future?

Yes, until Polio is eradicated in the whole world, IPV should be used together with OPV. OPV is extremely safe and effective at protecting children against lifelong Polio lameness and possibly death. Over the past 10 years, more than 10 billion doses of OPV have been given to nearly three billion children worldwide. More than 10 million cases of Polio have been prevented, and the disease has been reduced by more than 99%. It is the appropriate vaccine through which to achieve global polio eradication.

Is IPV better than OPV?

No. Each vaccine has its own strengths. Used in combination, it provides the best protection for populations and will accelerate the eradication of the remaining Polio strains worldwide.