

Job aide on the switch from trivalent OPV to bivalent OPV

We are close to the eradication of polio. Immunization efforts have reduced the number of polio cases globally by more than 99% over the last two decades. The transition from trivalent OPV to bivalent OPV is part of the polio eradication strategy.

There are 3 types of poliovirus (1, 2, and 3). **Type 2 wild poliovirus has already been eradicated** – there has not been a case of type 2 wild poliovirus detected globally since 1999.

Oral Polio Vaccine (OPV)	Inactivated Polio Vaccine (IPV)
Administered by drops	Administered by injection
Contains <i>live, weakened virus</i>	Contains <i>killed virus</i>
Provides immunity through the gut and associated herd immunity	Provides immunity through the blood
Trivalent OPV (tOPV) protects against types 1, 2, and 3	Should be used in all routine immunization schedules worldwide by the end of 2015
Bivalent OPV (bOPV) protects against types 1 and 3	IPV protects against types 1, 2, and 3

Used together, OPV and IPV provide the best form of protection in the final stages of polio eradication.

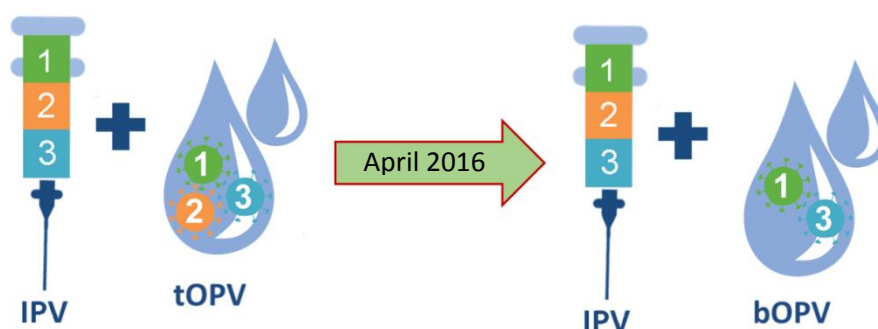
Why does the world need to switch from trivalent OPV to bivalent OPV?

OPV contains live but weakened virus, which in very rare cases, can genetically revert to an active form of virus (**circulating vaccine-derived poliovirus, cVDPV**) and, in even rarer cases, can cause paralysis (**vaccine-associated paralytic polio, VAPP**).

To fully eradicate polio, we need to eliminate vaccine-derived polioviruses by gradually phasing out OPV entirely, starting with the removal of the type 2 component of tOPV.

There is no longer any circulating type 2 wild poliovirus, therefore the risks associated with the type 2 component of tOPV now outweigh the benefits:

- Type 2 component of tOPV causes around 40% of VAPP and over 90% of cVDPV cases.
- Type 2 component of tOPV interferes with immune response to types 1 and types 3.



The type 2 component of tOPV causes the majority of cVDPV cases.

bOPV has a lower risk of cVDPVs.

The switch is a globally synchronized event: In April 2016, every health worker, in every facility, in every country using OPV, will contribute to a major milestone on the road to polio eradication.

What is YOUR role as a health worker in the switch?

1. Ensure bOPV is available at vaccination points
2. Use **ONLY bOPV after the switch day in April 2016**. Any place that continues to use tOPV after this day is at risk of generating and exporting type 2 cVDPVs, potentially putting its neighbours at risk.
3. **Ensure tOPV is properly disposed of**. On the switch day, take all tOPV out of the cold chain (both opened and unopened vials), place tOPV in a specifically marked bag, and dispose of tOPV vials as instructed by the vaccination programme.
4. Be prepared to answer questions about the switch

What are the key messages related to this change?

- The general public may not be aware that there are 3 types of polioviruses, and the change of vaccine may not be noticeable to caregivers – therefore, you may not be asked about the switch.
- If asked, you can reassure caregivers and the public that **this combination of IPV and OPV will keep their children and community safe from polio**.
- **bOPV simply replaces tOPV**: bOPV follows the same immunization schedule as tOPV, has the same attributes for administration as tOPV, and can come after tOPV in schedules.

Frequently Asked Questions:

Q: Will children have protection from wild poliovirus type 2 or from type 2 VDPVs after the switch from tOPV to bOPV? How will they be protected from type 2 polioviruses?

A: IPV will help to protect children against poliovirus types 1, 2, and 3.

After the switch from tOPV to bOPV, IPV will help to boost protection against paralytic polio caused by the type 2 poliovirus, and offer additional protection against types 1 and 3.

Q: What if a child received one type of OPV before and is getting the new type of OPV now? Is it ok to combine these vaccines?

A: Both types of OPV are extremely safe vaccines, and can be given to the same child at different visits.

Thanks to the addition of the injectable polio vaccine in programmes, the infant will still be protected against paralytic polio from all 3 types of poliovirus

Q: If countries have unused supplies or inventories of tOPV after the switch date, can they first use those supplies before making the switch to bOPV?

A: No. All countries, and all health facilities, must stop using tOPV on the switch day and any remaining tOPV stock must be destroyed. Any area continuing to use tOPV after all others have switched to bOPV puts neighboring communities at risk of a cVDPV2 outbreak.