

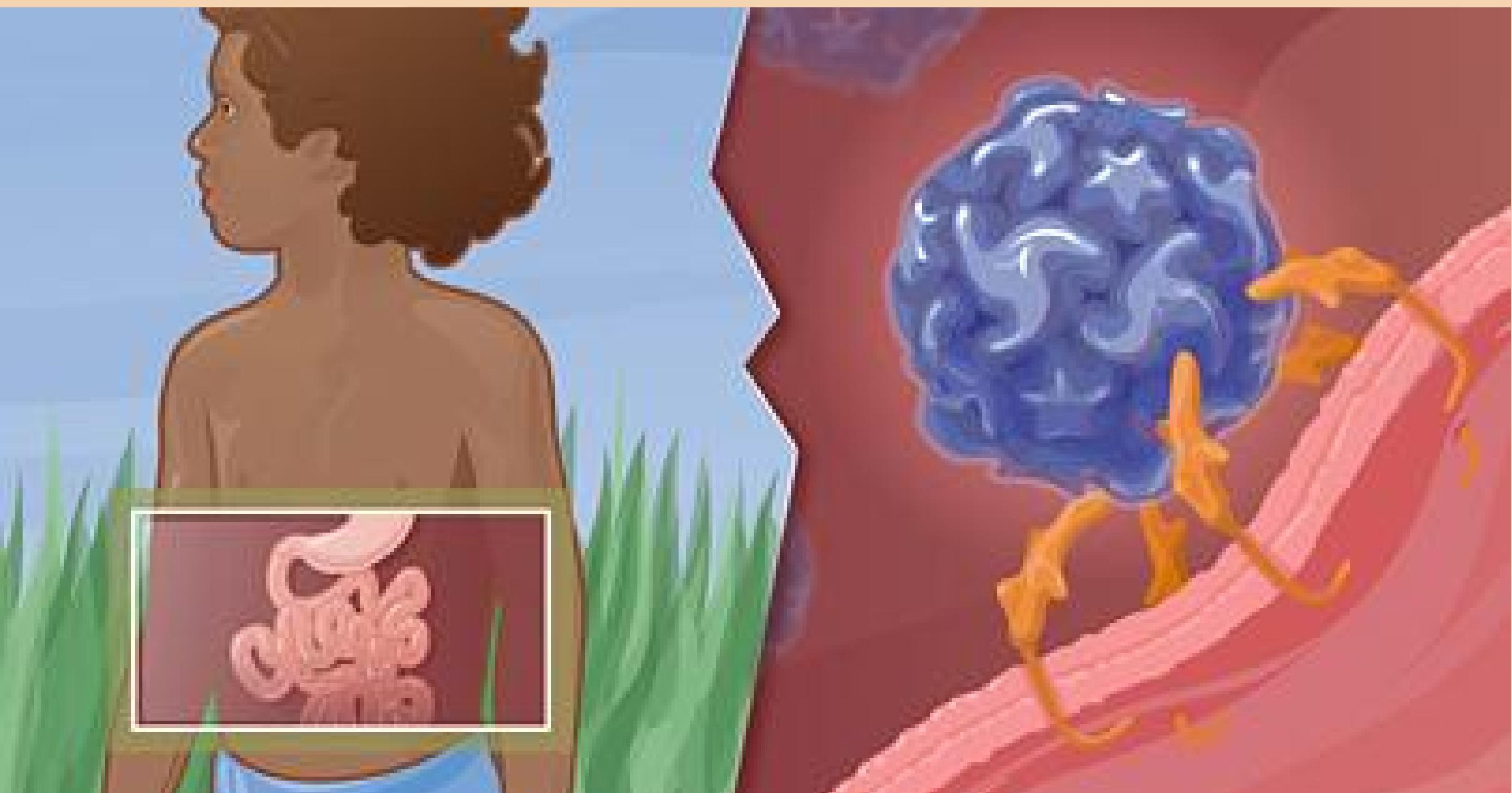
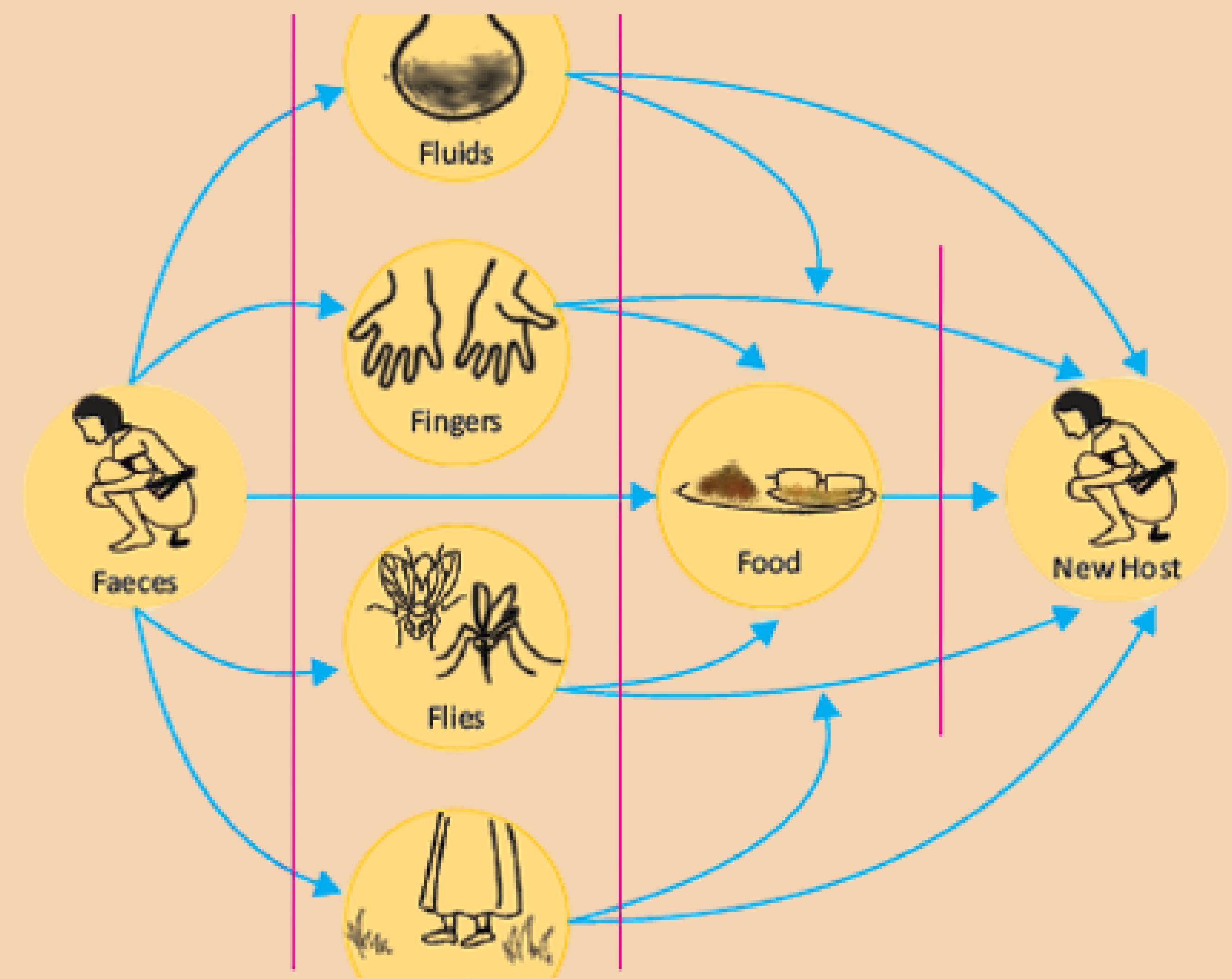
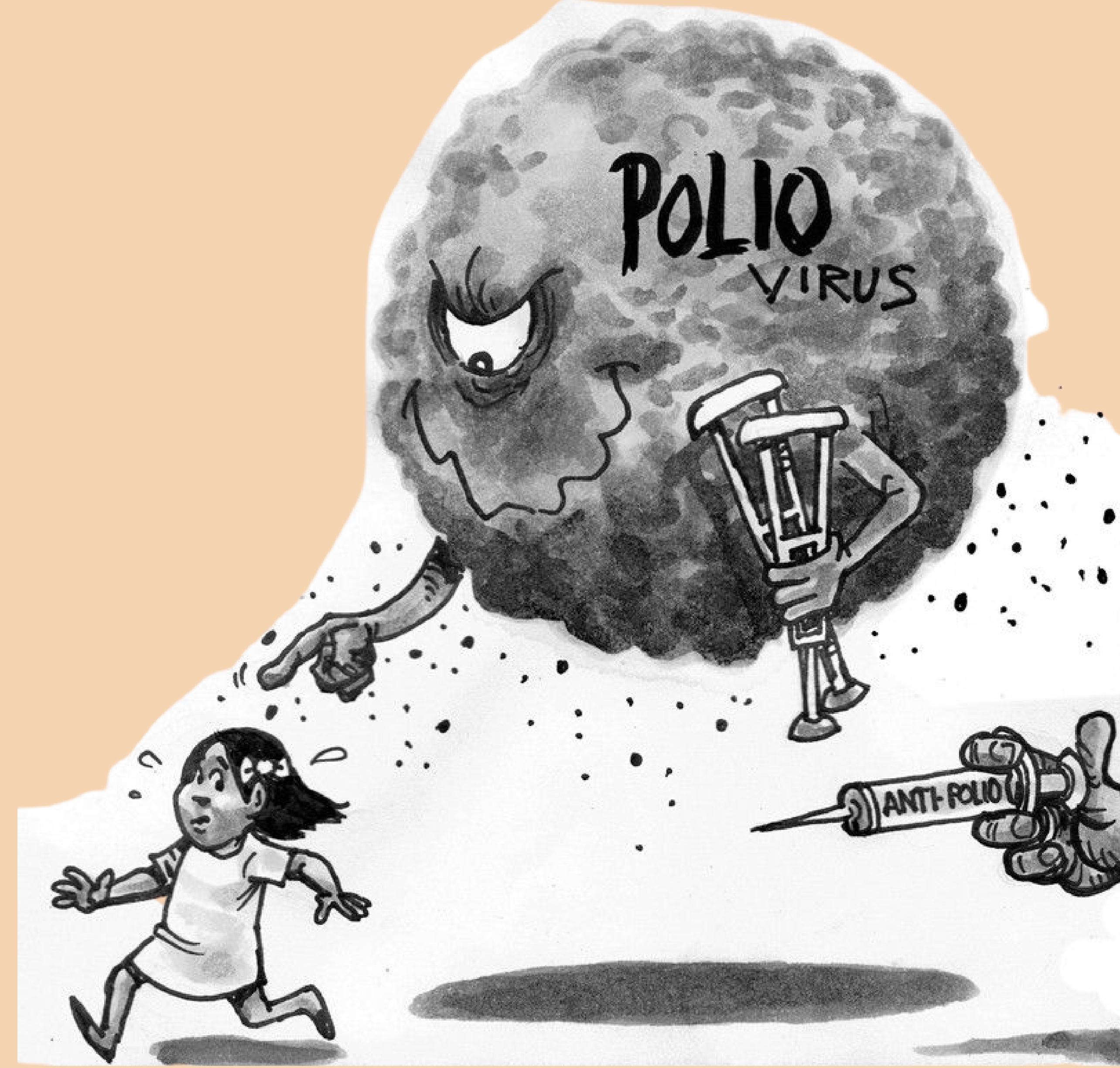
ANTI-POLIO DRIVE



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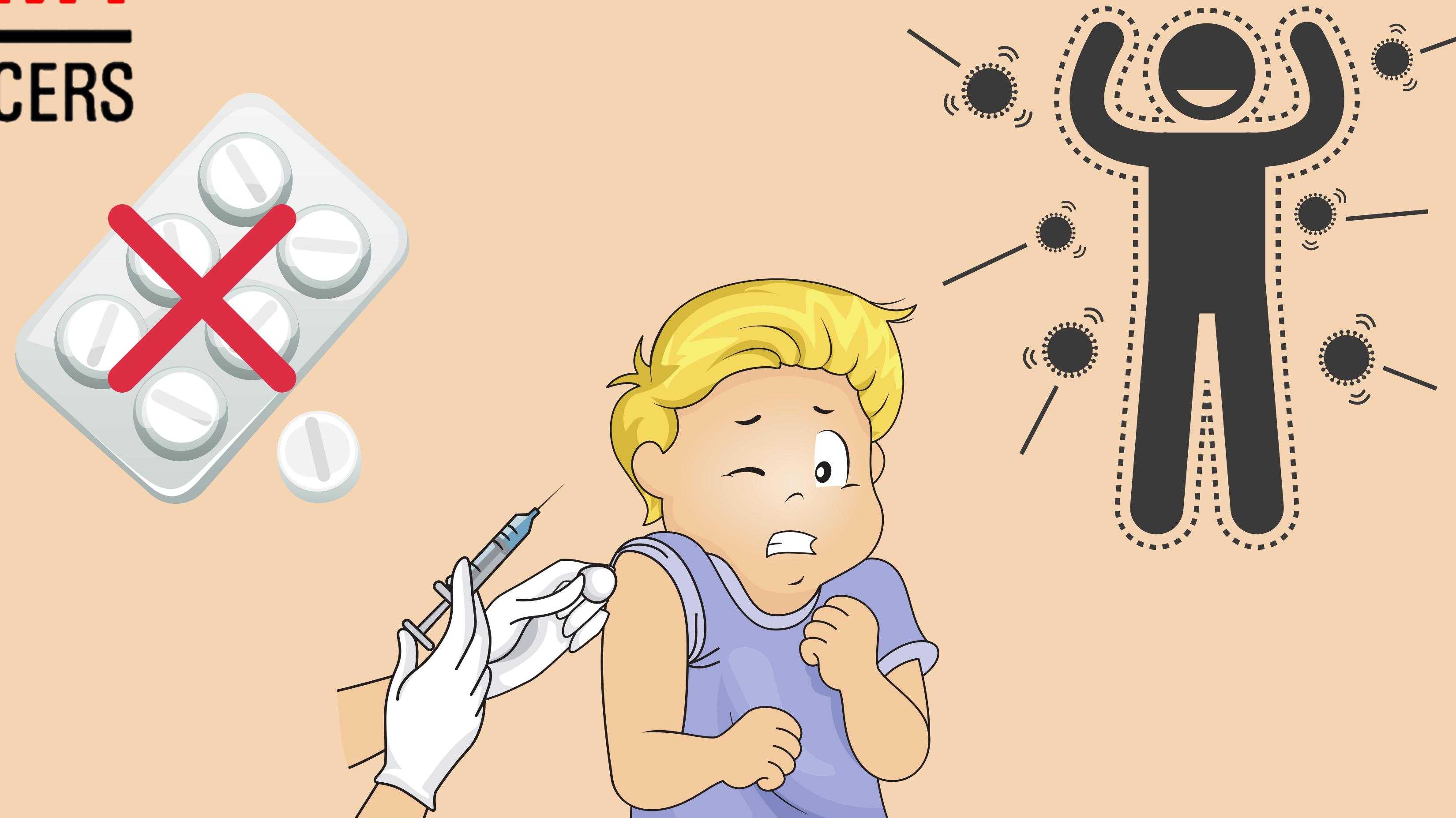
WHAT IS POLIO?

Poliomyelitis (polio) is a highly infectious **viral disease** caused by the Polio virus which mainly affects young children.



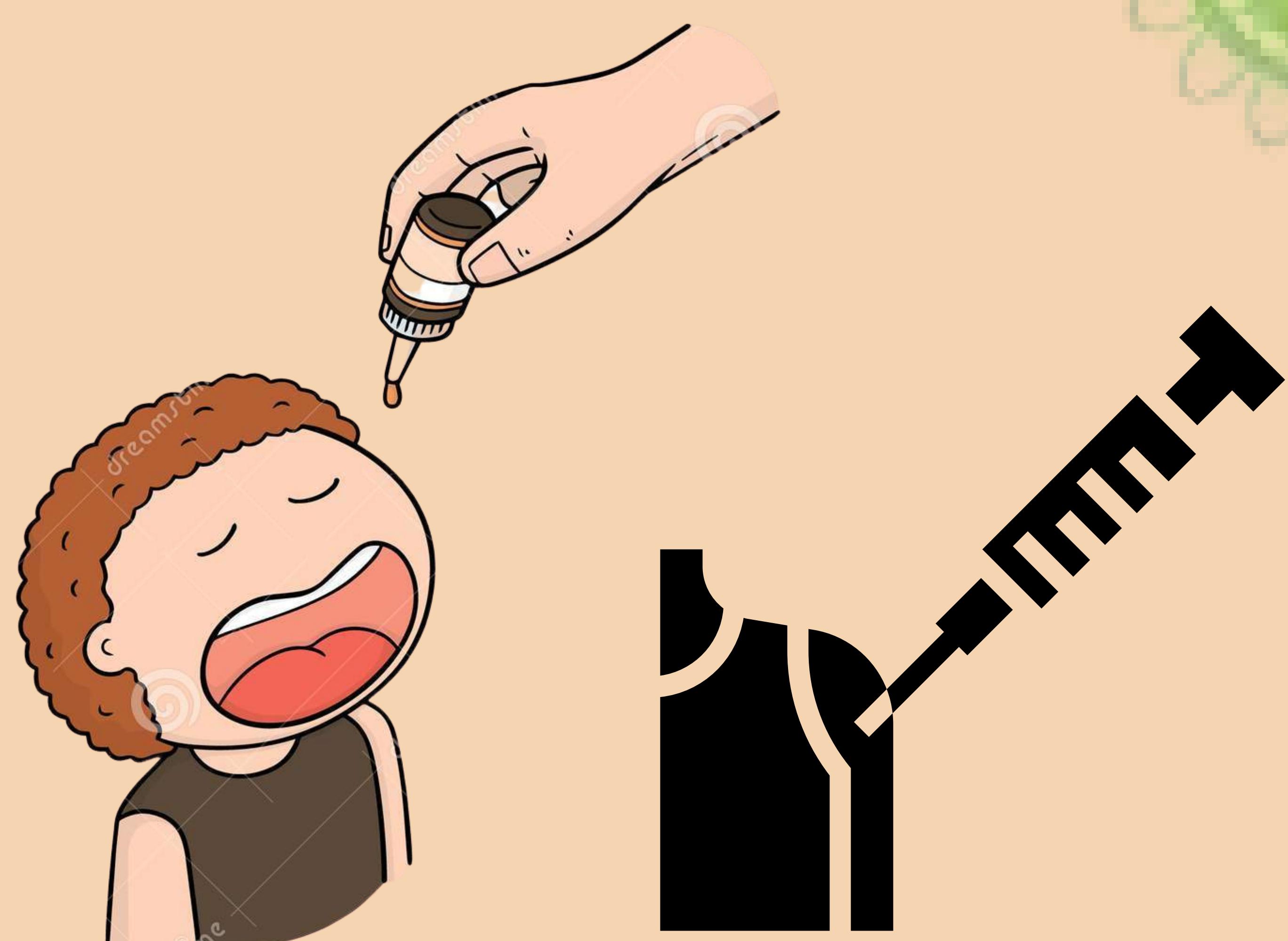
The virus is transmitted by person-to-person spread mainly through the **faecal-oral route or, less frequently, by a common vehicle** (e.g. contaminated water or food) and multiplies in the intestine, from where it can invade the nervous system.

**There is no cure for polio,
it can only be prevented
by immunization.**



ABOUT POLIO VACCINE

There are **three wild types of poliovirus (WPV)** – type 1, type 2, and type 3.

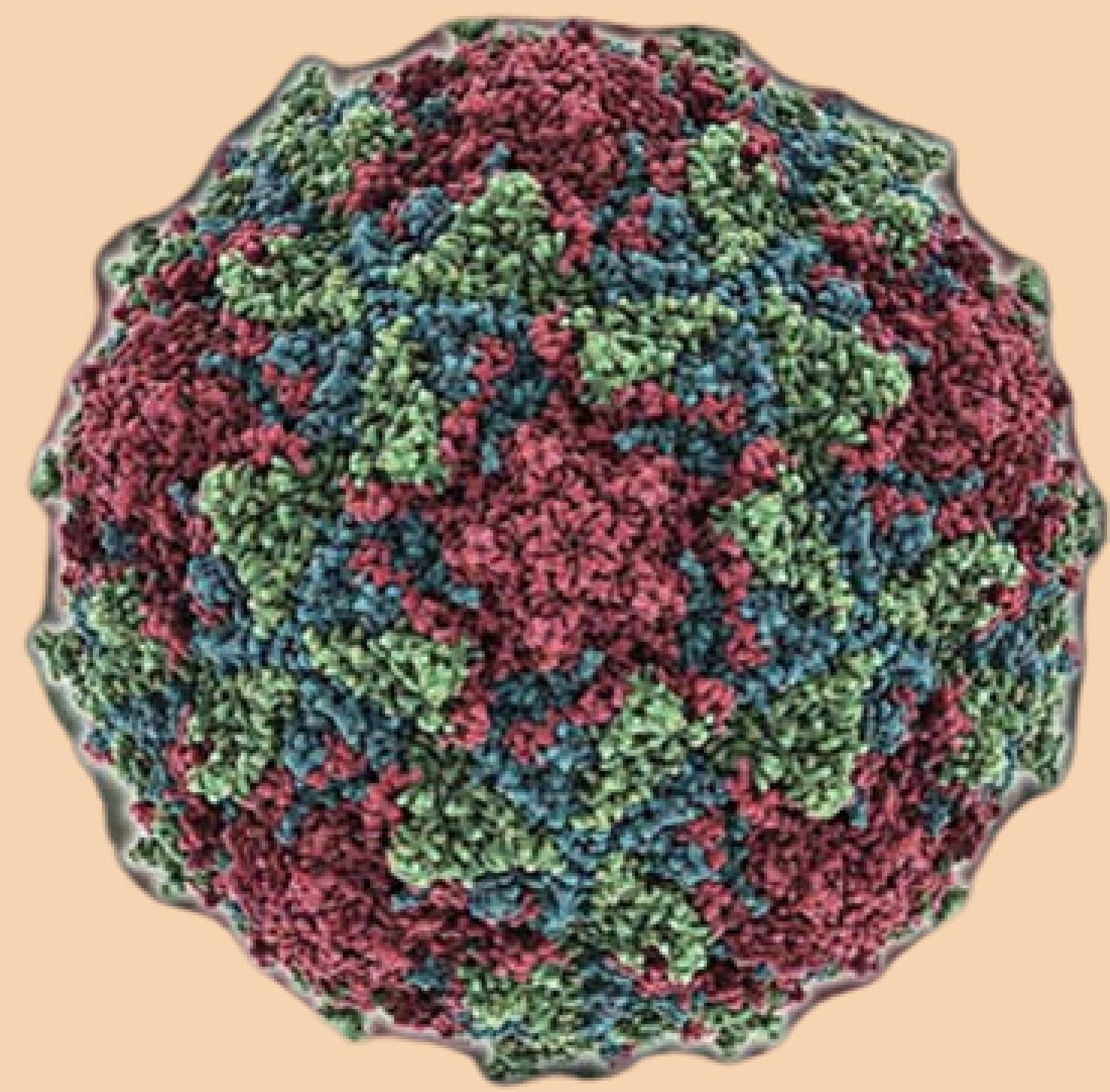


There are two vaccines used to protect against polio disease, **oral polio vaccine (OPV)** and **inactivated poliovirus vaccine (IPV)**.

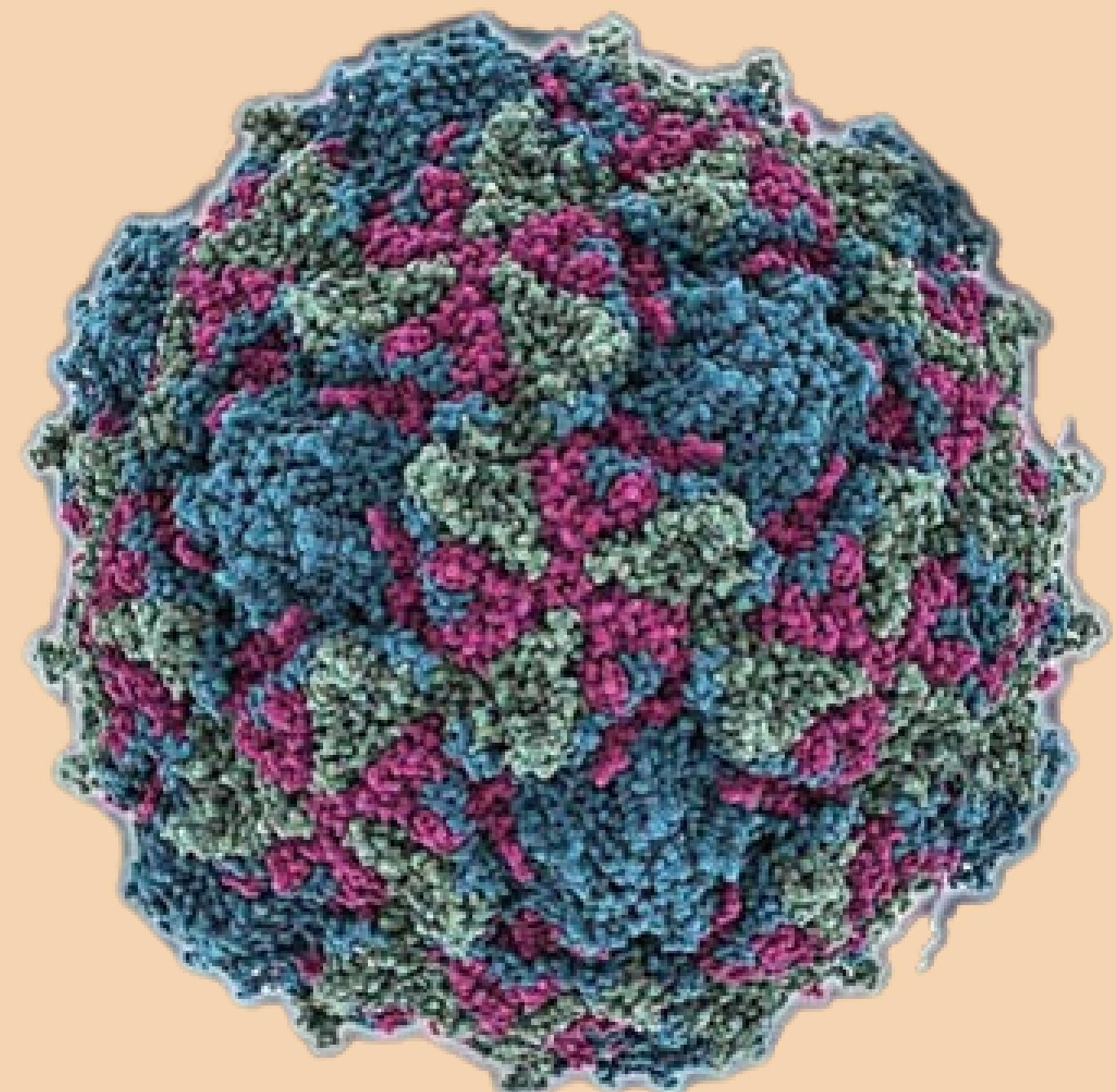
After wild poliovirus type 2 was declared eradicated in 2015, the world switched from trivalent to bivalent OPV. Trivalent OPV contains all three types of poliovirus, while bivalent OPV only contains poliovirus type 1 and 3.



Type 2



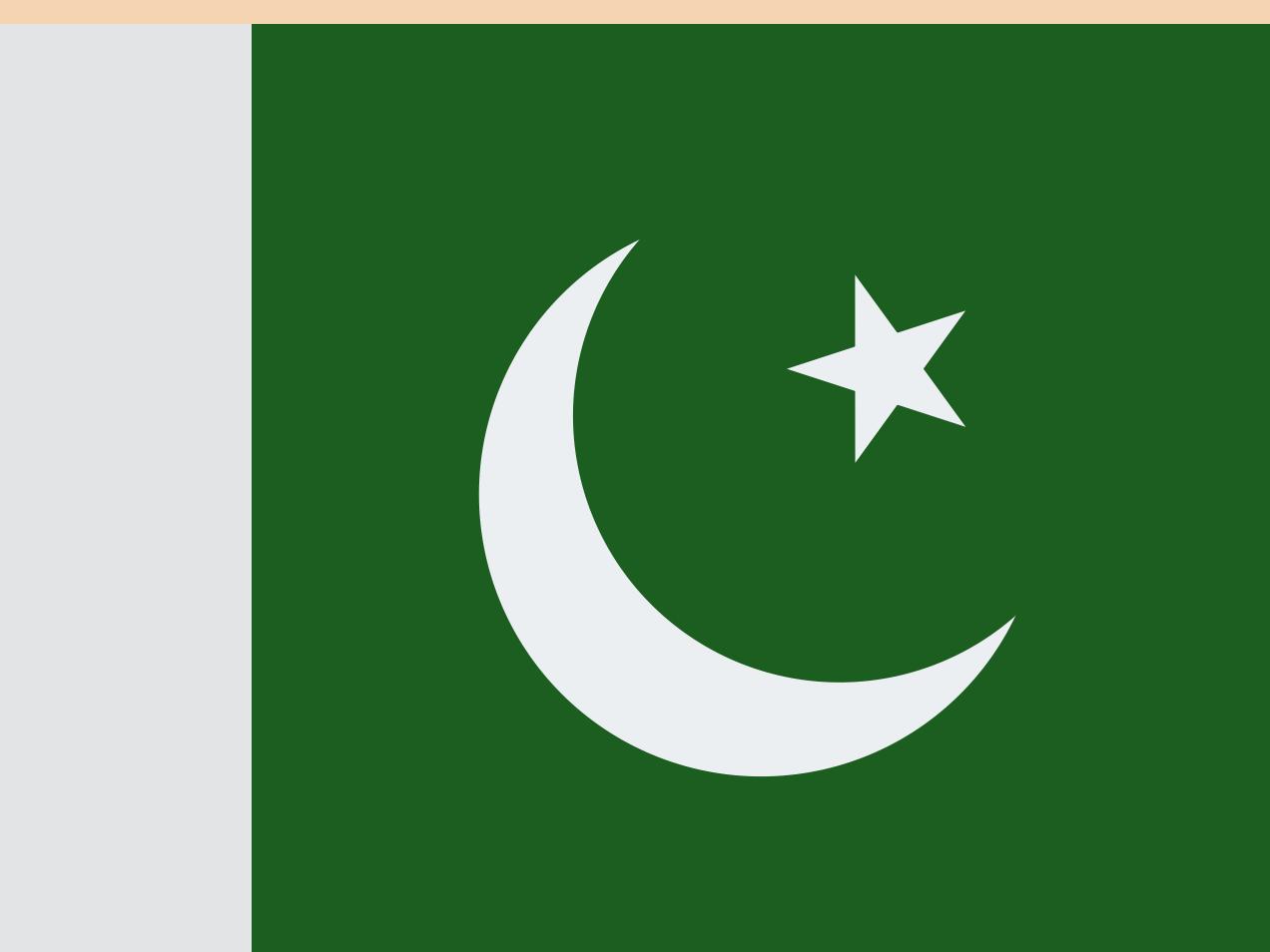
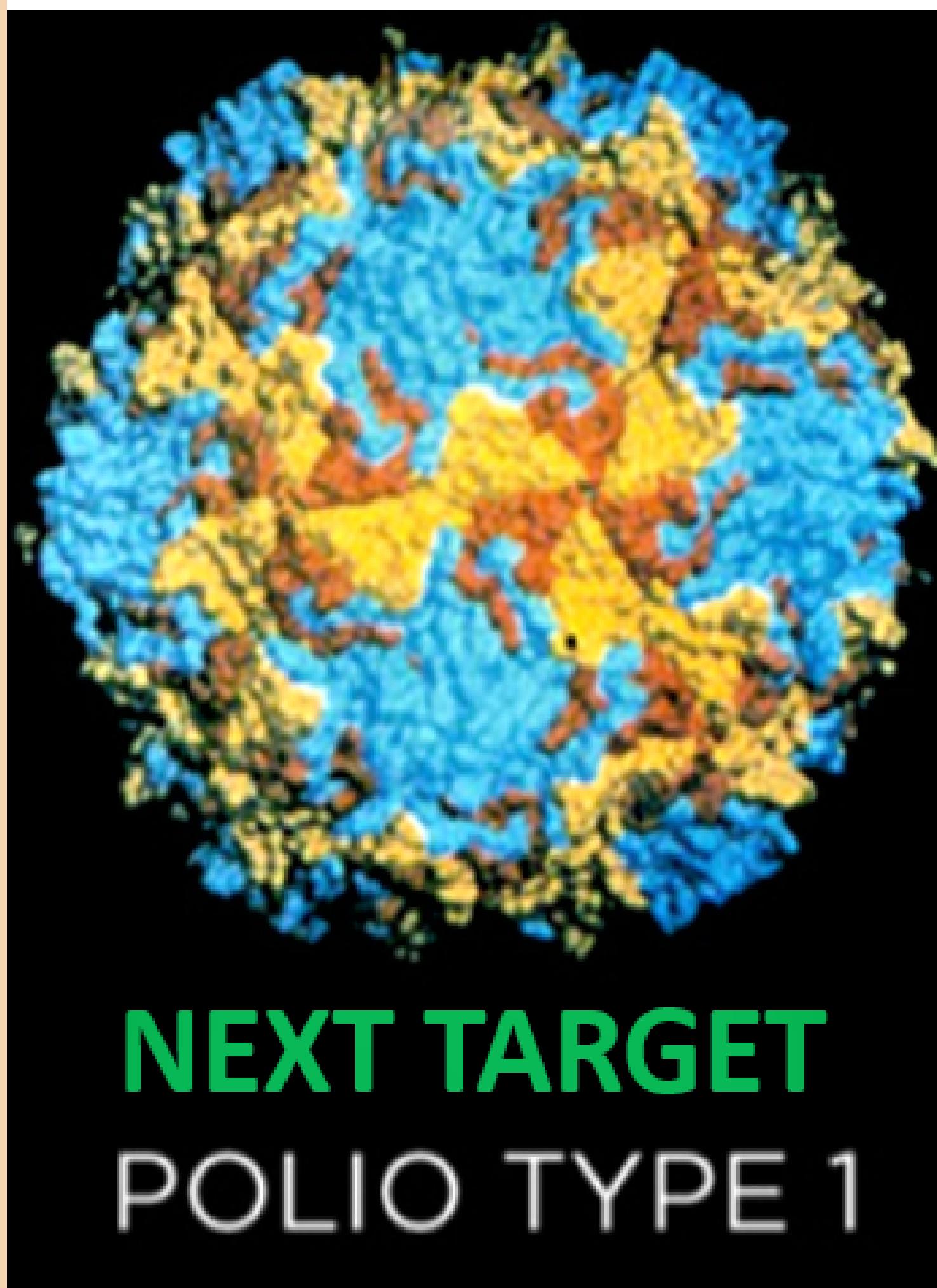
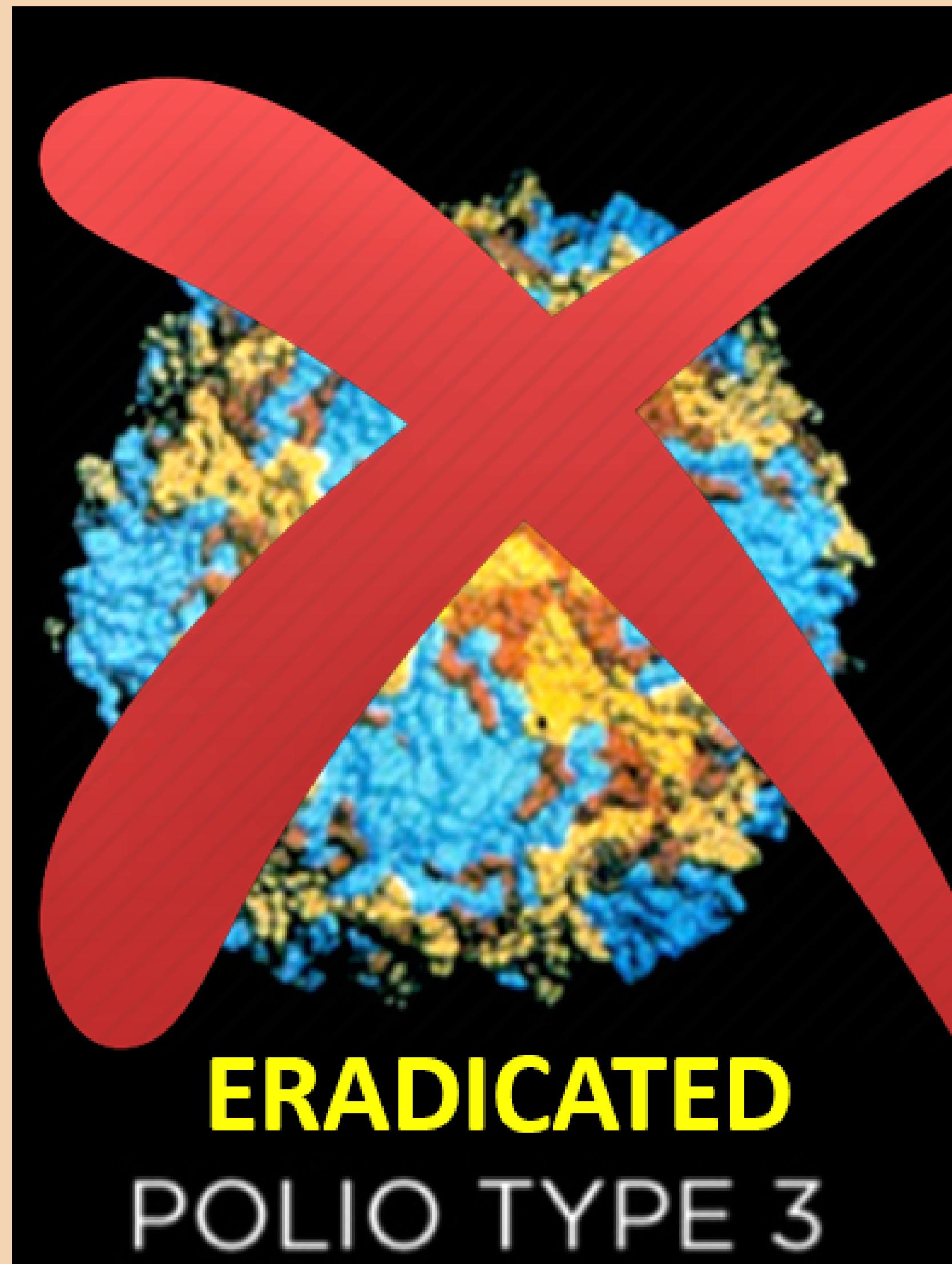
Type 1



Type 3

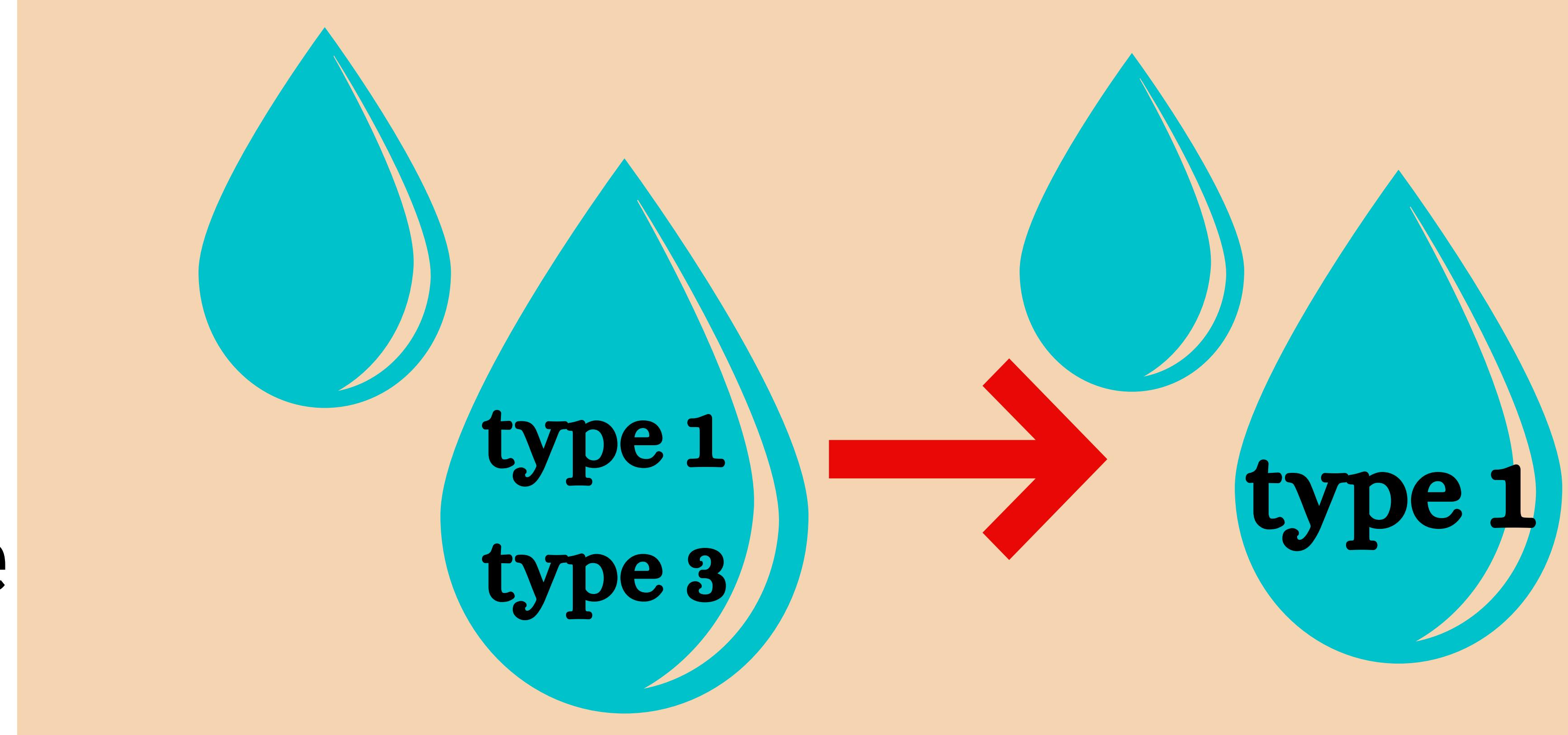
WHY IN NEWS?

Global Commission for the Certification of Poliomyelitis Eradication officially declared that wild poliovirus type 3 has been eradicated globally.



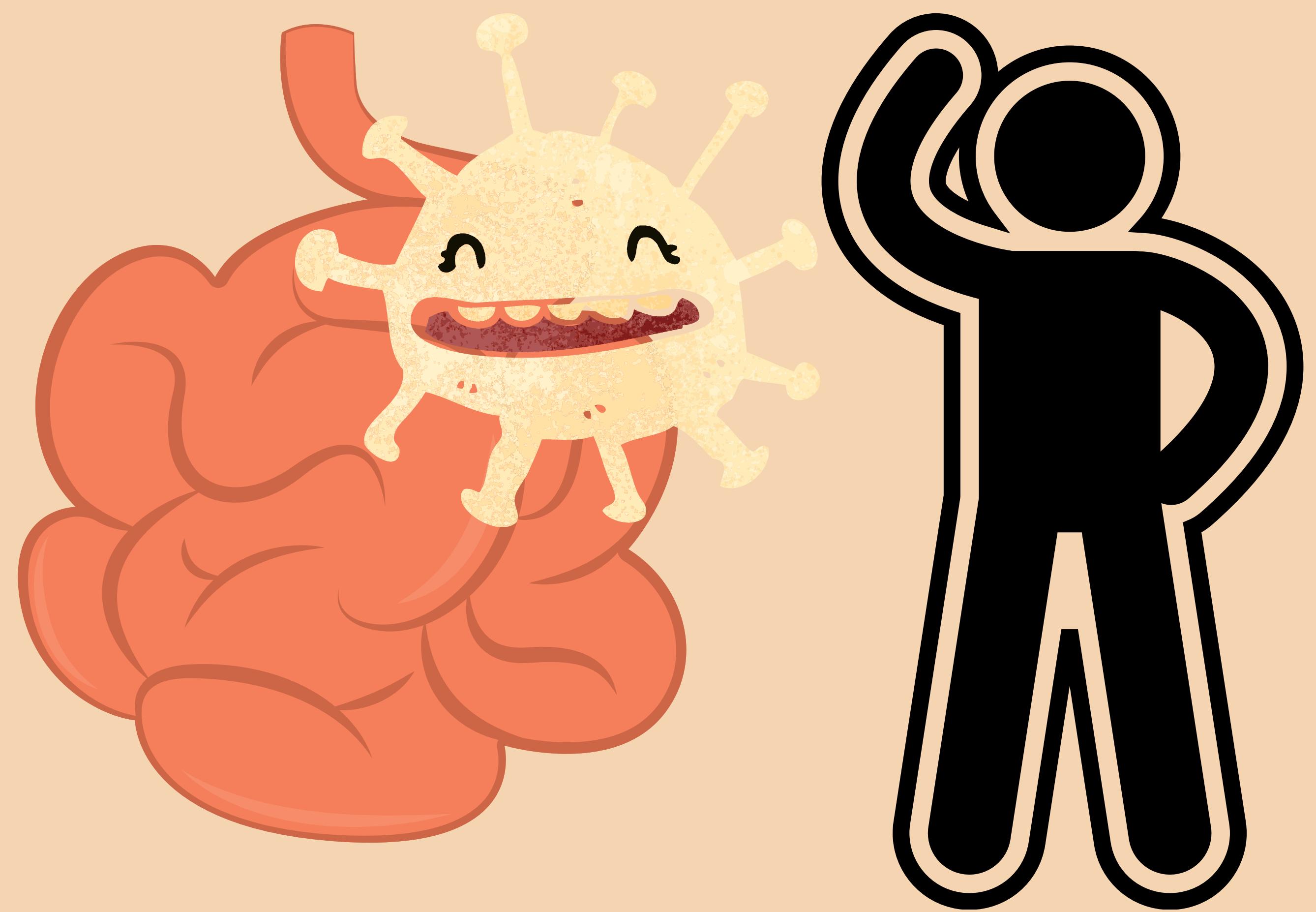
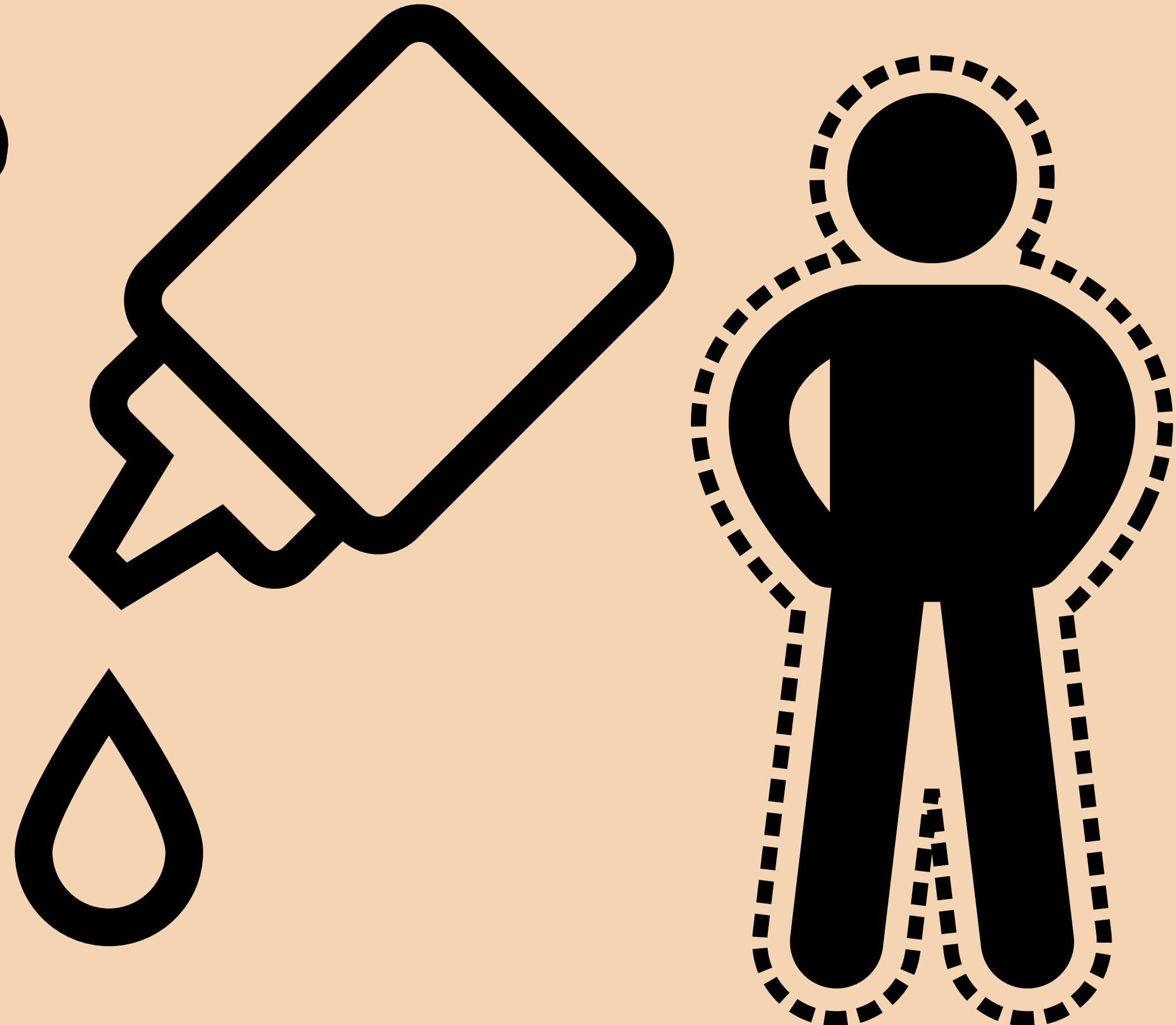
With two of the three wild polioviruses eliminated, only type 1 wild poliovirus is still in circulation and is **restricted to just two countries** – Afghanistan and Pakistan.

It opens up the possibility of switching from the currently used bivalent oral polio vaccine containing type 1 and type 3 to a monovalent vaccine containing only type 1.



VACCINE DERIVED POLIO

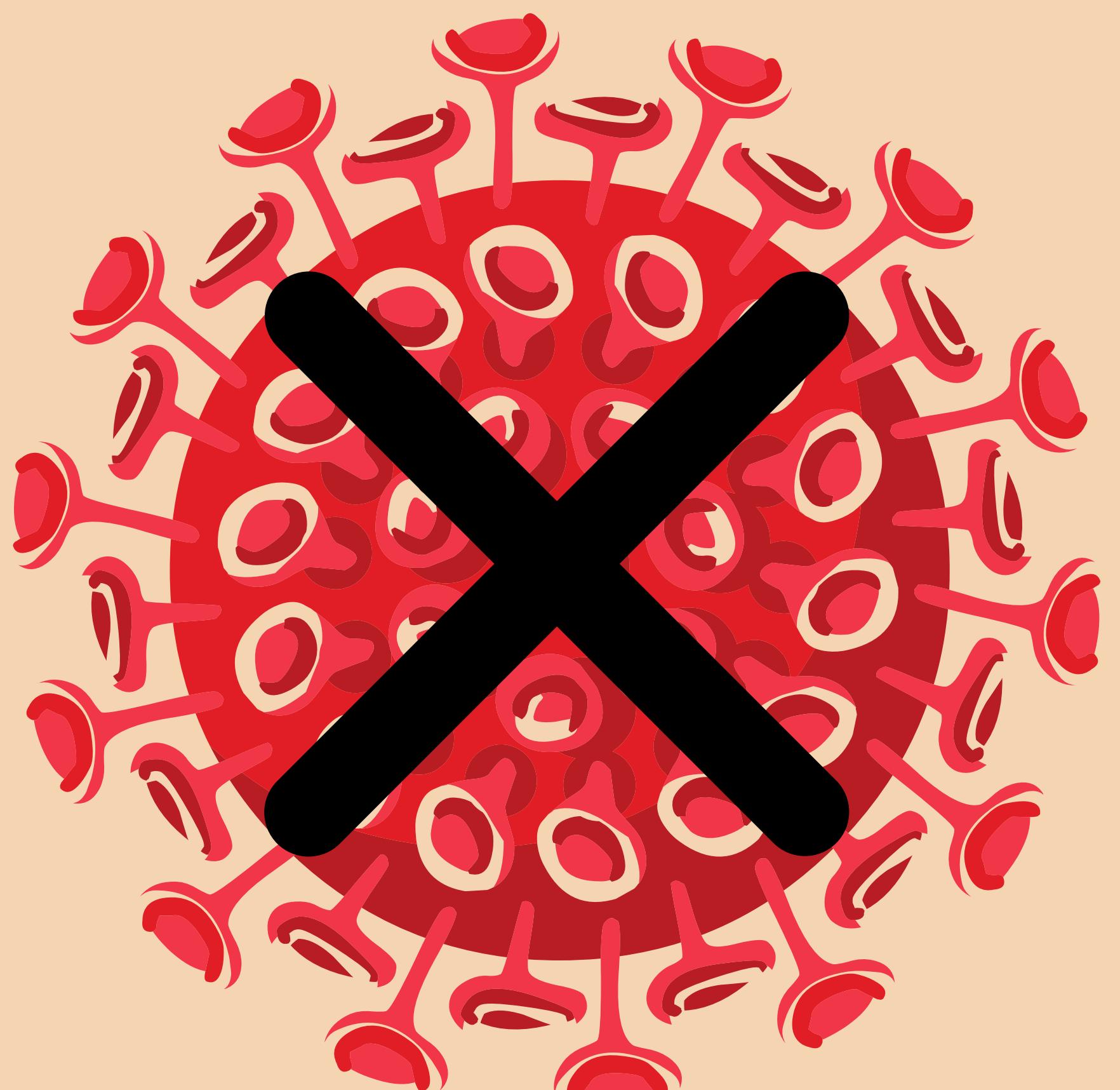
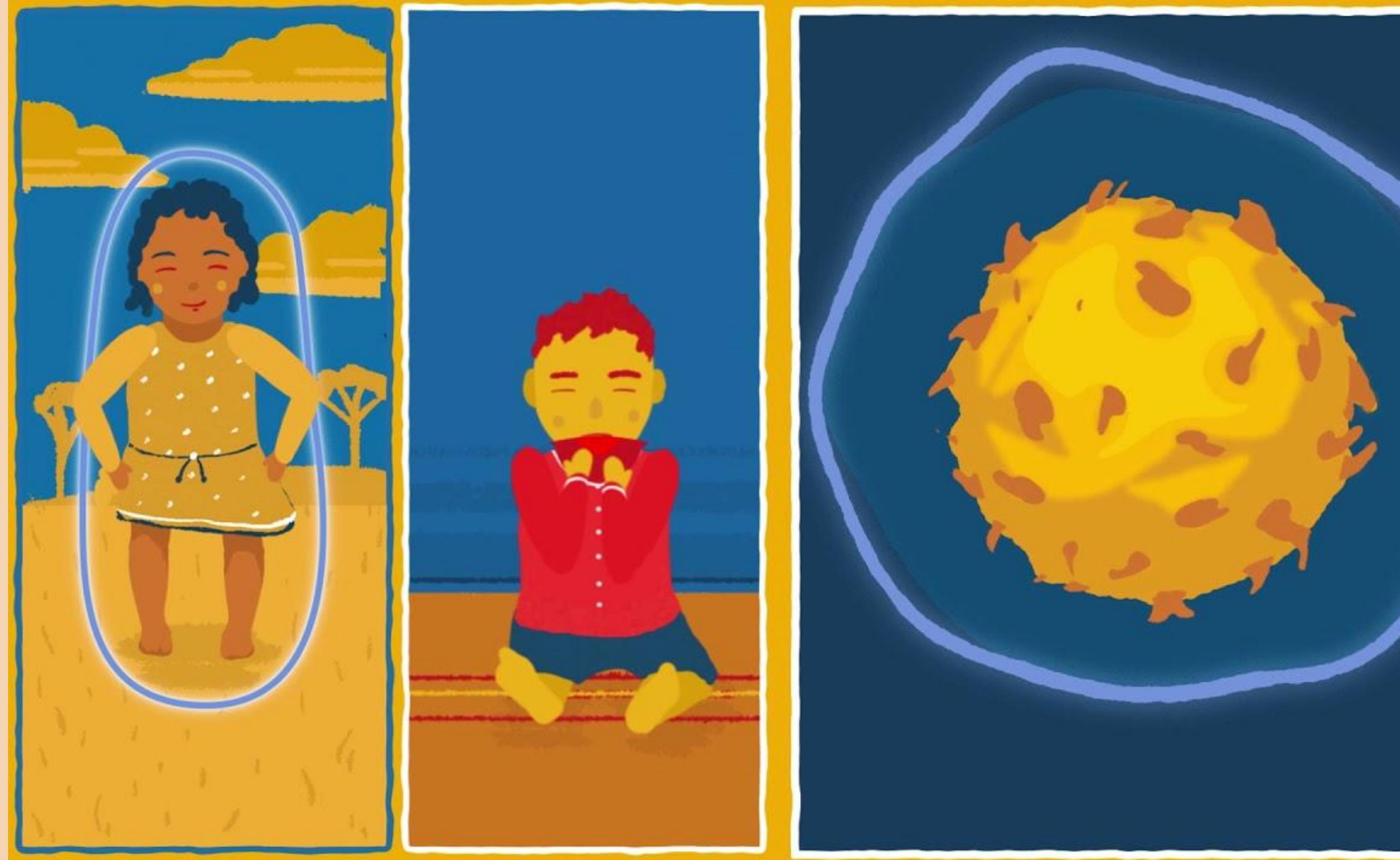
Oral polio vaccine contains attenuated (weakened) vaccine-virus, activating an immune response in the body.



When a child is immunized with OPV, the weakened vaccine-virus replicates in the intestine for a limited period, thereby developing immunity by building up antibodies.

During this time, the vaccine-virus is also excreted. In areas of inadequate sanitation, this excreted vaccine-virus can spread in the immediate community, before eventually dying out.

On rare occasions, if a **population** is seriously under-immunized, the vaccine-virus can genetically change into a form that can paralyse – known as a circulating vaccine-derived poliovirus (cVDPV) which causes Vaccine derived Polio.



This condition doesn't happen with Inactivated Poliovirus Vaccine as it doesn't contain live viruses.