Vaccine-Derived Polio Detected

Source: TH

Recently, a child from Meghalaya was diagnosed with vaccine-derived polio (VDP).

- VDP occurs when the weakened (attenuated) strain of poliovirus used in the <u>oral polio vaccine</u> (OPV) mutates and regains the ability to cause <u>paralysis</u>.
- VDP typically occurs in areas with low <u>immunisation</u> coverage, poor sanitation, or among **immunocompromised** individuals.
- More than 90% of VDP outbreaks are due to the <u>Wild poliovirus type 2 (WPV2)</u> present in OPV.
- The Indian government does not count vaccine-associated paralytic poliomyelitis (VAPP) as polio since these cases are sporadic and pose little or no threat to others.
- The WHO declared India polio-free in 2014. This case does not jeopardise India's polio-free status.
- Types of Poliovirus: WPV1, WPV2, and WPV3 are three types of wild polioviruses (naturally occurring), with identical symptoms but different genetic structures.
 - WPV2 and WPV3 were eradicated in 2015 and 2019 respectively with ongoing global efforts to eradicate WPV1.
 - Currently, wild poliovirus is endemic in Pakistan and Afghanistan.
- Inactivated Polio Vaccine (IPV) was developed by Jonas Salk using an inactivated virus while Oral Polio Vaccine (OPV) was developed by Albert Sabin, containing a live, attenuated virus.

What is polio

 Poliomyelitis (polio) is a highly infectious viral disease, mainly affecting children

 According to WHO, the virus is transmitted from person-to-person, mainly through the faecal-oral route

STRAINS

There are three types of polio virus strains — P1, P2 and P3

P2 was eradicated globally in 1999

 India attained a polio free status in 2014 after successfully eliminating the wild P1 and P3 strains



VACCINATION SCHEDULE OPV: At 6 weeks, 10 weeks and 14 weeks IPV: At 6 weeks and 14 weeks OPV booster: Between

16 and 24 months

Read More: Polio Eradication

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