

Recommendations for Reporting on Poliovirus Outbreaks

A media guide for journalists writing about circulating vaccine-derived polioviruses (cVDPVs) and polio eradication.



OVERVIEW

The media have an important role to play in communicating about one of the most complex challenges facing global polio eradication efforts: the spread of variant poliovirus outbreaks in areas where immunization rates are low. This guide is intended to support media reporting on cVDPVs to ensure coverage does not inadvertently cause vaccine hesitancy, mistrust, or other unintended adverse consequences to public health and use of polio vaccines. Vaccination efforts that achieve and maintain a high level of coverage (85% or higher) within at-risk populations are critical to stopping all forms of polio and finally achieving eradication of the disease.

CVDPVS: ASKED AND ANSWERED

What are cVDPVs? A child cannot get cVDPV infection from receiving a polio vaccine. cVDPVs are variant polioviruses that emerge when not enough children are vaccinated against polio, and the weakened strain of the poliovirus contained in the oral polio vaccine (OPV) circulates among under-immunized populations for a long time in areas with poor sanitary conditions. The weakened strains are shed by vaccinated children into the environment via their digestive systems and can pass from one unvaccinated individual to another, a process exacerbated by poor sanitation systems and the absence of clean drinking water. Over time, genetic changes in the virus can result in reversion to a form that can cause paralysis. cVDPVs are different from wild polioviruses, which now only circulate in Pakistan and Afghanistan. The rise in cVDPV cases, however, poses a risk to children, threaten eradication efforts and, just like wild polio, must be stopped.

What causes cVDPV outbreaks? cVDPV outbreaks are caused by community-level immunity gaps, where both routine immunization and door-to-door campaigns have failed to reach some children for many years. These gaps could be due to several factors, such as weak routine immunization programs, poor campaign quality, insecurity

KEY TERMS AND DEFINITIONS

WPV - Wild Poliovirus

The wild form of polio, a highly infectious viral disease that can invade the nervous system to cause paralysis. Wild polio is endemic in just two countries – Pakistan and Afghanistan – though a case linked to Pakistan was also detected in Malawi in February 2022.

cVDPV - Circulating Vaccine Derived Poliovirus

cVDPVs are variant polioviruses that can emerge if the weakened live virus contained in oral polio vaccine, shed by vaccinated children, is allowed to circulate in under-immunized populations for long enough to genetically revert to a version that causes paralysis.

OPV - Oral Polio Vaccine

A safe and effective vaccine that contains a combination of one, two or three strains of live, weakened poliovirus and is easily delivered via two oral droplets.

mOPV2 - Monovalent Oral Polio Vaccine Type 2

An oral polio vaccine that provides protection against type 2 polio virus, one of the three polio strains.

nOPV2 - Novel Oral Polio Vaccine Type 2

A next generation version of mOPV2 that clinical trials have shown is more genetically stable and could help stop cVDPV2 outbreaks in a more sustainable way.

IPV - Inactivated Polio Vaccine

A safe and effective vaccine that contains inactivated versions of all three poliovirus strains. It protects against paralysis and is delivered via an injection by a trained health worker.

See “Fiction vs. Fact” on [page 2](#) or [GPEI Media](#)

and civil conflict, vaccine hesitancy due to misinformation, and issues accessing high-risk groups such as mobile populations. About 90% of cVDPV outbreaks are caused by type 2 cVDPV.

- In 2020, the March-July suspension of polio campaigns to protect communities and staff from COVID-19, coupled with related disruptions to routine immunization, created immunity gaps that led to new outbreaks of cVDPVs and further increased transmission of cVDPVs globally.

Where are outbreaks happening? Most cVDPV outbreaks are in Africa, although there are also cases in parts of Asia, the Middle East and Eastern Europe. For the latest cVDPV case counts, see the [GPEI's cVDPVs page](#).

How are outbreaks stopped? As with wild polio, outbreaks of cVDPVs are stopped by ensuring every child is reached with oral polio vaccine through high-quality immunization campaigns to close immunity gaps. Fast, high-quality vaccination campaigns using type 2 monovalent OPV (mOPV2) have stopped cVDPV2 outbreaks previously. The vaccine continues to be a safe, effective tool for outbreak response across the continent. In addition, the [novel oral polio vaccine type 2 \(nOPV2\)](#) is now being rolled out in over 20 countries affected by cVDPV2 that have completed a readiness verification process to more sustainably stop outbreaks.

FICTION VS. FACT

There are several common misconceptions about cVDPVs, leading to the proliferation of misinformation that can reduce vaccine confidence and contribute to hesitancy and refusals. Journalists who are writing about polio can help to be a part of the solution and address these misconceptions in their stories.

✗ FICTION

A child can get cVDPV infection or be paralyzed from receiving OPV.

OPV is inferior to IPV (inactivated polio vaccine).

Polio has been declared eliminated in many parts of the world, yet new polio cases keep occurring in those regions.

✓ FACT

A child cannot get cVDPV from receiving OPV. A child can get cVDPV if they are not immunized against polio and live in an area where cVDPV is circulating. Vaccination against polio will protect an individual from cVDPV.

OPV is a safe, inexpensive, easy to administer and extremely effective vaccine that can stop person-to-person transmission of poliovirus by providing both individual and community-level protection, making it an important tool for cVDPV outbreak response in low-resource settings. OPV stimulates good gut immunity in the vaccinated child. Additionally, for the first several weeks after receiving OPV, a vaccinated child can excrete the weakened virus from the vaccine in their stool and spread it to their close contacts in areas with poor hygiene and sanitation, resulting in 'passive' immunization of unvaccinated people. However, if the weakened virus circulates unchecked for a long time in an under-immunized population, it can revert to a form that causes paralysis.

IPV prevents paralysis but cannot prevent person-to-person transmission of polio and is more difficult to administer in low resource settings, due to both the cost of the vaccine and the need for a trained health worker to deliver it via injection. It may be used in combination with OPV in endemic and high-risk countries but cannot stop outbreaks alone.

Certain types of polio have been successfully eradicated and eliminated. WPV Types 2 and 3 have been eradicated worldwide. Type 1 WPV has been eliminated in 5 of 6 WHO Regions, and endemic transmission remains in only two countries, Pakistan and Afghanistan.

Children living in certified polio-free areas no longer need to be vaccinated against polio.

Children living in places certified to be wild poliovirus-free must continue to receive vaccination against polio in order to maintain a high level of immunity in the population and prevent importation and spread of wild polio to areas that are certified wild polio-free. High vaccination coverage also works to prevent new cVDPV outbreaks, and prevent importation and spread of wild polio to other areas.

EXAMPLES OF COMPREHENSIVE EDITORIAL EXPLANATIONS OF CVDPVS

These examples from published stories clarify that cVDPVs are variant forms of the wild poliovirus and can only mutate from the weakened virus used in OPV in under-immunized populations. They also help underline that children cannot contract cVDPV from receiving the vaccine.

“Vaccinated children can shed the weakened virus in feces, and from there it can sometimes find its way back into people, occasionally setting off a chain of infections in communities with low immunization rates. If the weakened virus circulates for long enough, it can slowly mutate back into a more virulent form that can cause paralysis.”

– Apoorva Mandavilli, *The New York Times*, August 18, 2022

“The viruses Sabin modified for his vaccine can spread from child to child. If they continue to find children they can infect – if they passage through enough intestinal tracts – they can regain the power to paralyze. This phenomenon is seen in places where there are too many unvaccinated children.”

– Helen Branswell, *STAT*, July 26, 2022



More Resources

[Global Polio Eradication Initiative website](#)
[GPEI Media Centre](#)
[Africa Kicks Out Wild Polio website](#)
[GPEI Outbreak countries](#)



For the latest updates on polio outbreaks

[cVDPV outbreaks: GPEI cVDPVs](#)
[All outbreaks: GPEI “Polio Now” & GPEI Weekly Reports](#)
[US CDC Mortality & Morbidity Weekly Report](#)
[WHO Disease Outbreak News – Poliomyelitis](#)



For more information on polio vaccines

[OPV](#)
[IPV](#)
[cVDPV2 / nOPV2 roll out fact sheet](#)