

What does cVDPV stand for?

In the weekly polio reports, readers will see the number of reported Type I polio cases have fallen to only **4 in the world** in 2021 and we rejoice that we are truly “this close” to our goal. Reading on, we often see the reporting of cVDPV cases, a much larger number, which are often occurring in countries which are considered polio free. In 2021, the year that only 4 new Type 1 cases were identified, 637 new cVDPV cases were found.

cVDPV stands for “circulating vaccine-derived poliovirus” cases and the numbers are cases unvaccinated children get from other recently vaccinated children. To understand this problem, we have to look at how the immunization works. The original Salk vaccine, which is injected, uses killed virus cells to train the child’s immune system to recognize and destroy polio. The Sabin oral vaccine in contrast uses live polio virus cells. Once the drops are given to the child they grow and multiply in the gut for about 6 weeks (or longer if the child is malnourished) until the immune system overcomes and kills them. During that period, the child becomes a walking polio factory and can spread polio via fecal eliminations. In areas where workers can immunize a large percentage of the kids, this is not a problem. In areas where immunizations are spotty and some kids are getting their drops while others are not that the unwanted spread happens.