



Progress towards polio eradication

Indicator: Number of global wild poliovirus case

1. Results

DFID supports the Global Polio Eradication Initiative to eradicate polio, with only 33 cases of wild poliovirus globally in 2018.

The number of polio cases has been reduced from 350,000 in 1988, to 74 in 2015 and 33 in 2018¹.

2. Context

Polio is on the brink of becoming only the second human disease in history to be eradicated. Infection with poliovirus causes a mild illness in most cases, but in less than 1% of cases can result in paralysis. Children under 5 are at particular risk, as protection from maternal antibodies present at birth is lost.

Since its inception in 1988, the Global Polio Eradication Initiative (GPEI), which is a partnership of WHO, UNICEF, the Bill & Melinda Gates Foundation, the US Center for Disease Control & Rotary International, has successfully led global efforts that have reduced Wild Polio Virus (WPV) cases by more than 99% from 350,000 cases a year in 125 countries to 33 cases in 2018, and with only 3 countries not yet certified wild polio-free (Afghanistan, Nigeria, Pakistan). In 2018 Afghanistan reported 21 cases and Pakistan reported 12 cases. Nigeria has not reported a case since August 2016 and discussions are beginning this year in declaring the country and the African Continent free from WPV.

An increase in the number of cases in 2018 compared to 2017 (22 cases) was the result of severe insecurity and inaccessibility in certain parts of the endemic countries that prevented GPEI from performing vaccination campaigns. The GPEI is working with a wide range of actors to improve access and build trust with local communities in the affected regions.

The UK is currently the third largest donor to the GPEI and is also the largest donor to Gavi, the Vaccine Alliance, which has provided critical support to the rapid global introduction of the Inactivated Polio Vaccine (IPV). Gavi is in the process of becoming a core GPEI partner.

¹ <http://polioeradication.org/polio-today/polio-now/this-week/>

3. Methodology summary²

Number of global wild poliovirus cases

The number of WHO-accredited laboratory confirmed cases of wild poliovirus cases, by country and by type of wild poliovirus. A decrease in the number of cases indicates nearing the goal of eradicating wild poliovirus. A country or region is certified as having eradicated polio three years after the last case, so long as surveillance systems are assessed to be sufficiently robust. Once all regions are certified free from wild poliovirus, the world will be certified polio-free.

There are three types of wild poliovirus (types 1, 2 and 3). Wild poliovirus type 2 was certified by WHO to have been eradicated in 2015 and no cases of type 3 have been detected since 2012. Very rarely, when immunity in the population is extremely low, the weakened strain of polio virus used in oral polio vaccines can mutate and lead to vaccine-derived polioviruses that are capable of causing paralysis. Vaccine-derived outbreaks are more easily controlled than wild poliovirus outbreaks, do not directly affect progress towards the primary goal of eradication and do not count in the global totals of polio cases.

Once paralysis is detected in a child, a stool specimen is collected and sent to a WHO-accredited laboratory for testing. The presence or absence of poliovirus is confirmed from primary culture results. Polioviruses isolated from stools are then analysed to determine if the virus is wild, Sabin vaccine (as contained in the oral polio vaccine), or vaccine-derived. If wild poliovirus is confirmed, this is counted as being one case. Vaccine-derived and Sabin vaccine cases do not count towards this indicator. Cases are disaggregated by sex and geography, with the location of the child registered to the village level.

4. Data sources

Data is provided from national health information systems and collated globally by the Global Polio Eradication Initiative (GPEI). All data is available publicly at <http://polioeradication.org/polio-today/polio-now/this-week/>

5. Data quality notes

Only WHO-accredited laboratories are able to confirm cases. As such data reporting on wild poliovirus cases is of a high quality.

² <https://www.gov.uk/government/publications/dfid-results-methodology-notes-2018-to-2019>