

Statement

Vaccine-derived poliovirus in Nigeria

10/2/07

As recently reported by various news organizations, 69 cases of polio due to a vaccine-derived poliovirus have been confirmed in nine northern states of Nigeria. These cases are vaccine-derived, which means they came from a changed form of a strain found in the oral polio vaccine (OPV).

OPV contains a live but weakened form of poliovirus. On very rare occasions, polio strains derived from OPV mutate and regain the ability to paralyze and may spread in communities that are not fully vaccinated against polio, especially in areas where there is poor hygiene, poor sanitation, or overcrowding.

In Nigeria, immunization rates were not high enough in some northern states to protect all children. The vaccine-derived poliovirus in Nigeria was first noted in August 2006. Following necessary laboratory testing and verification, response plans were implemented and results were presented for discussion at various scientific forums starting in November 2006, and put in the public domain in April 2007.

Nigeria conducted four rounds of mass immunization campaigns. The first round was conducted in November 2006, another in January 2007, another in March 2007, and a further round in September 2007. These rounds have considerably reduced the spread and geographical extent of the vaccine-derived virus.

Vaccine-derived polioviruses are extremely rare. Of the more than 10 billion doses of OPV that have been given to more than 2 billion children in the past 10 years, less than 200 cases were from vaccine-derived polioviruses. During this same period, more than 33,000 children were paralyzed by the wild poliovirus, while 6.5 million polio cases were prevented by OPV.

OPV has been the vaccine of choice for over 195 countries that have successfully eradicated polio. It remains the Global Polio Eradication Initiative's (GPEI) recommended vaccine to finish polio eradication.