Dear Colleagues:

At the meeting of the Polio Oversight Board on September 25, 2015, the World Health Organization (WHO) announced that it removed Nigeria from the list of polio-endemic countries. At this point, the key priorities for polio eradication are:

- Getting over the finish line in Pakistan and Afghanistan; and
- Confirming that polio is truly gone from Africa by strengthening surveillance across the region.

In addition, we are focusing on cases and clusters of vaccine-derived polio. These **only** occur when polio vaccination rates are low, are easier to control than wild polio outbreaks, and have not been seen to spread widely. Nevertheless, they are important, because tragically, they are no less severe for the paralyzed child than wild polio, are symptomatic of low vaccine coverage, and could potentially complicate the planned switch from trivalent to bivalent oral polio vaccine (OPV) early next year.

Recent cases or clusters of vaccine-derived polio in the Democratic Republic of the Congo, Guinea, Madagascar, Mali, South Sudan, and Ukraine illustrate the importance of robust surveillance, high levels of vaccination, and rapid response. When vaccine-derived cases occur, it is critical to strengthen surveillance, ensure community engagement, and conduct a rapid, large-scale, high-quality vaccination response. It is promising that despite increasingly complete surveillance, the number of vaccineassociated cases diagnosed has been decreasing, indicating global progress (Figure).





\*Data through September 2015, as available by September 16, 2015.

OPV has eliminated 99 percent of wild polio cases worldwide and has the unique ability to stop personto-person spread of polio. However, OPV's ability to protect other children through secondary spread can, on rare occasion, cause paralysis when vaccination rates are low. The virus strains derived from OPV can continue to circulate in the community and eventually regain the ability to cause paralysis. This is why maintaining high population immunity is critical. Since OPV is orally administered, virtually any adult can deliver the vaccine, which has greatly increased global access to the vaccine. OPV remains the backbone of efforts to end polio.

When vaccine-derived polio outbreaks do occur, they can be stopped rapidly with a robust outbreak response. The internationally-agreed outbreak response <u>protocol</u>, as adopted by the World Health Assembly in May 2015, includes a minimum of three large-scale supplementary immunization activities beginning within two weeks of confirmation of the outbreak. The Global Polio Eradication Initiative (GPEI) is working with governments of the affected countries to implement urgent responses to vaccine-derived polio outbreaks. Only half of children in Ukraine were fully vaccinated against polio in 2014. The Ukrainian government and GPEI partners are working to ensure a high quality national campaign with community engagement to address parents' concerns about vaccination.

Mali's most recent vaccine-derived polio case was in a child from Guinea who experienced paralysis before arriving in Mali. This case is closely linked to a vaccine-derived polio case in Guinea from 2014. Genetic testing suggests this virus strain has been circulating for more than 12 months, indicating that gaps in surveillance and immunity persist. GPEI is working with both Mali and Guinea Ministries of Health to implement targeted immunization activities. A vaccine-derived polio, type 2 case was reported in the Katanga Province of the Democratic Republic of the Congo, and GPEI is working with the country's government to implement a vaccination program to prevent additional cases.

The Global Commission for the Certification of the Eradication of Poliomyelitis certified wild poliovirus type 2 as <u>eradicated</u> on September 20, 2015. Removal of type 2 from the vaccine is important, because oral polio vaccines without this component are more protective against the other two components, and removal of type 2 is a precursor to switching entirely to inactivated polio vaccine (IPV). The switch from trivalent to bivalent OPV is planned for April 2016, but requires the final recommendation from WHO's Strategic Advisory Group of Experts on Immunization in October 2015. The plan also requests all countries introduce IPV into their national immunization programs to mitigate risk from removing the OPV type 2 component. Once wild polio transmission is interrupted globally, bivalent OPV will be completely withdrawn. IPV will then be the only polio vaccine in use; it does not lead to vaccine-derived poliovirus.

Vaccine-derived polio outbreaks are a reminder that we must remain vigilant with meticulous surveillance, increase population immunity through vaccination, and respond rapidly to any possible outbreak.

Thank you for what you do to protect the health of children.

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