

Epidemiological Update Detection of Sabin type 3 vaccine poliovirus in a case of Acute Flaccid Paralysis

15 June 2018

Situation Summary

The following is an updated information on the case of acute flaccid paralysis (AFP) with detection of Sabin type 3 vaccine poliovirus, previously reported in the [PAHO/WHO Epidemiological Update of 8 June 2018](#)¹.

The case is a 34-month-old male, unvaccinated, resident of an indigenous community in Delta Amacuro, Venezuela, with paralysis onset on 29 April 2018. The clinical-epidemiological investigation carried out indicated that the flaccid paralysis of a lower limb persisted as of 11 June. Other children from the same community were vaccinated in April with a bivalent oral polio vaccine, so the case may have contracted the infection through the fecal-oral route.

The laboratory tests (genetic sequencing) recently performed in the regional reference laboratory confirmed the detection of Sabin type 3 poliovirus vaccine in the viral isolate obtained from this patient's sample collected on 30 April 2018. The results of the isolated poliovirus sequencing showed that the virus did not present genetic variation with respect to the prototype vaccine strain (Sabin type 3), thus ruling out a vaccine derived poliovirus (VDPV).

The final classification of the case of AFP (to define whether or not it is associated with the vaccine) will be based on clinical and virological criteria; for this reason the evaluation of the residual neurological deficit is expected 60 days after the onset of the paralysis (28 June).

Preliminary results of the field investigation carried out in the community where the case occurred had identified an 8-year-old girl with a vaccine history of at least one dose of tOPV (trivalent oral polio vaccine), suspected as AFP. The clinical evaluation subsequently carried out by health professionals has ruled out that this is a case of AFP.

No additional AFP cases have been identified to date through active search for AFP cases carried out in the community.

¹ PAHO/WHO. Detection of Sabin type 3 vaccine poliovirus in a case of Acute Flaccid Paralysis. 8 June 2018, Washington, D.C.: PAHO/WHO; 2018. Available at: <https://bit.ly/2JBFJod>

Advice to national authorities

The Pan American Health Organization / World Health Organization (PAHO / WHO) reiterates to Member States the importance of reaching and maintaining polio vaccination coverage of more than 95% in each district or municipality, maintaining high quality of epidemiological surveillance, and updating the national poliovirus outbreak response plans.

References

1. PAHO/WHO. Final report of the 3rd Ad-Hoc Meeting of the TAG. Ad-hoc Virtual Meeting, 19 March 2018. Available at: <https://bit.ly/2Jt8lrH>
2. PAHO/WHO. Polio Weekly Bulletin, 2018. Available at: <https://bit.ly/2GelAdn>
3. PAHO/WHO. Inactivated Polio Vaccine (IPV) Introduction; Frequently Asked Questions. 2014. Available at: <https://www.paho.org/hq/dmdocuments/2014/IPV-IntroductionFAQ-e.pdf>
4. WHO. Polio vaccines: WHO position paper – March 2016. Weekly Epidemiological Record, No. 12, 2016, 91, 145-168. Available at: <http://www.who.int/wer/2016/wer9112.pdf?ua=1>