



## Progress report on eradication of poliomyelitis

### Introduction

1. Wild poliovirus type 1 (WPV1) transmission continued in Afghanistan and Pakistan in 2018 and 2019, with a total of 33 cases reported in 2018, and 73 cases in 2019 as of 5 September; environmental sampling also indicates ongoing and expanding transmission in a number of areas in both countries. Eradication efforts are being hindered by conflict and insecurity, and by a ban on immunization campaigns in large areas of the south in Afghanistan. Significant population movements continue to play a role in the spread of wild poliovirus.
2. On 9 May 2019, the Global Polio Laboratory Network (GPLN) notified WHO of the detection of WPV1 from an environmental sewage sample collected on 20 April 2019 in Konarak district, Sistan-Baluchistan province, Islamic Republic of Iran. Subsequently, two samples collected two weeks and then four weeks after the first positive sample were also found to be positive for poliovirus. Since then, scheduled sewage samples collected every two weeks from the same site have all tested negative for poliovirus. To date, no associated cases of paralysis have been detected.
3. The outbreak of circulating vaccine-derived poliovirus type 2 (cVDPV2) in Syrian Arab Republic has been officially closed, with the last case reported having onset of paralysis in September 2017. In Somalia, concurrent outbreak response efforts have continued against cVDPV2 and circulating vaccine-derived poliovirus type 3 (cVDPV3) outbreaks. In 2018, 12 children were paralyzed in Somalia (five cases due to cVDPV2, six due to cVDPV3, and one due to co-infection with cVDPV2 and cVDPV3), with three cases due to cVDPV2 reported in 2019 (as of 5 September). Response efforts are affected by compromised access to large numbers of children living in areas controlled by non-state armed groups.
4. The twenty-first meeting of the Emergency Committee under the International Health Regulations (2005) regarding the international spread of poliovirus that convened on 14 May 2019 again confirmed that the risk of international spread of poliovirus is a Public Health Emergency of International Concern. Consequently, Temporary Recommendations for infected countries remain in force, including for Afghanistan and Pakistan (WPV1), and Somalia (cVDPV2/cVDPV3).
5. In April 2019, the Global Polio Eradication Initiative (GPEI) launched a new strategy for 2019–2023 with three major pillars: eradication; integration; and certification and containment. The regional polio eradication programme is adjusting operations to align with the strategy, where required.

### Interruption of wild poliovirus transmission

6. A total of 33 cases due to WPV1 were reported in 2018 (21 in Afghanistan and 12 in Pakistan). As of 5 September, 73 WPV1 cases had been reported globally in 2019 (15 in Afghanistan and 58 in Pakistan). These cases and the regular isolation of wild poliovirus in environmental samples from a number of sites demonstrate the continued and expanding transmission of WPV1 in the two endemic countries.
7. The governments of Afghanistan and Pakistan, and their partners, have developed national emergency action plans for polio eradication; however, compromised access to children as a result of insecurity and bans in Afghanistan, and variable implementation at the lowest administrative levels in both countries, present challenges to eradication. Large migrant and mobile populations, extensive population movement, uncertainty among some parents about the value of vaccination, and compromised supervision and monitoring of immunization activities in some key reservoirs, remain significant issues. Community-based vaccination by locally recruited, mainly female volunteers remains a key strategy in achieving access to children in all endemic transmission zones in Pakistan.

8. Emergency operations centres are functioning at national and subnational levels in both Afghanistan and Pakistan to coordinate polio eradication efforts and closely monitor the implementation of their respective plans. A strong mechanism for cross-border coordination between the two countries has been established to stop polio transmission in common virus reservoir areas.

9. In Afghanistan and Pakistan, communication strategies are tailored to local audiences, taking into account the social, cultural and political context. In Pakistan, an increase in the spread of misinformation on immunization is leading to a rethink in strategy. Communication reviews in both countries in late 2018/early 2019 are aiding the development of new strategies to build trust in community vaccinators. With the support of UNICEF, vaccinators are trained on how to address key areas of concern for parents and caregivers, in order to enable them to make informed decisions about polio vaccination.

### **Vaccine-derived polioviruses**

10. cVDPV2 and cVDPV3 were isolated from environmental samples in Mogadishu, Somalia, in late 2017 and through 2018. There were 12 paralytic cases due to cVDPV in 2018 (five due to cVDPV2, six due to cVDPV3, and one due to co-infection with cVDPV2 and cVDPV3). As of 5 September, three cases due to cVDPV2 have been reported in Somalia in 2019. The detection of cVDPV reflects a significant population immunity gap in Somalia, primarily due to the large number of inaccessible children in areas controlled by non-state armed groups. A comprehensive response plan is being implemented in coordination with other Horn of Africa countries.

### **At-risk countries**

11. Aside from the endemic countries Afghanistan and Pakistan, and outbreak country Somalia, six countries in the Region are at high risk of outbreaks due to importation of WPV1 or development of cVDPV: Djibouti, Iraq, Libya, Sudan, Syrian Arab Republic and Yemen. All are experiencing varying degrees of complex emergency and have access or security constraints that hamper efforts to maintain high population immunity and sensitive surveillance. WHO is providing technical and logistic support to these countries to implement supplementary immunization and surveillance strengthening activities.

### **Surveillance**

12. Acute flaccid paralysis (AFP) surveillance continues to function in all countries of the Region. The AFP surveillance system reported 22 913 AFP cases in 2018 and more than 15 000 cases in 2019 (as of 31 August). In 2018, all Member States except two met the key standard surveillance indicators for non-polio AFP rates (2 per 100 000 children under 15 years of age) and percentage of AFP cases with adequate specimens (80%). The AFP surveillance system is supported by an efficient network of 12 WHO-accredited laboratories.

13. Environmental surveillance expanded in 2017 to include Sudan, in addition to already established systems in Afghanistan, Egypt, Islamic Republic of Iran, Jordan, Lebanon, Pakistan, Somalia and Syrian Arab Republic. Arrangements are in place for expansion to Iraq in 2019.

### **Certification of polio eradication**

14. The Regional Certification Commission (RCC) convened its thirty-third meeting on 23–25 April 2019 in Muscat, Oman. Reports from all countries were reviewed by RCC members, and 19 were provisionally accepted, while the progress reports from Afghanistan and Pakistan were noted. One country report was returned for revision.

15. At its February 2019 meeting, the Global Commission for the Certification of Poliomyelitis Eradication (GCC) reaffirmed its decision to undertake sequential certification of wild polioviruses eradication, which will certify wild poliovirus type 3 (WPV3) as eradicated, prior to WPV1. The GCC has requested the WHO Director-General to ask the Regional Directors for Africa and the Eastern Mediterranean, respectively, to confirm with their Member States that the last cases of WPV3 in both regions were identified more than six years ago.

## **Poliovirus containment**

16. Implementation of poliovirus containment activities is on track. All Member States in the Region have complied with Global Action Plan III (GAP III) requirements for containment or destruction of type 2 poliovirus. GAP III Phase 1 containment activity reports have been submitted or are being finalized by all countries for submission to national certification committees and WHO.

## **Polio outbreak simulation exercises**

17. All polio-free countries of the Region, except Yemen, have conducted polio outbreak simulation exercises. The regional polio eradication programme has facilitated 25 exercises in 19 countries since 2016. The programme has started a process to update the methodology used for polio outbreak simulation exercises, in light of the lessons learned and best practices in other regions and programmes.

## **Polio transition planning**

18. Four countries in the Region (Afghanistan, Pakistan, Somalia and Sudan) are among the 16 countries that have been identified globally as a priority for transition planning. An additional three countries (Iraq, Syrian Arab Republic and Yemen) are considered regional priorities.

19. Transition plans for Somalia and Sudan have been drafted. Although transition planning is not expected in Afghanistan or Pakistan until WPV1 circulation has ceased, Afghanistan has developed a framework for transition. The timeline for implementation of transition planning is affected by the outbreak of cVDPV in Somalia and the endemic transmission of WPV1 in Afghanistan and Pakistan. Iraq, Syria Arab Republic and Yemen are expected to begin work on transition plans in 2019.

## **The Islamic Advisory Group for Polio Eradication**

20. A student training manual developed for the Islamic Advisory Group for Polio Eradication (IAG) by Al Azhar University in 2017 to train international students of religious studies coming from polio-endemic and at-risk countries on polio eradication, routine immunization and priority maternal and child health issues has been translated into six regional languages. The training programme is being expanded to the Islamic University in Uganda and other Islamic universities under the umbrella of the Organisation of Islamic Cooperation (OIC) in Malaysia and Niger.

21. National Islamic advisory groups in Afghanistan and Pakistan continue to support eradication efforts. A joint Afghanistan/Pakistan ulema conference was held in 2019 to rally ongoing support. The IAG is engaging Islamic nongovernmental organizations in Pakistan to identify areas of collaboration.

## **Equity and gender**

22. In 2018, the GPEI took major steps towards strengthening gender mainstreaming; the regional polio eradication programme has participated actively in this process. The programme introduced new indicators for ensuring girls and boys are reached equally with polio vaccines and disease surveillance, and to monitor female participation as frontline workers in the endemic countries.

23. The GPEI and the regional polio eradication programme regularly collect and analyse sex-disaggregated data and conduct analysis to further strengthen the reach and effectiveness of vaccination campaigns. Within the Region, indicators show that boys and girls under five years of age have very similar immunization status for polio vaccination, and are generally equally well represented in surveillance. Major progress has been made in Pakistan, and some in Afghanistan, with respect to recruiting local female community vaccinators and supervisors to strengthen the capacity to reach every child in house-to-house immunization activities.

## **Regional priorities for polio eradication in 2019**

24. The overriding regional priority is stopping wild poliovirus transmission in Afghanistan and Pakistan. Other priorities include the final interruption of cVDPV circulation in Somalia, maintaining high levels of immunity in the Region through immunization, ensuring certification-standard AFP surveillance in all Member States, enhancing preparedness and response plans to ensure early detection and effective response to any event or outbreak of WPV or cVDPV, continuing work on containment of polioviruses and certification of eradication, and transitioning polio assets and experience for future global health initiatives.

## **Financing polio eradication**

25. Thanks to the generous continuing support of the international development community, including Member States, multilateral and bilateral organizations, development banks, foundations and Rotary International, the regional budget for planned activities in 2018 was fully financed. However, budgetary constraints are affecting implementation of planned activities in 2019, particularly in non-endemic but high-risk countries. The GPEI and the regional polio eradication programme will continue to advocate strongly with donors and governments for fully funded multi-year budgets.

## **The way forward**

26. Member States are encouraged to:

- support the extraordinary efforts to stop poliovirus transmission being made by Afghanistan and Pakistan, and strengthen collaboration;
- mobilize resources to support polio eradication activities nationally and regionally;
- maximize opportunities to effectively use polio assets and experience to support other key public health interventions, particularly essential immunizations, disease surveillance, and emergency preparedness and response, while continuing to sustain polio-free status after certification;
- complete the implementation of phases I and II of GAP III for the containment of polioviruses;
- take all necessary measures to implement the Temporary Recommendations of the Emergency Committee under the International Health Regulations (2005) regarding the international spread of poliovirus;
- maintain a high level of immunization coverage of high-risk groups, including refugees, internally displaced persons, immigrants and mobile populations, by enhancing basic immunization services and, if necessary, conducting targeted supplementary immunization activities;
- ensure the highest possible quality of AFP surveillance, particularly among high-risk groups, including refugees, immigrants and internally displaced communities; and
- ensure that polio outbreak preparedness and response plans are up to date and test them regularly through polio outbreak simulation exercises.