Progress report on eradication of poliomyelitis

Introduction

1. Wild poliovirus type 1 (WPV1) transmission continued in Afghanistan and Pakistan in 2019 and 2020. Eradication efforts are being hindered by conflict and insecurity, vaccine hesitancy and bans on immunization campaigns in large areas of Afghanistan. Significant population movements have continued to play a role in the spread of wild poliovirus. The COVID-19 pandemic led to the temporary suspension of polio vaccination campaigns worldwide, which is likely to have a marked impact on virus spread.

2. An outbreak of circulating vaccine-derived poliovirus type 2 (cVDPV2) continues in Pakistan, with 22 cases reported in 2019 and 52 cases as of 31 August 2020. Sixty-nine cases of cVDVP2 have been reported in Afghanistan to date, confirming international spread from Pakistan. In Somalia, low-grade transmission of cVDPV2 continues: three children were paralysed due to cVDPV2 in 2019, and three cases of paralytic polio have been detected so far in 2020. An outbreak of cVDVP2 was confirmed in Sudan in August 2020, with detection of 16 paralytic cases and three positive environmental samples following the international spread of strains circulating in Chad. In August 2020, an outbreak due to the emergence of circulating vaccine-derived virus type 1 (cVDPV1) was detected in Saada governorate in northern Yemen. Fourteen cases of paralytic polio due to cVDPV1 have been reported to date.

3. The twenty-fifth meeting of the Emergency Committee under the International Health Regulations (IHR) (2005) regarding the international spread of poliovirus, which convened on 23 June 2020, again confirmed that the risk of international spread of poliovirus is a public health emergency of international concern, and consequently the WHO Temporary Recommendations for infected countries remain in force, including for Afghanistan and Pakistan (WPV1 and cVDVP2) and Somalia (cVDPV2).

4. Since the start of the COVID-19 pandemic, the polio programme has been providing its tools, workforce and extensive laboratory and surveillance network to support countries in their COVID-19 response. To protect communities and frontline workers, the programme suspended polio vaccination campaigns until July 2020.

Interruption of wild poliovirus transmission

5. The certification of wild poliovirus eradication in the WHO African Region was declared in August 2020. The Eastern Mediterranean Region is now the only remaining WHO region endemic for polio, due to continued transmission of wild poliovirus type 1 in Afghanistan and Pakistan.

6. A total of 176 cases due to WPV1 were reported in 2019 (29 in Afghanistan and 147 in Pakistan). As of 31 August, 105 WPV1 cases have been reported globally in 2020 (40 in Afghanistan and 65 in Pakistan). The increase in the number of cases and the regular isolation of wild poliovirus in environmental samples from a number of sites highlights the continued geographic spread of the virus.

7. The governments of Afghanistan and Pakistan, and their partners, intensified their commitment to polio eradication in 2019–2020. In-depth analysis of all aspects of respective polio programmes has resulted in new emergency public health measures and transformative changes to improve overall programme management, increase community ownership of polio vaccination activities and improve the quality of operations.

8. A series of communication reviews in both countries have led to new communication and outreach strategies that address the issue of community trust. In Pakistan, the introduction of a “perception management initiative” aims to reduce misconceptions about the polio programme and counterbalance the spread of misinformation on immunization.
9. The polio programme is enhancing its collaborative approach to integration by fostering new collaborations with broader health initiatives. The governments of Afghanistan and Pakistan are making plans to launch an integrated service delivery package through a multisectoral approach to target underserved communities in core reservoir areas through the transformation of management and governance structures. Focused investments and commitment are needed from governments and development partners to establish provision of essential health services to the multiple deprived communities where polio remains entrenched.

10. To support national governments, the Global Polio Eradication Initiative (GPEI) has established a “hub” comprised of experts from each GPEI partner agency. The GPEI hub is based in Amman, Jordan, and aims to provide expert, dedicated, rapid and coordinated support to the two remaining polio-endemic countries.

Vaccine-derived polioviruses

11. The cVDPV2 outbreak continues in Somalia. Three paralytic cases due to cVDPV2 were detected in 2019 and three cases in 2020 (as of 31 August); cVDPV2 strains continue to be detected by environmental surveillance in the country. No new circulating vaccine-derived poliovirus type 3 has been reported from acute flaccid paralysis (AFP) cases or environmental surveillance samples since September 2018.

12. In 2019, a type 2 vaccine-derived poliovirus outbreak was detected in Pakistan. A total of 22 cases of cVDPV2 and 35 positive environmental samples were reported in the country in 2019, and 52 cases and 39 positive environmental samples have been reported in 2020 to date. Unless mass vaccination campaigns are fully implemented starting mid-2020, an exponential increase in cVDPV2 transmission and paralytic cases is likely.

13. In early 2020, a type 2 vaccine-derived poliovirus outbreak was detected in Afghanistan, with genetic links to the outbreak in Pakistan. A total of 69 cases of cVDPV2 and 55 positive environmental samples have been reported in the country in 2020 to date. The outbreak response is being coordinated between both countries.

14. An outbreak of cVDPV2 was confirmed in Sudan in August 2020, with detection of 16 paralytic cases and three positive environmental samples. Epidemiological and virologic investigations indicate the outbreak is associated with multiple introductions of cVDPV2 strains already circulating in Chad, with the first introduction estimated to have occurred in October 2019. The outbreak response is being coordinated between both countries.

15. In August 2020, an outbreak of circulating vaccine-derived virus type 1 (cVDPV1) was detected in Saada governorate in northern Yemen. These genetically-linked VDPV1 were isolated from 14 AFP cases, with onset of paralysis ranging from 31 January to 18 June 2020 (with a further AFP case from June 2019 retrospectively confirmed). Epidemiological and virologic investigations confirm that the VDPV1 strain emerged in Yemen. Outbreak response activities to enhance surveillance for poliovirus and preparations for mass vaccination campaigns have commenced.

16. The GPEI has developed a new global strategy to target circulating vaccine-derived poliovirus outbreaks. The programme aims to roll out a new type 2 oral polio vaccine in 2020, designed to tackle vaccine-derived outbreaks. This decision was supported by the WHO Executive Board in February 2020.

At-risk countries

17. Aside from the endemic countries (Afghanistan and Pakistan) and outbreak countries (Somalia, Sudan and Yemen), four countries in the Region are at high risk of outbreaks due to importation of WPV1 or development of cVDPV: Djibouti, Iraq, Libya and the Syrian Arab Republic. 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 for supplementary immunization and surveillance strengthening.
Surveillance

18. AFP surveillance continues to function in all countries of the Region. In 2019, all Member States except one met the key standard surveillance indicator for non-polio AFP rates (2 cases per 100 000 children under 15 years of age), and all but three met the key standard surveillance indicator for percentage of AFP cases with adequate specimens (80%). The COVID-19 pandemic has affected poliovirus surveillance. The polio programme is closely monitoring and making efforts to restore AFP and environmental surveillance, and mitigating the impact of the COVID-19 pandemic on detection and reporting.

19. Environmental surveillance is operational in Afghanistan, Egypt, the Islamic Republic of Iran, Jordan, Kuwait, Lebanon, Pakistan, Somalia, Sudan and the Syrian Arab Republic. WHO is following up on implementation in Iraq, Saudi Arabia and Yemen, where operations have been delayed.

Certification of polio eradication

20. Due to the COVID-19 pandemic, the thirty-fourth meeting of the Eastern Mediterranean Regional Commission for the Certification of Poliomyelitis Eradication (RCC) was held virtually, from 15 to 17 September 2020.

21. At its meeting on 17 and 18 October 2019, the Global Commission for the Certification of Poliomyelitis Eradication (GCC) expressed concern over the increase in WPV1 transmission in Afghanistan and Pakistan. The GCC also expressed concern about the increase in cVDPV2 outbreaks affecting Afghanistan, Pakistan and Somalia and the risks associated with monovalent type 2 oral polio vaccine (mOPV2) use.

Poliovirus containment

22. 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 the 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

23. 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 updated the methodology and materials used for simulation exercises and is planning for pilot implementation. The programme is exploring the feasibility of an online methodology for conducting the simulation exercises.

Polio transition planning

24. A regional Steering Committee on Polio Transition has been established, chaired by the Regional Director, with membership from all WHO programmes and departments. The committee is leading the regional transition planning and implementation process, as well as conducting high-level advocacy for domestic resource mobilization and integration of essential polio functions into national health systems.

25. A regional Working Group on Polio Transition has been established to support countries in the development and implementation of transition planning. Country missions have been conducted to Iraq, Sudan, Afghanistan, Pakistan, Somalia, the Syrian Arab Republic and Yemen.

26. The country missions to Iraq and Sudan were followed by high-level advocacy to encourage continued implementation of their national transition plans, highlighting the contributions of the polio networks to COVID-19 response. In consequence, field surveillance functions of the polio programme in Iraq were transferred from WHO to the national health programme. In Sudan, implementation was delayed due to the impact of the COVID-19 pandemic, coupled with the emergence of the cVDPV2 outbreak. In Yemen, polio staff that were previously funded by the Global Polio Eradication Initiative are now being supported through the immunization programme.
27. Polio teams have been working on COVID-19 response as part of the integrated WHO team in all priority countries, paving the way for a smooth transition. The WHO Regional Office prioritized operationalization of the Integrated Public Health Team concept as a modality to move forward with polio transition in the COVID-19 context.

**The Islamic Advisory Group for Polio Eradication**

28. The Islamic Advisory Group for Polio Eradication (IAG) has an expanded mandate to support a broad public health agenda; its Secretariat has been transferred to the Office of the Regional Director, denoting its broader strategic significance. The IAG supports polio eradication, the Expanded Programme on Immunization (EPI) and maternal and child health, besides advising on emerging health issues such as the COVID-19 pandemic.

29. The IAG presented a progress report at the seventh session of the Organisation of Islamic Cooperation (OIC) Islamic Conference of Health Ministers in 2019. The Regional Director for the Eastern Mediterranean, alongside the IAG Executive Committee chair, held side meetings with delegates from Indonesia and Malaysia. The meeting resolved to support polio eradication and mandated the OIC Secretariat to align work plans for the OIC Strategic Health Programme of Action 2014–2023 with the IAG.

30. A joint Afghanistan-Pakistan Eminent Ulema Conference was convened in 2019 in Muscat, Oman, to strengthen collaboration in support of polio eradication. The IAG is also coordinating with the International Islamic University Malaysia on research studies and student training.

**Equity and gender**

31. In 2019 and 2020, the GPEI took further steps towards strengthening gender mainstreaming; the regional polio eradication programme has participated actively in this process. In May 2019, the Polio Oversight Board officially endorsed the GPEI Gender Equality Strategy 2019–2023.

32. 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 5 years of age have very similar polio immunization status and are 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 help reach every child in house-to-house immunization activities.

**Regional priorities for polio eradication in 2020**

33. The COVID-19 pandemic response requires worldwide solidarity and urgent global efforts. Guided by its commitment to protecting the most vulnerable, the GPEI has a public health imperative to ensure that its resources are used to support countries in their preparedness and response. Over the next four to six months, the polio programme will continue to offer its tools, workforce and extensive laboratory and surveillance network to support countries as they respond to COVID-19.

34. Despite ongoing support for the COVID-19 response, the overriding regional priority for polio eradication remains stopping wild and vaccine-derived poliovirus transmission in Afghanistan and Pakistan. The programme has developed operational approaches to safely resume mass vaccination campaigns coupled with the delivery of additional health interventions during the COVID-19 pandemic. Other priorities include the interruption of cVDPV circulation in Somalia, Sudan and Yemen, maintaining high levels of immunity in the Region through immunization, ensuring certification-standard AFP surveillance in all Member States, enhancing preparedness and capacities to ensure early detection and effective response to any event or outbreak of wild poliovirus or cVDPV, continuing work on containment of polioviruses and certification of eradication, and transitioning polio assets and experience to broader public health functions. The programme is rapidly scaling up operations as polio vaccination campaigns resume to mitigate setbacks resulting from the COVID-19 pandemic and protect vulnerable under-immunized populations.
Financing polio eradication

35. 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 2019 was fully financed. However, significant budgetary constraints for GPEI are affecting implementation of planned activities in 2020 across all endemic and high-risk countries. The GPEI and the regional polio eradication programme continue to advocate strongly with donors and governments for more flexible funding and fully funded multi-year budgets.

The way forward

36. Member States are encouraged to:

• adopt the proposed resolution, which includes endorsement to establish a ministerial level Polio Eradication Regional Subcommittee;
• support the extraordinary efforts to stop poliovirus transmission being made by Afghanistan and Pakistan, and strengthen collaboration to halt transmission as soon as possible;
• advocate for and facilitate access to children in parts of Afghanistan where house-to-house vaccination has been banned since May 2018, and support access to all children in Somalia and Yemen for house-to-house vaccination;
• support the efforts in Somalia, Sudan and Yemen to urgently stop outbreaks of eVDPV;
• support efforts to rapidly scale up polio eradication operations to increase population immunity and deliver integrated services as supplementary vaccination activities resume following the pause due to COVID-19;
• mobilize resources to support polio eradication activities nationally and regionally;
• 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 IHR (2005) regarding the international spread of poliovirus;
• maintain a high level of immunization coverage through essential and supplementary immunization services and ensure the highest possible quality of AFP surveillance, particularly among high-risk groups including refugees, internally displaced persons, immigrants and mobile populations;
• ensure that polio outbreak preparedness and response plans are up to date and test them regularly through polio outbreak simulation exercises;
• ensure sustained momentum for polio transition in priority countries under the leadership of national governments with support from WHO and other partners.