

Progress report on eradication of poliomyelitis

Introduction

1. Transmission of wild poliovirus type 1 (WPV1) is at the lowest levels ever recorded in the Region (22 cases in 2017 and 13 as at 9 August in 2018) and is limited to a few discrete zones in the two remaining polio-endemic countries, Afghanistan and Pakistan. Wild poliovirus type 2 (WPV2) was declared eradicated in September 2015 and the last case due to wild poliovirus type 3 (WPV3) globally had onset in November 2012.
2. An outbreak of cases due to circulating vaccine-derived poliovirus type 2 (cVDPV2) emerged in 2017 in north-east Syrian Arab Republic resulting in 74 cases. Circulating vaccine-derived polioviruses type 2 and type 3 (cVDPV2 and cVDPV3) were also isolated from sewage water in Mogadishu, Somalia in 2017 and 2018; and four children paralyzed by cVDPVs had been detected in 2018 as at 9 August, (including one case due to cVDPV2, two due to cVDPV3 and one with co-infection of cVDPV2 and cVDPV3).
3. A total of 119 polio vaccination campaigns, including case response, outbreak response, special campaigns and national and subnational campaigns were carried out between January 2017 and the end of June 2018, during which nearly 620 000 000 doses of polio vaccines were administered.
4. The 17th meeting of the IHR (2005) Emergency Committee on the international spread of poliovirus again confirmed that the risk of international spread of poliovirus is a public health emergency of international concern, and consequently Temporary Recommendations for infected countries remain in force. Within the Region, Afghanistan and Pakistan are considered infected with wild poliovirus, and Somalia and the Syrian Arab Republic with cVDPV2.
5. All Member States except one submitted annual updates or progress reports to the Regional Commission for Certification of Poliomyelitis Eradication (RCC) in April 2018. The reports of 19 polio free countries in the Region were provisionally accepted by the RCC.
6. The Seventieth World Health Assembly in May 2017 urged the Director-General to make polio transition a key priority for the Organization at all levels. A strategic plan on polio transition was discussed during the Seventy-first World Health Assembly in May 2018.

Interruption of wild poliovirus transmission

7. A total of 22 cases were reported in 2017 (14 in Afghanistan and 8 in Pakistan). As of 9 August 2018, 13 cases due to wild poliovirus type 1 had been reported globally (10 in Afghanistan and 3 in Pakistan). Case numbers remain low; however, WPV1 continued to be isolated from environmental samples at several sites in Afghanistan and Pakistan.
8. On 20 September 2015, the Global Commission for the Certification of Poliomyelitis Eradication declared the global eradication of wild poliovirus type 2.
9. Wild poliovirus type 3 has not been detected globally since November 2012 and the onset of the last case in the Region was on 18 April 2012 in Pakistan.

Endemic countries

10. The governments of Afghanistan and Pakistan and partners are implementing robust national emergency action plans with the objective of stopping poliovirus transmission in 2018.

11. Community-based vaccination by locally recruited, mainly female volunteers, has markedly increased access to children in all endemic transmission zones in Pakistan.
12. Emergency operation centres are functioning at national and subnational levels in both Afghanistan and Pakistan to coordinate polio eradication efforts and to monitor closely the implementation of the national emergency action plans. A strong mechanism of cross-border coordination between the two countries has been established to stop polio transmission in common virus reservoir areas.
13. Inaccessibility and insecurity, large migrant and mobile populations and extensive population movement, lingering uncertainty among some parents about the value of vaccination and compromised supervision and monitoring of immunization activities in some key reservoirs remain significant issues.

Vaccine-derived polioviruses

14. A total of 74 cases due to cVDPV2 were reported in the north-east of the Syrian Arab Republic, the majority from Mayadeen district in Deir Al Zor governorate, with dates of onset between March and September 2017. Effective response activities implemented in exceptionally challenging operational circumstances resulted in the halting of the outbreak. An outbreak response assessment mission visited the country in April 2018 and concluded that response activities were effective in containing the outbreak.
15. Circulating vaccine-derived polioviruses type 2 and 3 were isolated from environmental samples in Mogadishu, Somalia, in late 2017 and early 2018, with the most recent positive samples collected on 19 April (cVDPV3) and 17 May 2018 (cVDPV2). To date there are four associated paralytic cases including one due to cVDPV2, two due to cVDPV3 and one due to co-infection of cVDPV2 and cVDPV3. The most recent cases have onset on 23 May (cVDPV3) and 26 May (cVDPV2) respectively. The detection of cVDPVs reflects a significant population immunity gap in Somalia due to the large number of inaccessible children. A comprehensive response plan is being implemented in coordination with other Horn of Africa countries.

At-risk countries

16. Apart from the endemic countries of Pakistan and Afghanistan, the six countries in the Region at greatest risk of outbreaks due to importation of WPV1 or development of cVDPVs are Iraq, Libya, Somalia, Sudan, Syrian Arab Republic and Yemen. All have varying degrees of complex emergency and access or security constraints, which hamper efforts to maintain high population immunity and sensitive surveillance. WHO is providing technical and logistic support to these six countries to implement supplementary immunization and surveillance strengthening activities.
17. A biannual risk analysis is conducted for the Region as a whole, and a quarterly analysis specific to the highest risk countries, to monitor levels of risk and the outcomes of risk mitigation activities and to inform the development of operational strategies.

Surveillance

18. Acute flaccid paralysis (AFP) surveillance continues to function in all countries of the Region. The AFP surveillance system reported 19 177 AFP cases in 2017 and 11 776 up to August 2018. In 2017, 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.
19. Environmental surveillance expanded in 2017 to include Jordan, Lebanon, Islamic Republic of Iran, Somalia and Syrian Arab Republic, in addition to already established systems in Afghanistan, Egypt and Pakistan. Arrangements are in place for expansion to Iraq and Sudan in 2018. In 2017, 1576 environmental samples were collected in the Region, of which 148 samples were positive for WPV1 (42 in Afghanistan and 106 in Pakistan) and 1050 samples were collected in 2018 as of 24 July, of which 74 samples were positive for WPV (28 in Afghanistan and 46 in Pakistan). Additionally, two samples tested positive for cVDPV2 in Somalia in 2017, and ten for cVDPV2, six for cVDPV3 and one for co-infection of cVDPV2 and cVDPV3 in 2018.

20. External field surveillance reviews were completed in Somalia and Sudan in 2017 and in Iraq in 2018 in collaboration with respective ministries of health and the partnership. These reviews validated achievements and identified gaps at the subnational level for further response.

Communications

21. In endemic and at-risk countries, communications outreach continues to take place in order to build and maintain community demand for and trust in polio vaccination. Through a range of print, online and broadcast news outlets, communities are made aware of vaccination drives and other messages delivered on the safety of vaccines and the importance of continued vaccination.

22. In Afghanistan and Pakistan, communications are also tailored to the local level, taking into account the social, cultural and political context. In Pakistan, in areas with relatively high numbers of refusals, outreach aims to build a sense of familiarity and trust around community vaccinators. With the support of UNICEF, vaccinators are also being trained on interpersonal skills and on how to address key areas of concerns of parents and caregivers in order to enable them to make informed decisions about polio vaccination. The immediate reporting of AFP cases is promoted.

23. WHO communication activities tie in closely with social mobilization efforts, for which UNICEF is the lead partner agency.

Withdrawal of the type-2 component in oral polio vaccine

24. The switch from trivalent to bivalent oral polio vaccine was successfully completed in 2016. Further verification was conducted into the withdrawal of the type 2 component in conflict-affected countries and in countries where monovalent type 2 vaccine has been used in outbreak responses after the switch. In line with the post-certification strategy, it is envisaged that bivalent oral polio vaccine will be withdrawn within a year of global certification of the eradication of wild poliovirus.

25. A global stockpile of mOPV2 has been established in order to facilitate outbreak response as needed. Three countries in the Region, Pakistan (2016), Somalia (2017–2018) and Syrian Arab Republic (2017–2018) have so far made use of this stockpile to respond to cVDPV2.

26. Due to a global supply shortage of inactivated polio vaccine (IPV) in 2016 and 2017, the Strategic Advisory Group of Experts on Immunization (SAGE) recommended prioritizing the highest risk countries for IPV supply, particularly the endemic countries. As a result, some countries not considered at high risk could not introduce IPV as scheduled, or interrupted its use shortly after its introduction. However, the supply situation has improved in 2018 and all Member States are expected to introduce IPV.

Certification of polio eradication

27. The RCC convened its 31st meeting on 24–26 April 2018 in Dubai, United Arab of Emirates.

28. Reports from all countries were reviewed by RCC members except from one country which did not submit a report. Nineteen reports were provisionally accepted while the progress reports of Afghanistan and Pakistan were noted.

29. The Commission recommended modifications to certification annual updates to include more emphasis on risk analyses and mitigation with focus on four areas: population immunity, surveillance, containment, and outbreak preparedness and response.

Containment

30. Significant progress has been made in the Region to contain type 2 polioviruses, in line with the WHO Global Action Plan (GAP III) to minimize poliovirus facility-associated risks after type-specific eradication of wild polioviruses and sequential cessation of oral polio vaccine use.

31. To assist countries in achieving containment, two regional meetings and a workshop on containment of polioviruses and potentially infectious materials were held.

32. Only two facilities in the Region, the oral polio vaccine production facility at the Razi Institute in the Islamic Republic of Iran and the poliovirus serology laboratory in the polio regional reference laboratory at the National Institute of Health in Pakistan, have been designated as polio essential facilities. In both countries, a national authority for containment has also been nominated to ensure strict implementation of containment measures.

33. All countries that destroyed or removed VDPV2 materials documented the destruction processes.

Polio outbreak simulation exercise

34. A standard training module for simulation exercises has been developed, consistent with global guidelines and procedures.

35. All polio-free countries of the Region except Palestine and Yemen have conducted simulation exercises. The regional polio team facilitated 24 exercises in 18 countries during the period 2016–2018.

Transition planning

36. Transition planning is a critical part of preparing for, and sustaining, a polio-free world. Four countries in the Region, namely Afghanistan, Pakistan, Somalia and Sudan, are among the 16 countries that have been identified globally as a priority for transition planning. An additional 3 countries, Iraq, Syrian Arab Republic and Yemen, are considered regional priorities.

37. A joint planning workshop for transition in Somalia was held in April 2018, which concluded with a consensus on the strategic options for transition of polio functions, with the main focus on surveillance, service delivery (particularly essential immunization services) and emergency preparedness and response.

38. It is envisaged that Somalia and Sudan will operationalize their transition plans in 2018, and that Iraq, Syrian Arab Republic and Yemen will develop transition plans during the second half of 2018. Pakistan and Afghanistan will commence preliminary planning in 2018–2019.

The Islamic Advisory Group for Polio Eradication

39. The Islamic Advisory Group for Polio Eradication (IAG), under the leadership of Al Azhar Al Sharif of Egypt and the International Islamic Fiqh Academy, Jeddah, and in collaboration with the Organization of Islamic Cooperation and the Islamic Development Bank, is meeting regularly to determine how best to contribute to the eradication of polio, and to review progress in implementing interventions.

40. In addition to its efforts in the area of polio eradication, the IAG through a consultative process with WHO, UNICEF and the United Nations Population Fund (UNFPA) has agreed to provide other support for key maternal and child health interventions, including immunization, in order to contribute towards attainment of the Sustainable Development Goals (SDGs).

41. A student training manual developed for the IAG by Al Azhar University has been launched. The manual is being used for training the international students of religious studies in Al Azhar coming from polio-endemic and at-risk countries on polio eradication, routine immunization and priority maternal and child health issues. For this purpose the IAG is also beginning to collaborate with institutions in countries in other regions, including the Islamic University in Uganda.

42. Efforts of the national Islamic advisory group in Pakistan are well aligned with activities under the national emergency action plan. Religious support persons provide support in addressing misconceptions and vaccine refusals. A similar role is performed by the national advisory group in Afghanistan. Contact has also been made with Islamic nongovernmental organizations in Pakistan in order to identify possible areas of collaboration, since these organizations have a large reach within communities of interest.

Regional priorities for polio eradication in 2018 and 2019

43. The overriding regional priority is stopping wild poliovirus transmission in Afghanistan and Pakistan.
44. The sustained interruption of cVDPV circulation in Somalia and the Syrian Arab Republic is also a priority.
45. Other priorities include: maintaining high levels of immunity by improving immunization services in at-risk countries; ensuring the highest possible quality of AFP surveillance; enhancing preparedness and response plans in all Member States of the Region to ensure early detection and effective response to any event or outbreak of WPV or cVDPV; streamlining certification and containment processes; and transition planning.

Financing the Global Polio Eradication Initiative

46. 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 2017 and 2018 has been fully financed.
47. In order to ensure the achievement and maintenance of a polio-free world in the most cost-effective way, the Global Polio Eradication Initiative and the regional poliomyelitis programme will continue to refine multi-year budgets based on evolving epidemiology. Efforts to mobilize additional funding will also continue, with particular focus on securing flexible resources as well as resources against specific gaps

The way forward

48. Member States are encouraged to:
- Acknowledge the extraordinary efforts to stop polio transmission being made by Afghanistan and Pakistan, the two remaining endemic countries, and strengthen collaboration to stop poliovirus transmission in 2018;
 - Mobilize resources to support polio eradication activities nationally and regionally;
 - Maximize the opportunities to ensure that polio assets and experience are effectively used 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 GAPIII for the containment of polioviruses;
 - Take all the necessary measures to implement the temporary recommendations of the Emergency Committee on Polio Eradication under the IHR (2005);
 - 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;
 - Ensure that polio outbreak preparedness and response plans are up to date and test them regularly through polio outbreak simulation exercises.