

Poliomyelitis

Poliomyelitis eradication

Report by the Director-General

1. At its 150th session, the Executive Board noted the report on poliomyelitis eradication.¹ This report to the World Health Assembly provides information at the start of 2022 as the Polio Eradication Strategy 2022–2026: Delivering on a Promise takes effect. It covers: interrupting all transmission of wild poliovirus in countries where the virus is endemic, and stopping the transmission of circulating vaccine-derived poliovirus and preventing outbreaks thereof in non-endemic countries; the continuing impact of the pandemic of coronavirus disease (COVID-19) on the global polio eradication effort; and the financing situation at the start of 2022.

2. Compared to 2020, the epidemiological situation improved in 2021, with a 96% decline in cases of poliomyelitis due to wild poliovirus type 1 and a 47% decline in cases due to circulating vaccine-derived poliovirus, globally. In endemic areas, five cases due to wild poliovirus type 1 were reported in 2021. This favourable situation must not give rise to complacency; it is a unique opportunity that should be capitalized on through strengthened engagement and support by all partners in the public and civil society sectors. The polio eradication programme continues to face both ongoing and emerging challenges, such as the need to catch up with and vaccinate children in endemic reservoir areas who are persistently missed by programmes; insecurity and uncertainty in Afghanistan; the continuing COVID-19 pandemic, which affects polio surveillance and campaigns; and a precarious financial situation adversely affecting the global effort.

GOAL 1: PERMANENTLY INTERRUPT ALL POLIOVIRUS TRANSMISSION IN ENDEMIC COUNTRIES

3. Five of six WHO regions are independently certified as free of all wild polioviruses, and in 2021, the remaining region endemic for wild poliovirus, the Eastern Mediterranean Region, reported the lowest number of cases ever. Global eradication of wild polioviruses type 2 and type 3 has been certified. In 2021, wild poliovirus type 1 was detected in parts of Afghanistan and Pakistan, the last remaining countries where the virus is endemic. In addition to wild poliovirus type 1, Afghanistan and Pakistan are affected by co-circulating vaccine-derived poliovirus type 2. Despite the record-low levels of cases of poliomyelitis reported, the danger of residual transmission is underlined by the continuing detection of wild poliovirus type 1 in environmental samples in both countries. The risk of continuing transmission of wild poliovirus anywhere was further underscored with the confirmation of a case of poliomyelitis

¹ Document EB150/21; see also the summary records of the Executive Board at its 150th session, ninth meeting, section 3, and tenth meeting section 2.

due to wild poliovirus type 1 in February 2022 in Malawi; the virus was genetically linked to a virus originating in Pakistan.

4. In Afghanistan, four cases of poliomyelitis due to wild poliovirus type 1 and 0.3% of environmental samples positive for wild poliovirus type 1 (one of 298) were reported in 2021, along with 43 cases due to circulating vaccine-derived poliovirus type 2 and 13% of environmental samples positive for circulating vaccine-derived poliovirus type 2 (40 of 298).¹

5. Afghanistan has in the past successfully interrupted indigenous transmission of wild poliovirus in the two endemic reservoirs, the Southern and Eastern regions; however, its efforts have been complicated by the humanitarian crisis, which intensified in August 2021 and continues. As a result, mass displacements of people and increased insecurity compounded and complicated the existing challenges of limited access for house-to-house vaccination in the Southern region, compromised the safety of health workers at the forefront, and engendered continuing operational complications arising from the COVID-19 pandemic. Although overall national polio vaccination coverage is high (upwards of 90%), subnational gaps in immunity continue among persistently-missed children in reservoir areas.

6. The humanitarian needs of the population of Afghanistan continue to rise sharply. Since the end of May 2021, the number of people internally displaced and in need of immediate humanitarian aid has more than doubled.² The national polio programme continues to adapt operational approaches as challenges evolve, in order to rapidly interrupt transmission of strains of both wild poliovirus type 1 and circulating vaccine-derived poliovirus type 2, by focusing efforts on identifying and reaching persistently-missed children. With the deepening of the humanitarian crisis, the programme is focusing on rigorous humanitarian neutrality; development of contingency plans; a flexible approach to accessing children; and dynamic solutions to local vaccination and strengthening of routine immunization services, including the implementation of the integrated services delivery plan. The humanitarian operation will depend on funding, movement within, to and from Afghanistan, and access to health facilities. Frontline humanitarian organizations, which have a critical role, must be supported. Despite this environment, Afghanistan implemented two back-to-back nationwide immunization campaigns targeting 9.9 million children in November and December 2021, including activities in Southern Region, where 2.6 million children were vaccinated for the first time in almost three years as a result of insecurity and inaccessibility.

7. In Pakistan, one case of poliomyelitis due to wild poliovirus type 1 and 8% of environmental samples positive for wild poliovirus type 1 (3 of 833) have been reported in 2021, along with eight cases due to circulating vaccine-derived poliovirus type 2 and 4% of environmental samples positive for circulating vaccine-derived poliovirus type 2 (35 of 833).

8. Following a temporary pause in supplementary immunization activities in 2020 due to the COVID-19 pandemic, activities resumed in August 2020 to counter circulation of both wild poliovirus type 1 and circulating vaccine-derived poliovirus type 2 in the country. Cross-border coordination with Afghanistan is continuing. The programme operates under the auspices of the National Emergency Action Plan implemented through the National Emergency Operations Centre, with the overarching goal

¹ Unless otherwise stated, all epidemiological data in this report are as at February 2022. The latest global epidemiological data, updated on a weekly basis, are available at <https://polioeradication.org/polio-today/polio-now/this-week/>.

² UNHCR. Statement by Principals of the Inter-Agency Standing Committee on Afghanistan, 19 August 2021. United Nations High Commissioner for Refugees: Geneva; 2021 (<https://www.unhcr.org/en-us/news/press/2021/8/611e1cc738/statement-principals-inter-agency-standing-committee-iasc-afghanistan.html>, accessed 1 April 2022).

of reducing the number of children not immunized during supplementary immunization activities. The programme is focusing on prioritization of the highest-risk areas with the highest proportion of persistently-missed children; strong implementation of strategies to engage communities; and integration with broader public health programmes, in particular to help to strengthen immunization systems. It fully engages federal and provincial leadership to support and oversee programme implementation.

9. A ministerial Regional Subcommittee on Polio Eradication and Outbreaks, established by WHO's Regional Director for the Eastern Mediterranean, met for the first time in March 2021. The existence and meetings of the Subcommittee signal greater engagement of government leadership, with provision of additional support and guidance to Afghanistan and Pakistan. At the same time, operations in both countries are affected by the COVID-19 pandemic, as polio eradication staff, expertise and infrastructure continue to support national and local COVID-19 response efforts, including introduction of COVID-19 vaccines.

GOAL 2: STOP TRANSMISSION OF CIRCULATING VACCINE-DERIVED POLIOVIRUS AND PREVENT OUTBREAKS IN NON-ENDEMIC COUNTRIES

10. In 2021, circulating vaccine-derived poliovirus continued to be detected in 20 non-endemic countries of three WHO regions, resulting in 590 cases (15 cases due to type 1 and 575 cases due to type 2), compared to 1079 cases reported in 2020. Although this represents a 47% decline in global cases compared to 2020, the situation remains precarious, with continuing gaps in immunity, in particular to type 2 poliovirus, insufficient quality and timeliness of outbreak response, and dropping immunization rates owing to disruptions related to COVID-19. In particular, poliovirus continued to be detected in both newly- and previously-affected areas. Of particular concern is the situation in areas of West Africa, collectively accounting for 76% (438 of 575) of all global cases due to circulating vaccine-derived poliovirus type 2, and Nigeria alone accounting for 67% (389 of 575) of all global cases. The Global Polio Eradication Initiative is particularly concerned at the escalating crisis affecting Ukraine and disruptions to its immunization and surveillance systems and the pausing of outbreak response to the country's ongoing outbreak of circulating vaccine-derived poliovirus type 2. Contingency plans are being developed to support Ukraine and prevent spread of this outbreak. Neighbouring countries are assessing their immunity levels and surveillance sensitivity. It is crucial that necessary resources are mobilized and made available to assist with the humanitarian needs, including relief, disease response and prevention efforts, in both Ukraine and neighbouring countries.

11. To stop transmission of circulating vaccine-derived poliovirus type 2 more effectively and sustainably, the novel oral polio vaccine type 2 continues to be administered through the WHO Emergency Use Listing Procedure. The initial use period for the vaccine concluded in early October 2021 upon the recommendation of the Strategic Advisory Group of Experts on immunization. In the 12 months following its first use in March 2021, the Secretariat's data indicate that about 250 million doses of novel oral polio vaccine type 2 have been used across 14 countries. Enhanced surveillance allowed for rigorous safety monitoring of the vaccine during the initial use phase and continuing monitoring and verification of readiness before use will remain in place for the duration of the vaccine's deployment under the WHO Emergency Use Listing Procedure.

12. In addition to the continuing introduction of novel oral polio vaccine type 2, success in attaining the goal will depend on high-quality and rapid-response campaigns to any current or newly-detected outbreak. There is no shortage of type 2 vaccine for responses to outbreaks, and the Initiative is guided by the advice of the Strategic Advisory Group of Experts on immunization to respond as quickly as possible with available type 2 vaccine. Success depends on rapid and high-quality implementation of

outbreak response, using whatever type 2 vaccine that is available in a given area (rather than delaying a response in favour of any different vaccine whose supply might be limited at that given time). The response should include targeted and coordinated political engagement at all levels following the declaration of a public health emergency; establishment of command structures for emergency outbreak response in order to effectively coordinate outbreak responses; scaling up regional and country capacity in the areas with highest risk; and coordinating with essential immunization services to identify and reach zero-dose and under-immunized communities. Underpinning all is the need for enhanced surveillance capacity to enable more rapid detection and a timely response so as to minimize the risk and consequences of any detected emergence of poliovirus. The Initiative continues to manage a complex global vaccine supply situation, consisting of different polio vaccine formulations, and make adaptations in response to an evolving poliovirus epidemiology.

13. With the bulk of circulating vaccine-derived poliovirus type 2 cases occurring in the African Region, and following the successful certification of wild poliovirus eradication in that Region in August 2020, emergency efforts are being intensified to secure a sustainable polio-free African Region that is free of all forms of the disease. In the margins of the 71st session of the Regional Committee for Africa, on 25 August 2021, Member States re-committed themselves¹ to intensifying their efforts to eradicate all remaining strains of circulating vaccine-derived poliovirus type 2, while continuing to transition the assets, functions and expertise established by the polio programme to benefit broader public health efforts and to ensure longer term sustainability.² To balance the needs for sustained eradication efforts and transition planning, the Global Polio Eradication Initiative will focus its resources on known polio-affected and high-risk areas. An expert rapid-response team is in place to enable rapid detection, investigation and response in the event of any emergence of poliovirus.

Public health emergency of international concern

14. At its most recent meeting in February 2022,³ the Emergency Committee under the International Health Regulations (2005) on the international spread of poliovirus, having reviewed the global poliovirus epidemiology including the impacts of the global COVID-19 pandemic, unanimously agreed that the risk of international spread of poliovirus remains a public health emergency of international concern.

Enabling environment

15. Successful implementation of the Polio Eradication Strategy 2022–2026 is underpinned by several enabling factors, including ensuring gender equality and gender-responsive programming, research, monitoring and evaluation, and ensuring a more integrated approach (as highlighted in the sections above on Goal 1 and Goal 2) to eradication.

16. In line with the Gender Equality Strategy 2019–2023 of the Global Polio Eradication Initiative and efforts to identify and address gender-related barriers to immunization, the Polio Eradication Strategy 2022–2026 sets clear goals to strengthen gender responsiveness as a key factor to achieve polio

¹ Global Polio Eradication Initiative. African countries commit to ending all forms of polio, 26 August 2021. Geneva: World Health Organization; 2021 (<https://polioeradication.org/news-post/african-countries-commit-to-ending-all-forms-of-polio/>, accessed 1 April 2022).

² For additional information on polio transition, including activities in the African Region, see document A75/24.

³ WHO. Statement of the thirty-first Polio IHR Emergency Committee, February 2022. Geneva: World Health Organization; 2022 (<https://www.who.int/news/item/11-03-2022-statement-of-the-thirty-first-polio-ihf-emergency-committee>, accessed 1 April 2022).

eradication. The programme's commitment to gender-responsive programming closely aligns with the Immunization Agenda 2030 and the gender policy of Gavi, the Vaccine Alliance.

17. Cross-programmatic integration has been accelerated by the COVID-19 pandemic, during which the polio programme has worked closely with other health programmes. In places where the polio programme has the largest presence, polio staff have contributed to the COVID-19 pandemic response and immunization recovery efforts, together with the introduction and administration of COVID-19 vaccines. These contributions, which extend beyond eradicating polio, manifest the transferable skills of the polio staff and their added value for broader public health, in the context of polio transition.

18. The Polio Eradication Strategy 2022–2026 brings integration into focus through two transformative approaches. The first is a recognition that, for polio eradication to succeed, chronically low immunization coverage and demand-based refusals of polio vaccines in key geographical areas and populations must be addressed and overcome, and that integration provides targeted solutions to tackle these challenges. The second approach is the recognition of integration as a step towards the long-term, sustainable transition of functions and assets of the polio programme to other health programmes and national health systems as the world nears polio eradication. The Global Polio Eradication Initiative is aligning its priorities with the key global vaccine and immunization strategies such as the Immunization Agenda 2030 and the strategy of Gavi, the Vaccine Alliance, for 2021–2025 focusing on identifying and reaching “zero-dose” communities.

PREPARING FOR THE POST-CERTIFICATION WORLD

Containing poliovirus

19. The overarching goal of poliovirus containment is to reduce the risk of reintroduction of poliovirus and disease into communities by monitoring and limiting the types and amounts of polioviruses held in countries through the annual review of inventories and providing technical guidance on the implementation of the WHO global action plan to minimize poliovirus facility-associated risk in designated poliovirus-essential facilities. In accordance with resolution WHA71.16 (2018) on poliomyelitis: containment of polioviruses, Member States should continue to implement appropriate containment of type 2 polioviruses, as outlined in the global action plan to minimize poliovirus facility-associated risk after type-specific eradication of wild polioviruses and sequential cessation of oral polio vaccine use.¹ All Member States, irrespective of poliovirus-affected status, should: ensure that poliovirus-containment measures are fully implemented in a timely manner; reduce the number of poliovirus-essential facilities to an absolute minimum; and when possible abandon the use of wild poliovirus in vaccine production and testing in favour of alternative, genetically-stabilized attenuated strains.

Cessation of oral polio vaccine

20. Following the successful eradication of wild polioviruses globally, the use of all remaining oral polio vaccine by routine immunization programmes will end in order to eliminate the risks of vaccine-derived polioviruses. Planning for the global cessation of the use of all remaining oral polio vaccines will begin at least two years before the eventual cessation, building on the lessons learned from the removal of the type 2 component of oral polio vaccines in 2016. Oral polio vaccine-cessation policies

¹ WHO. WHO global action plan to minimize poliovirus facility-associated risk after type-specific eradication of wild polioviruses and sequential cessation of oral polio vaccine use: GAPIII. Geneva: World Health Organization; 2015 (<http://apps.who.int/iris/handle/10665/208872>, accessed 1 April 2022).

will take into account strategies for pre-cessation supplementary immunization activities; potential availability of new, more genetically-stable vaccines; establishment and maintenance of global stockpiles of relevant oral polio vaccines; and time intervals between certification of eradication and cessation of oral polio vaccine use. The Secretariat will continue to be guided in this process by expert advisory groups, notably the Global Commission for the Certification of the Eradication of Poliomyelitis and the Strategic Advisory Group of Experts on immunization, and will keep Member States informed of and seek their approval for any global policy decisions needed during the process.

GOVERNANCE AND FINANCING

21. In 2020, the Global Polio Eradication Initiative conducted a comprehensive review of governance and management to evaluate how to improve the programme's operations and structures towards the eradication goal. As a result of the review, crucial changes are being implemented to enhance agility, efficiency and effectiveness across all levels, including regional empowerment and increased delegation of decision-making to local levels. The recommendations on regionalization, wider participation in the Polio Oversight Board, including the broadening of donor representation and new support groups on key and emerging issues such as gender integration and monitoring and evaluation, are still being implemented.

22. Overall political commitment to polio eradication remains high, but in the current economic climate and with the demands and costs of responding to COVID-19, the polio programme faces a precarious global health financing situation which could significantly hamper eradication efforts. The operating budget to implement the Polio Eradication Strategy 2022–2026 will be submitted for approval to the Polio Oversight Board in the second quarter of 2022. Resource mobilization for the new strategy and budget will be supported by an investment case that will be put forward later in 2022; the programme focuses on continued support from existing donors and aims to identify new sources of support, together with synergies with multilateral funds available at country levels. The Global Polio Eradication Initiative budget will not be sufficient by itself to fully implement the strategy and achieve eradication. For example, funds are needed to support procurement of inactivated polio vaccine through Gavi, the Vaccine Alliance, enhanced essential immunization and additional oral polio vaccine stockpiles. As in previous years, the polio programme will work hand-in-hand with Gavi, the Vaccine Alliance, a core partner of the Global Polio Eradication Initiative, and the broader immunization community to strengthen global immunization and advocate comprehensive and complementary funding focused on zero-dose communities and children.

23. Increased domestic financing will be key to making this the final and successful phase of polio eradication. Thus, Member States are encouraged to mobilize domestic resources to respond to outbreaks of circulating vaccine-derived polioviruses, in line with decision EB146(11) (2020) on polio eradication, and to sustain the core capacities and infrastructure that were put in place to achieve polio eradication but whose reach extends into many other essential public health functions and programmes.

ACTION BY THE HEALTH ASSEMBLY

24. The Health Assembly is invited to note the report and further to provide guidance on concrete ways to fully implement the Polio Eradication Strategy 2022–2026 in order to achieve a world free of all forms of poliovirus, where no child will ever again be paralysed by poliomyelitis.

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