

Poliomyelitis: intensification of the global eradication initiative

Report by the Secretariat

1. The Polio Eradication and Endgame Strategic Plan 2013–2018¹ was prepared in response to a request by the Health Assembly in resolution WHA65.5 on poliomyelitis: intensification of the global eradication initiative. In May 2013, the Plan was presented to the Sixty-sixth World Health Assembly. The present report summarizes the status of each of the four objectives of the Endgame Strategic Plan, the impediments to achieving the milestones in a timely manner, the current financing situation, and the programme priorities for 2014.

OBJECTIVE 1: POLIOVIRUS DETECTION AND INTERRUPTION

2. As of 10 December 2013, the number of cases of disease due to wild poliovirus had increased by 68% compared to the same time in 2012 (359 cases compared with 213 cases), with eight countries reporting cases of poliomyelitis compared to four at this point in 2012. This increase is driven by disease outbreaks due to new international spread of polioviruses from Nigeria into the Horn of Africa (183 cases in Somalia, 14 in Kenya, 6 in Ethiopia) and from Pakistan into the Middle East (17 cases in the Syrian Arab Republic). Four cases due to an imported poliovirus have also been detected in Cameroon. To date, cases of endemic poliomyelitis increased by 32% in Pakistan (to 74) compared with the same time in 2012. In the other two countries where the virus is endemic, Nigeria and Afghanistan, cases declined by 58% and 68%, respectively. In 2013, all cases detected in Afghanistan occurred in the Eastern Region and were due to polioviruses that originated in Pakistan. Wild poliovirus of Pakistani origin was also detected in environmental samples collected in Israel and the occupied Palestinian territory.

3. For the first time in the history of the eradication initiative, in 2013 all cases of poliomyelitis caused by a wild virus were due to a single serotype, type 1; the most recent case due to wild poliovirus type 3 occurred on 10 November 2012 in Nigeria. Cases due to circulating vaccine-derived poliovirus type 2 (57 cases in seven countries) declined by 16% compared to 2012, with most cases being either in Pakistan or the border area of Cameroon, Chad, Niger and Nigeria.

4. Overall, the proportion of children vaccinated during supplementary immunization activities increased in Afghanistan, Nigeria and Pakistan, the three endemic countries, in 2013, with national emergency action plans driving operational improvements in most districts where historically

¹ <http://www.polioeradication.org/ResourceLibrary/Strategyandwork.aspx> (accessed 4 December 2013).

performance of these activities has been poor. However, insecurity, targeted attacks on health workers and/or a ban by local authorities on polio immunization resulted in a severe deterioration in access to children in some priority infected areas, particularly in the Federally Administered Tribal Areas and Khyber Pakhtunkhwa province of Pakistan and the state of Borno in Nigeria. These new challenges, combined with chronically poor implementation of activities in other priority areas, most notably in the state of Kano, Nigeria, resulted in persistent endemic virus transmission and recurring outbreaks of poliomyelitis within these countries, and continued international spread of virus and outbreaks in reinfected countries.¹ As of November 2013, in poliovirus-affected areas of Pakistan and Nigeria an estimated combined total of more than 700 000 children remained inaccessible for vaccination; in addition, more than 500 000 children were inaccessible for polio vaccination in the reinfected area of south-central Somalia.² Consequently, the risk of further international spread remains high, particularly in central Africa, the Middle East and the Horn of Africa. Recognizing that 79% of poliomyelitis cases in 2013 occurred in countries of the Eastern Mediterranean Region, the Regional Committee of that Region at its sixtieth session in October 2013 declared the situation an emergency for all Member States of the Region.³

OBJECTIVE 2: STRENGTHENING IMMUNIZATION SYSTEMS AND WITHDRAWAL OF ORAL POLIO VACCINE

5. In 2013, work intensified on securing the achievements made to date towards global eradication, and enhancing protection against polioviruses in the short- and long-term, through strengthening immunization systems and eventual withdrawal of the type 2 component of the oral polio vaccine. Five criteria were adopted for gauging readiness for type 2 oral polio vaccine withdrawal globally as early as 2016:⁴ introduction of at least one dose of inactivated poliovirus vaccine as recommended by the Strategic Advisory Group of Experts on immunization; access to a bivalent oral polio vaccine that is licensed for routine immunization; implementation of surveillance and response protocols for type 2 poliovirus (including constitution of a stockpile of monovalent oral polio vaccine type 2); completion of phase 1 containment activities and appropriate handling of residual type 2 materials;⁵ and verification of wild poliovirus type 2 eradication globally. The trigger for withdrawal of the type 2 component of the oral polio vaccine globally will be the absence of all persistent type 2 circulating vaccine-derived polioviruses for at least six months.

6. WHO, its Global Polio Eradication Initiative partners and the GAVI Alliance, initiated a joint programme of work to support the strengthening of routine immunization systems in the 10 priority countries identified in the Endgame Plan.⁶ The joint approach in these countries seeks to capitalize on the GAVI Alliance's investments in health systems strengthening and to exploit fully the substantial

¹ Report of the Independent Monitoring Board of the Global Polio Eradication Initiative, October 2013.

² In 2013, countries in the Horn of Africa were reinfected with polioviruses originating in northern Nigeria.

³ Resolution EM/RC60/R.3 Escalating poliomyelitis emergency in the Eastern Mediterranean Region.

⁴ Meeting of the Strategic Advisory Group of Experts on immunization, November 2013 – conclusions and recommendations. *Weekly Epidemiological Record*, 2014; 89(1):1–16, in press.

⁵ Global action plan to minimize poliovirus facility-associated risk after eradication of wild poliovirus and cessation of routine oral polio vaccine use (draft) (http://www.polioeradication.org/Portals/0/Document/Resources/PostEradication/GAP3_2009.pdf, accessed 4 December 2013).

⁶ These 10 priority countries contain most of the world's under-immunized children and have a substantial human resources infrastructure funded by the Global Polio Eradication Initiative: Afghanistan, Angola, Chad, Democratic Republic of the Congo, Ethiopia, India, Nigeria, Pakistan, Somalia, and South Sudan.

technical assistance deployed through the Global Polio Eradication Initiative. In 2013, the immunization plans in five of these countries – Chad, Democratic Republic of the Congo, India, Nigeria and Pakistan – were reviewed and revised to include specific actions for ensuring that the infrastructure of the Global Polio Eradication Initiative systematically contributes to improving routine immunization coverage. This approach exploits core strengths of the polio programme in: policy and strategy; planning, management and oversight; implementation and service delivery; monitoring and evaluation; communications and community engagement; disease surveillance and data analysis; capacity building; and partnerships and coordination.

7. The Strategic Advisory Group of Experts on immunization, at its meeting on 5–7 November 2013, finalized its policy recommendations for the age of administration of inactivated poliovirus vaccine in the routine immunization schedules of countries that introduce a single dose of the vaccine.¹ The Group also reviewed and endorsed the strategy that had been developed with the GAVI Alliance for the financing, supply and introduction of inactivated poliovirus vaccine globally. To facilitate planning, the strategy prioritizes the 124 countries that currently use only oral polio vaccine into four tiers, on the basis of the risk of the emergence and spread of circulating vaccine-derived poliovirus type 2. Of note, 72% of the strategy's target population is concentrated in the 33 countries of tiers 1 and 2 that constitute the greatest risk for emergence and spread of circulating vaccine-derived poliovirus type 2. The financing strategy combines funding through the GAVI Alliance and expedited processes for its 73 countries with volume purchasing and UNICEF-assisted procurement for other countries in order to obtain the lowest possible prices for inactivated poliovirus vaccine in the near-term.

8. The Strategic Advisory Group of Experts on immunization concluded that, although the price for inactivated poliovirus vaccine could slightly exceed the US\$1 per dose target for the period of the Endgame Plan, the outcome of the current UNICEF tender would represent the best possible price for low- and low-middle income countries at this time. However, it recommended that further reductions in the cost of inactivated poliovirus vaccine should be pursued through continued work to develop and license new products and approaches using adjuvants and intradermal administration routes.

OBJECTIVE 3: CONTAINMENT AND CERTIFICATION

9. The Global Action Plan to Minimize Poliovirus Facility Associated Risk after Eradication of Wild Poliovirus and Cessation of Routine Oral Polio Vaccine Use (draft)² is being updated to align activities with the strategy and timelines of the Endgame Plan. The updated plan will be available for public consultation in 2014, with finalization expected by the end of that year. Operationally, the immediate priority for containment is to ensure that phase 1 activities are completed by 2015. These include establishment of an inventory of all facilities holding infectious and/or potentially-infectious wild poliovirus materials and the implementation of measures to ensure the safe handling of all residual wild polioviruses, especially serotype 2. As at 25 November 2013, all Member States had completed phase 1 activities with the exception of one country in the South-East Asia Region, two countries in the Eastern Mediterranean Region, and 37 countries in the African Region.

¹ Meeting of the Strategic Advisory Group of Experts on immunization, November 2013 – conclusions and recommendations. *Weekly Epidemiological Record*, 2014; 89(1):1–16, in press. .

² Global action plan to minimize poliovirus facility-associated risk after eradication of wild poliovirus and cessation of routine oral polio vaccine use (draft) (http://www.polioeradication.org/Portals/0/Document/Resources/PostEradication/GAP3_2009.pdf, accessed 4 December 2013).

10. The South-East Asia Region is on track for certification of polio eradication in the first quarter of 2014, following its last case of paralytic poliomyelitis due to wild poliovirus in January 2011. The findings of the South-East Asia Regional Certification Commission for Polio Eradication will be presented to the Global Commission for the Certification of the Eradication of Poliomyelitis in 2014. The Global Commission will also review data from all six WHO regions to determine whether there is sufficient evidence to conclude formally that wild poliovirus type 2 has been eradicated globally.

OBJECTIVE 4: LEGACY PLANNING

11. Legacy planning aims to ensure that the knowledge, capacities, processes and assets created by the Global Polio Eradication Initiative continue to benefit other public health programmes after completion of the eradication effort. In 2013, an extensive consultative process was initiated with Member States and stakeholders, beginning with the drafting of a background paper for consideration by the WHO regional committees that outlined three possible legacy scenarios. A growing consensus is emerging from these consultations that the assets, lessons and resources of the polio initiative should eventually be transitioned, primarily through national governments, to benefit other existing health priorities.

12. In addition, an independent study was conducted on the 22 000 people who are deployed by the Global Polio Eradication Initiative, including the more than 7000 contracted by WHO.¹ This study, which was designed to determine the financial implications of eventual closure of the polio programme, also consulted senior representatives of donor agencies, other health initiatives and some national governments to obtain their perspectives on long-term options for the polio-funded workforce. These stakeholders most frequently cited the surveillance (86%), laboratory (50%) and social mobilization (46%) functions performed by this workforce as of potential value for transition to other health initiatives. Two thirds of respondents stated that the future administration of this human resources infrastructure should be the responsibility of national governments.

13. In 2014, the polio legacy work will continue with further consultation to guide the overall direction, greater documentation of the assets and capabilities of the Global Polio Eradication Initiative, and closer examination of the knowledge gathered and lessons learnt. These inputs will form the basis of a global framework that can be used to support legacy planning at the national and international levels. A draft framework will be prepared for consideration by regional committees in 2014, in advance of the Sixty-eighth World Health Assembly in 2015.

FINANCING AND RESOURCE MANAGEMENT

14. In April 2013, donors and polio-affected countries pledged US\$ 4040 million towards the US\$ 5530 million budget of the Endgame Plan at the recent Global Vaccine Summit (Abu Dhabi, 24 and 25 April 2013). A further US\$ 490 million has been pledged since then. In order to operationalize these pledges and mobilize additional funding for the remaining US\$ 1000 million gap, WHO and its Global Polio Eradication Initiative partners have enhanced their resource mobilization and strategic communications capacities and refocused their cross-agency polio advocacy group on intensified resource mobilization. Complementing these capacities, a cross-agency finance working group has been established to ensure stronger cost control, accountability and resource management, and to act on the findings of a study in 2012 on “value for money”.

¹ See document EB134/49.

15. By end November 2013, aggregated requests for financing of eradication activities in 2014 exceeded the budget of US\$ 1033 million by US\$ 286 million. These requests included an additional US\$ 60 million and US\$ 26 million for outbreak control in the Horn of Africa and the Middle East, respectively; additional costs for the intensification of supplementary immunization activities in Nigeria (US\$ 74 million), Pakistan (US\$ 28 million) and Afghanistan (US\$ 6 million); and an additional US\$ 60 million for early introduction of inactivated poliovirus vaccine. Reconciling these requests with available financing will require a substantial rescheduling of supplementary immunization activities in many countries, allocation of part of the programme's limited discretionary funds for inactivated poliovirus vaccine introduction and, potentially, the off-budget use of humanitarian funding for some outbreak activities in complex emergency settings.

MAJOR RISKS AND PROGRAMME PRIORITIES FOR 2014

16. As of 25 November 2013, the major risks to attaining the 2014 eradication target of the Endgame Plan were: the bans on immunization campaigns in the North Waziristan agency in Pakistan and parts of southern and central Somalia; the continued targeting of vaccinators in Khyber Pakhtunkhwa province in Pakistan; ongoing military operations in Khyber Agency (within the Federally Administered Tribal Areas region) of Pakistan; insecurity in Eastern Region, Afghanistan and Borno, Nigeria; active conflict in the Syrian Arab Republic and chronic gaps in programme performance in Kano state, Nigeria. These risks to the vaccination of children in known polio-affected areas are compounded by gaps in polio surveillance and the continued threat of new international spread of wild poliovirus into highly vulnerable areas and populations.

17. Management of these risks requires full national ownership of the eradication programme in all infected countries, with deep engagement of all relevant line ministries and departments, and the holding of local authorities fully accountable for the quality of activities, particularly in accessible areas such as Kano. Accessing and vaccinating children in insecure and conflict-affected areas will in addition require the full engagement of relevant international bodies, religious leaders and other actors with influence in such settings. Collaboration with broader humanitarian efforts must be enhanced to develop and implement area-specific operational plans, generate greater community demand and participation, and adapt or modify eradication approaches in line with local contexts. In order to minimize the risks and consequences of international spread of poliovirus, Member States are urged to enhance surveillance, strengthen routine immunization coverage, and, where appropriate, implement supplementary immunization activities. The Secretariat will convene an expert group in 2014 to advise on further measures to vaccinate travellers from areas where there is active poliovirus transmission.

18. In order to facilitate the withdrawal of the type 2 component of oral polio vaccine in 2016, and further reduce global vulnerability to the remaining wild poliovirus serotypes, Member States are encouraged to establish plans for the introduction of at least one dose of the inactivated poliovirus vaccine into their routine immunization programmes. Recognizing the complex financing arrangements and tight supply timelines for introduction of this vaccine globally, the Strategic Advisory Group of Experts on immunization recommended that countries endemic and at high risk of polio develop by mid-2014 a plan for inactivated polio vaccine introduction, and that all countries develop such plans by the end of 2014.¹

¹ Meeting of the Strategic Advisory Group of Experts on immunization, November 2013 – conclusions and recommendations. *Weekly Epidemiological Record*, 2014; 89(1):1-16, in press.

19. In order to further strengthen governance and oversight of the eradication initiative, the Polio Oversight Board, comprised of the heads of the five core partners, initiated in-person meetings on a six-monthly basis, is adopting a systematic risk review process, and is introducing a decision-making process that facilitates more systematic input by donors and stakeholders. Within WHO, the Director-General established a cross-cluster Polio Endgame Management Team to enhance organizational support for programme management, strategy implementation, and resource mobilization and management.

ACTION BY THE EXECUTIVE BOARD

20. The Board is invited to note the report.

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