

## **Poliomyelitis: intensification of the global eradication initiative**

### **Report by the Secretariat**

1. The Executive Board at its 134th session noted an earlier version of this report.<sup>1</sup> The following text has been updated and revised in the light of those discussions.
2. The Polio Eradication and Endgame Strategic Plan 2013–2018<sup>2</sup> was prepared in response to resolution WHA65.5. This report summarizes the status of each of the four objectives of the Plan, the impediments to achieving the milestones, the current financing situation, and the priorities for 2014.

#### **OBJECTIVE 1: POLIOVIRUS DETECTION AND INTERRUPTION**

3. The reported number of cases of disease due to wild poliovirus in 2013 increased by 82% compared to 2012 (405 cases compared with 223 cases), with eight countries reporting cases of poliomyelitis compared to five in 2012. This increase was driven by an increase in cases in Pakistan and disease outbreaks due to new international spread of polioviruses from Nigeria into the Horn of Africa (193 cases in Somalia, 14 in Kenya, nine in Ethiopia) and from Pakistan into the Middle East (38 cases, reported from all sources, in the Syrian Arab Republic). Wild poliovirus of Pakistani origin was also detected in environmental samples collected in Israel and the occupied Palestinian territory. Four cases due to an imported poliovirus were detected in Cameroon. Cases increased by 60% in Pakistan (to 93) compared with 2012. In Nigeria and Afghanistan, cases declined by 57% and 62%, respectively. Of note, of Nigeria's 53 cases, only six were reported between September and December 2013 (that is, in the "high season" for poliovirus transmission). Of Pakistan's 93 cases, 60 were reported between September and December, 48 of which were from the Federally Administered Tribal Areas and Khyber Pakhtunkhwa province.
4. For the first time in history, 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. A total of 63 cases due to circulating vaccine-derived poliovirus type 2 occurred in seven countries, heavily concentrated in Pakistan and the border area of Cameroon, Chad, Niger and Nigeria.
5. Insecurity, targeted attacks on health workers and/or a ban by local authorities on polio immunization resulted in a deterioration in access in the Federally Administered Tribal Areas and

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<sup>1</sup> See the summary record of the Executive Board at its 134th session, twelfth meeting, section 3 (document EB134/2014/REC/2).

<sup>2</sup> <http://www.polioeradication.org/ResourceLibrary/Strategyandwork.aspx> (accessed 4 December 2013).

Khyber Pakhtunkhwa province of Pakistan and the state of Borno in Nigeria. Chronically poor implementation of activities remained a critical challenge in other priority areas, most notably in the state of Kano, Nigeria, and Balochistan province and the city of Karachi in Sindh province, Pakistan. In poliovirus-affected areas of Pakistan and Nigeria an estimated combined total of 530 000 children remained inaccessible for vaccination; in the reinfected area of south-central Somalia more than 500 000 children were inaccessible for polio vaccination.<sup>1</sup>

6. The risk of further international spread remains high, particularly in central Africa (especially from Cameroon), the Middle East and the Horn of Africa. Consequently, the Regional Committee of the Eastern Mediterranean Region at its sixtieth session in October 2013 declared polio transmission an emergency for all Member States of the Region.<sup>2</sup> Following the deliberations of the Executive Board at its 134th session, the Director-General convened the Polio Working Group of the Strategic Advisory Group of Experts on immunization (Geneva, 5–6 February 2014) to update WHO's vaccination recommendations for travellers from polio-infected countries. The convening of an Emergency Committee under the International Health Regulations (2005) is planned in advance of the Sixty-seventh World Health Assembly in order to advise the Director-General on measures to limit the international spread of wild poliovirus.

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

7. In 2013, five criteria were adopted for gauging readiness for type 2 oral polio vaccine withdrawal globally as early as 2016:<sup>3</sup> introduction of at least one dose of inactivated poliovirus vaccine; 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 poliovirus containment activities, with appropriate handling of residual type 2 materials;<sup>4</sup> and verification of global eradication of wild poliovirus type 2. The trigger for setting a definitive date for the withdrawal of the type 2 component of the oral polio vaccine globally will be the absence of all persistent circulating vaccine-derived type 2 polioviruses for at least six months.

8. A joint programme of work was initiated with the GAVI Alliance to support the strengthening of routine immunization systems in the 10 priority countries identified in the Endgame Plan,<sup>5</sup> capitalizing on the Alliance's investments in health systems strengthening and the substantial technical assistance deployed through the Global Polio Eradication Initiative. In 2013, the immunization plans in six of these countries – Chad, Democratic Republic of the Congo, Ethiopia, India, Nigeria and Pakistan – were reviewed and revised to align these resources.

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<sup>1</sup> In 2013, countries in the Horn of Africa were reinfected with polioviruses originating in northern Nigeria.

<sup>2</sup> Resolution EM/RC60/R.3: Escalating poliomyelitis emergency in the Eastern Mediterranean Region.

<sup>3</sup> Meeting of the Strategic Advisory Group of Experts on immunization, November 2013 – conclusions and recommendations. *Weekly Epidemiological Record*, 2014; 89(1):1–16.

<sup>4</sup> 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](http://www.polioeradication.org/Portals/0/Document/Resources/PostEradication/GAP3_2009.pdf), accessed 4 December 2013).

<sup>5</sup> 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.

9. The Strategic Advisory Group of Experts on immunization finalized its policy recommendations for the administration of inactivated poliovirus vaccine in routine immunization schedules, and endorsed the strategy that was developed for the financing, supply and introduction of inactivated poliovirus vaccine globally.<sup>1</sup> The strategy prioritizes the 126 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; 72% of the strategy's target population is concentrated in the 33 countries of tiers 1 and 2. The strategy combines funding through the GAVI Alliance and expedited processes for the 73 countries eligible for its support with volume purchasing and UNICEF-assisted procurement for other countries in order to obtain the lowest possible prices for inactivated poliovirus vaccine. In February 2014, UNICEF announced a procurement price of €0.75 per dose (about US\$ 1 per dose at current exchange rates) of inactivated poliovirus vaccine in 10-dose vials for GAVI-eligible countries and a price of €1.49–2.40 (about US\$ 2.04–3.28 at current exchange rates) per dose for middle-income countries. In addition, UNICEF has awarded volumes for five-dose vials at the price of US\$ 1.90 per dose for both low- and middle-income countries, expected to be available from the fourth quarter of 2014. Work continues to develop and license new products and approaches for inactivated poliovirus vaccine, which may contribute to further reductions in the cost of inactivated poliovirus vaccine for the medium-term (that is to say beyond 2018).

### **OBJECTIVE 3: CONTAINMENT AND CERTIFICATION**

10. The draft global action plan to minimize poliovirus facility-associated risk after eradication of wild poliovirus and cessation of routine oral polio vaccine use<sup>2</sup> is being updated to align activities with the strategy and timelines of the Endgame Plan. The updated plan will be available for public consultation later this 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. At the end of 2013, all Member States had completed phase 1 activities with the exception of two countries in the Eastern Mediterranean Region and 37 countries in the African Region.

11. As of 28 February 2014, the South-East Asia Region was on track for certification of polio eradication at end-March 2014. The Global Commission for the Certification of the Eradication of Poliomyelitis will review data from all six WHO regions in late 2014 or early 2015 to determine whether there is sufficient evidence to conclude formally that wild poliovirus type 2 has been eradicated globally.

### **OBJECTIVE 4: LEGACY PLANNING**

12. 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 work of eradication. In 2013, a consultative process was initiated, with a background paper for WHO regional committees that outlined three possible legacy scenarios. A growing consensus is emerging that the assets, lessons and resources of the polio initiative should

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

<sup>2</sup> 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](http://www.polioeradication.org/Portals/0/Document/Resources/PostEradication/GAP3_2009.pdf), accessed 4 December 2013).

eventually be transitioned, primarily through national governments, to benefit other existing health priorities.

13. 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.<sup>1</sup> Senior representatives of national governments, donor agencies and other health initiatives 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.

14. In 2014, the polio legacy work will continue with further consultation, 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 for 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**

15. In April 2013, donors and governments of polio-affected countries pledged US\$ 4040 million towards the US\$ 5530 million budget of the Endgame Plan at the 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. A cross-agency finance working group ensures stronger cost control, accountability and resource management.

16. At the end of November 2013, aggregated requests for financing of eradication activities in 2014 exceeded the budget of US\$ 1033 million by US\$ 286 million. Reconciling these requests with available financing required a substantial rescheduling of supplementary immunization activities in many countries and allocation of part of the programme's limited discretionary funds for inactivated poliovirus vaccine introduction. As at 23 January 2014, the cash gap for eradication activities planned for 2014 was still US\$ 497.52 million, against the 2014 budget of US\$ 1033 million, requiring intensified efforts to operationalize financing pledges.

## **MAJOR RISKS AND PROGRAMME PRIORITIES FOR 2014**

17. The major risks to eradication are: 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 and Karachi in Pakistan; ongoing military operations in Khyber Agency (within the Federally Administered Tribal Areas) of Pakistan; insecurity in Eastern Region, Afghanistan, and Borno state, Nigeria; active conflict in the Syrian Arab Republic; and gaps in programme performance in Kano state, Nigeria, and in the outbreak response performance in

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<sup>1</sup> See document EB134/49.

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Cameroon. These risks are compounded by gaps in polio surveillance and the continued threat of new international spread of wild poliovirus.

18. 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 state, Nigeria, and in Cameroon. Accessing and vaccinating children in insecure and conflict-affected areas will in addition require the full engagement of relevant international bodies, religious leaders and humanitarian actors to implement area-specific plans, generate greater community demand and participation, and adapt 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 and immunization activities and implement fully recommendations for immunization of travellers.

19. In order to be prepared for the withdrawal of the type 2 component of oral polio vaccine by 2016, 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, it is recommended that countries endemic and at high risk of re-emergence of polio develop by mid-2014 a plan for inactivated polio vaccine introduction, and all countries develop such plans by the end of 2014.<sup>1</sup>

20. 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, a systematic risk review process, and a decision-making process that facilitates more systematic input by donors and stakeholders. A comprehensive, independent management review of the eradication initiative will be held in the second quarter of this year in order to improve programmatic decision-making across the initiative. Within the Secretariat, 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 HEALTH ASSEMBLY**

21. The Health Assembly is invited to note the report and encourage: all polio-affected Member States to undertake immediately emergency measures to overcome remaining obstacles to reach all children with oral polio vaccine; all Member States that currently use only oral polio vaccine to establish by the end of 2014 a plan for introducing at least one dose of inactivated poliovirus vaccine into their routine immunization programme by the end of 2015; and all Member States to implement phase 1 containment activities for poliovirus by the end of 2015, ensure highly sensitive surveillance for polioviruses, and implement relevant polio vaccination recommendations for travellers.

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