

Poliomyelitis: mechanism for management of potential risks to eradication

Report by the Secretariat

1. In 1988, when wild poliovirus was endemic in more than 125 countries, resolution WHA41.28 established the goal of global eradication of poliomyelitis. In resolution WHA59.1 the Health Assembly urged all remaining Member States in which poliomyelitis is endemic to act on their commitment to interrupt transmission of wild poliovirus, and urged all poliomyelitis-free Member States to respond rapidly to the detection of circulating polioviruses through defined steps.

2. In 2006, four countries remain endemic for wild poliovirus: Afghanistan, India, Nigeria and Pakistan. This is the lowest number of endemic countries in history. These four countries account for 92% of all new cases of poliomyelitis in 2006 (as of 17 October 2006). In Afghanistan (28 cases as of 17 October 2006), increased insecurity in the Southern Region has contributed to a new outbreak, as access to children was further hampered during poliomyelitis immunization campaigns. The President of Afghanistan has established a National Polio Action Group, so as to allow his office to oversee directly strategies to increase access to all populations. Pakistan (24 cases as of 17 October 2006) is synchronizing campaigns with Afghanistan in order to maximize coverage among populations both in insecure areas and in areas where populations are moving between the two countries. In India (383 cases as of 17 October 2006), two states – Bihar and Uttar Pradesh – continue to have endemic transmission. In Bihar, poliovirus transmission is on the verge of being interrupted. In western Uttar Pradesh, gaps in immunization coverage which led to a new outbreak in 2006 are being tackled. In Nigeria (902 cases as of 17 October 2006), wild poliovirus is restricted to northern states, where endemic transmission remains the most vigorous in the world; “Immunization Plus Days” have been introduced since May 2006, offering in addition to administration of oral poliomyelitis vaccine other vaccinations and health interventions in order to enhance community participation.

3. In 2006, the remaining 8% of all new cases of poliomyelitis occurred in countries into which poliovirus has been reintroduced. Poliovirus that originated in India caused outbreaks of disease in Angola, Bangladesh, Democratic Republic of the Congo, Namibia and Nepal. Poliovirus that originated in northern Nigeria caused cases or outbreaks in Cameroon, Ethiopia, Indonesia, Kenya, Niger, Somalia and Yemen. Rapid implementation of actions urged in resolution WHA59.1 has markedly reduced the size and duration of recent outbreaks.

4. In order to reduce the risk of further international spread of wild poliovirus in 2006, countries judged to be at high risk of importing viruses (because of previous importations or having borders with areas where polioviruses are circulating) conducted additional campaigns against poliomyelitis. In

order to protect individual travellers, WHO is updating its guidance on international travel and health¹ so as to recommend that all travellers to countries where poliovirus is known to be circulating should be fully vaccinated against poliomyelitis in accordance with the national immunization policy in their country of origin. In order to reduce the risk of poliomyelitis for pilgrims to the hajj and umrah, the Ministry of Health of Saudi Arabia issued a directive requiring all travellers aged less than 15 years from countries with recent or ongoing circulation of polioviruses, and all Nigerians regardless of age, to provide proof of vaccination before an entry visa could be issued.

5. In 2006, substantial progress has been made in preparing for the post-eradication era, including the refining of strategies for minimizing and managing the long-term risks to poliomyelitis eradication. Of particular note, the draft third edition of the WHO global action plan for laboratory containment of wild polioviruses² has been circulated for public comment, and the standard operating procedures for the stockpile of monovalent oral poliovirus vaccines in the era following eradication and cessation of use of oral vaccine are under review by the Advisory Committee on Polio Eradication.

ISSUES

6. **Interrupting transmission of endemic wild poliovirus in Afghanistan, India, Nigeria and Pakistan.** For interruption of transmission of indigenous wild poliovirus in the remaining reservoirs, seven to eight rounds of supplementary poliomyelitis immunization activities must be implemented in the affected areas using an appropriate mix of monovalent and trivalent oral poliomyelitis vaccines, with more than 95% of children reached during each intervention. Rapid organization of activities that attain that coverage will require engagement of political leaders in order to mobilize and manage the necessary resources of multiple government ministries and enhanced engagement of the affected communities to reach all population subgroups. Based on recent experience in countries endemic for poliomyelitis and those where the virus has been reintroduced, it will take more than 12 months to stop transmission in the remaining endemic areas. In areas affected by insecurity, the negotiation of “days of tranquillity” would facilitate access to children for vaccination against poliomyelitis.

7. **Limiting the risk of international spread of wild poliovirus.** To minimize the risk of reintroducing wild poliovirus into poliomyelitis-free areas by asymptomatic, poliovirus-infected individuals, the Advisory Committee on Polio Eradication has recommended that all travellers from areas where poliovirus is circulating should be fully immunized against poliomyelitis before travel. To ensure this, the Committee recommended that a standing recommendation on poliomyelitis immunization of travellers from areas where poliovirus is circulating should be established under the International Health Regulations (2005) after their entry into force in June 2007. These measures supplement the Committee’s existing recommendations which are designed to minimize the consequences of introduction of wild poliovirus by maintaining high routine immunization coverage against poliomyelitis in all countries, supplemented by poliomyelitis immunization campaigns in areas bordering those parts of India and Nigeria where poliovirus is circulating.

8. **Ensuring the financing needed to interrupt endemic poliovirus transmission and prepare for the post-eradication era.** Additional funding of US\$ 390 million is needed for 2007-2008, of which US\$ 100 million are needed for activities in the first half of 2007 (as of 20 October 2006).

¹ *International Travel and Health: situation as on 1 January 2006*. Geneva, World Health Organization, 2006.

² Second edition (2003): document WHO/V&B/03.11.

9. **Initiating a process to minimize and manage the risks of re-emergence of poliomyelitis in the post-eradication era.** Once transmission of wild poliovirus has been interrupted across the world, poliomyelitis could recur, primarily owing to (a) the emergence of circulating vaccine-derived polioviruses as a result of continued use of oral poliomyelitis vaccine for routine immunization and (b) reintroduction into human populations of a wild or vaccine-derived poliovirus from a vaccine-manufacturing site, research facility or diagnostic laboratory. To minimize and manage these risks, international consensus is needed on the long-term use of poliomyelitis vaccines and biocontainment of infectious and potentially-infectious poliovirus materials. Planning must begin in 2007 to ensure the timely development of the national and international policies needed to minimize and manage the risks of the re-emergence of poliomyelitis in the post-eradication era. From a normative point of view, consideration could be given for example to an additional Annex to the International Health Regulations (2005), since poliomyelitis is already included in Annex 2 with regard to notification of specific diseases.

ACTION BY THE EXECUTIVE BOARD

10. The Executive Board is invited to consider the following draft resolution:

The Executive Board,

Having considered the report on eradication of poliomyelitis,¹

RECOMMENDS to the Sixtieth World Health Assembly the adoption of the following resolution:

The Sixtieth World Health Assembly,

Having considered the report on eradication of poliomyelitis;

Recalling resolution WHA59.1, urging Member States in which poliomyelitis is endemic to act on their commitment to interrupting transmission of wild poliovirus;

Recognizing that the occurrence of endemic poliovirus is now restricted to geographically limited areas in four countries;

Recognizing the need for international consensus on long-term policies to minimize and manage the risks of re-emergence of poliomyelitis in the post-eradication era;

Noting that planning for such international consensus must commence in the near future,

¹ Document EB120/4.

1. URGES all Member States where poliomyelitis is still prevalent:
 - (1) to establish mechanisms for regularly updating the Head of State or Government on programme progress and requirements, to enhance political commitment to, and engagement in, poliomyelitis eradication activities at state/provincial and district levels, and to engage local leadership and members of the remaining poliomyelitis-affected populations in order to ensure full acceptance of, and participation in, poliomyelitis immunization campaigns;
 - (2) to intensify poliomyelitis eradication activities in order rapidly to interrupt all remaining transmission of wild poliovirus;
2. URGES all Member States:
 - (1) to protect against importations and international spread of wild polioviruses by reviewing and, if appropriate, updating national policy to recommend full immunization against poliomyelitis for travellers from areas in which poliovirus is circulating;
 - (2) to revise national policy and legislation on immunization of travellers from areas in which poliovirus is circulating in accordance with temporary or standing recommendations which may be established under the International Health Regulations (2005) once they enter into force;
 - (3) to reduce the potential consequences of importation of wild poliovirus by achieving and maintaining routine immunization coverage against poliomyelitis greater than 90% and, where appropriate, conducting supplementary poliomyelitis immunization activities;
 - (4) to strengthen active surveillance for acute flaccid paralysis in order rapidly to detect any circulating wild poliovirus and prepare for certification of poliomyelitis eradication;
 - (5) to prepare for the long-term biocontainment of polioviruses by implementing the measures set out under phases 1 and 2 in the current edition of the WHO global action plan for laboratory containment of wild polioviruses;¹
3. REQUESTS the Director-General:
 - (1) to continue to provide technical support to the remaining Member States where poliomyelitis is still prevalent in their efforts to interrupt the final chains of transmission of wild-type poliovirus;
 - (2) to assist in mobilizing financial resources to eradicate poliomyelitis from the remaining areas where poliovirus is circulating, and to minimize the risks of re-emergence of poliomyelitis in the post-eradication era;

¹ Document WHO/V&B/03.11 (second edition).

- (3) to continue to work with other organizations of the United Nations system on security issues, through mechanisms such as “days of tranquillity”, in areas where better access is required to reach all children;
- (4) to initiate the process for a potential standing recommendation, under the International Health Regulations (2005), on the immunization against poliomyelitis of travellers from areas where poliovirus is circulating;
- (5) to submit proposals to the Sixty-first World Health Assembly with a view to minimizing the long-term risks of reintroduction of poliovirus or re-emergence of poliomyelitis in the post-eradication era, by establishing international consensus on the long-term use of poliomyelitis vaccines and biocontainment of infectious and potentially-infectious poliovirus materials.

= = =