

## **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 had not interrupted indigenous transmission of wild poliovirus: Afghanistan, India, Nigeria and Pakistan. This is the lowest number of such “endemic countries” in history. These four countries accounted for 94% of all new cases of poliomyelitis in 2006 (as of 27 February 2007). In Afghanistan (31 cases), increased insecurity in the Southern Region contributed to a new outbreak, as access to children was further hampered during poliomyelitis immunization campaigns. The President of Afghanistan established a National Polio Action Group, so as to allow his office to oversee directly strategies to increase access to all populations. Pakistan (40 cases) synchronized 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 (672 cases), two states – Bihar and Uttar Pradesh – continued to have endemic transmission. In western Uttar Pradesh, gaps in immunization coverage led to a new outbreak in 2006. In Nigeria (1119 cases), wild poliovirus was restricted to northern states, where endemic transmission remains the most vigorous in the world; “Immunization Plus Days” were introduced in 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 6% 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, Chad, 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 intensify efforts to interrupt the remaining chains of transmission of indigenous wild poliovirus in Afghanistan, India, Nigeria and Pakistan, the Director-General urgently convened a stakeholder consultation on poliomyelitis eradication (Geneva, 28 February 2007). Participants reaffirmed the technical, humanitarian and economic case for completing eradication. Endemic countries, donors and the other partners in poliomyelitis eradication committed themselves to work together to overcome rapidly the remaining operational and financial obstacles to extending poliomyelitis vaccine coverage to all children through supplementary poliomyelitis immunization

activities. Participants discussed the new approaches being implemented to remove specific operational barriers in each of the four countries, and noted that these countries had made substantial allocations of domestic financial resources to poliomyelitis eradication. The meeting urged the international donor community to allocate rapidly additional funds for eradication of poliomyelitis and to ensure that the case for completing eradication of poliomyelitis would be presented at major international development forums to be held in the next few months. It was agreed that by the end of 2007 poliomyelitis vaccine coverage and immunity in the areas with endemic transmission had to be raised to at least the levels attained in poliomyelitis-free areas in each endemic country and those levels maintained for as long as necessary in order to stop the circulation of poliovirus.

5. 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 updated its guidance on international travel and health<sup>1</sup> 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 travellers from Afghanistan, India, Nigeria and Pakistan, regardless of age, to provide proof of vaccination before an entry visa could be issued.

6. In 2006, substantial progress was 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 polioviruses<sup>2</sup> was 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 were reviewed by the Advisory Committee on Polio Eradication.

## ISSUES

7. **Interrupting transmission of endemic wild poliovirus in Afghanistan, India, Nigeria and Pakistan.** For interruption of transmission of indigenous wild poliovirus in the remaining reservoirs, the levels of vaccination coverage and child immunity must be raised to at least the levels in the poliomyelitis-free areas of those countries. 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, and tailored approaches, in order to ensure that more than 95% of children are reached during each intervention. Rapid organization of activities that attain that coverage will require engagement of local and national 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. In areas affected by insecurity, the negotiation of “days of tranquillity” would facilitate access to children for vaccination against poliomyelitis.

---

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

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

8. **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. The Executive Board at its 120th session adopted resolution EB120.R1 which contained a resolution recommended to the Health Assembly that urged Member States to implement this policy. It also requested the Director-General to initiate the process for a potential standing recommendation to that effect, under the International Health Regulations (2005), after their entry into force in June 2007. These measures supplement the existing recommendations of the Advisory Committee on Polio Eradication, 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.

9. **Ensuring the financing needed to interrupt endemic poliovirus transmission and prepare for the post-eradication era.** Additional funding of US\$ 575 million is needed for 2007–2008, of which US\$ 100 million are needed for activities in the first half of 2007 (as of 27 February 2007).

10. **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 to the Regulations with regard to notification of specific diseases.

#### **ACTION BY THE HEALTH ASSEMBLY**

11. The Health Assembly is invited to consider the draft resolution contained in resolution EB120.R1.

= = =