Eradication of poliomyelitis

Report by the Secretariat

1. In 1988, when polio virus was endemic in more than 125 countries, resolution WHA41.28 established the goal of global eradication of poliomyelitis. In 1999, the Health Assembly, in resolution WHA52.22, urged all Member States to accelerate eradication activities. In 2005, the level of activities to interrupt poliovirus circulation in countries still affected by poliomyelitis was unprecedented.

2. In Africa, transmission of indigenous poliovirus has not been detected in Egypt or Niger for more than six months and appears to have been interrupted. Imported poliovirus was eliminated from 10 of the 15 African countries that had experienced importations since 2003, as a result of a series of five coordinated poliomyelitis immunization campaigns conducted in 25 countries under the auspices of the African Union. Following the resumption in October 2004 of nationwide poliomyelitis immunization campaigns in Nigeria, the number of states in that country reporting poliovirus to date in 2005 declined by 32% and the number of poliomyelitis cases fell by 20% (as compared with 9 November 2004).

3. In Asia, since the introduction of monovalent oral poliomyelitis vaccine type 1 (mOPV1), the locally circulating poliovirus has not been detected in one of the three remaining poliovirus reservoirs in India – Mumbai – and was further restricted to 14 of the 107 districts in Uttar Pradesh and Bihar. In Pakistan in 2005, only type 1 poliovirus was detected, in nine out of 126 districts, with a 57% decline in the number of circulating wild-type poliovirus lineages as compared to 2004. In Afghanistan, a few cases of paralytic poliomyelitis due to types 1 and 3 polioviruses were detected in the southern region in 2005.

4. During 2005, 12 countries reported imported poliovirus and, for the first time, the number of poliomyelitis cases in the countries newly affected was higher than in countries endemic for the disease (873 compared to 655 at 22 November 2005).

ISSUES

5. Interrupting indigenous wild-type poliovirus transmission in Africa. Northern Nigeria constitutes the last reservoir of indigenous wild-type poliovirus in Africa and appears to be the only significant remaining reservoir of types 1 and 3 poliovirus together in the world. Because of the heavy

1 Data as of the onset of the high season for wild-type poliovirus transmission, 1 July 2005.
disease burden and risk of exportation, large-scale supplementary immunization activities with an appropriate combination of monovalent and trivalent oral poliomyelitis vaccines are required every four to six weeks until poliovirus transmission is interrupted.

6. **Interrupting indigenous wild-type poliovirus transmission in Asia.** Wild-type poliovirus transmission in Afghanistan, India and Pakistan is now restricted to a single serotype, type 1 or 3, in any given geographical area. Large-scale supplementary immunization activities that reach more than 95% of children in the infected areas with the appropriate monovalent oral poliomyelitis vaccine are required every four to six weeks until poliovirus transmission is interrupted.

7. **Preparing for global certification of poliomyelitis eradication and eventual cessation of oral poliomyelitis vaccine use.** With the acceleration of wild-type poliovirus eradication, all countries must implement recommended activities for the biocontainment of wild-type polioviruses, enhance and sustain surveillance for circulating polioviruses, and evaluate long-term poliomyelitis immunization policy options.

8. **Ensuring financing for the 2006-2008 “mop-up and certification phase”.** Multi-year and flexible financing commitments are needed to cover the unmet funding requirement of US$ 750 million for 2006-2008, of which US$ 200 million is immediately required for activities in 2006. These funds are needed to buy oral poliomyelitis vaccine, conduct poliomyelitis immunization campaigns, implement emergency outbreak response, sustain highly sensitive disease surveillance, and provide technical support to Member States.

9. **Limiting the international spread of wild-type poliovirus transmission.** Recognizing that 57% of all poliomyelitis cases reported in 2005 have been from outbreaks in previously poliomyelitis-free countries, the Advisory Committee on Polio Eradication undertook a detailed analysis of the response to such outbreaks between 2003 and 2005. The Committee found that the risk of prolonged transmission and further national and international spread of poliovirus was related to (1) the speed of the initial immunization response, (2) the geographical extent of the response, (3) the proportion of children vaccinated in the target population, (4) the use of monovalent oral poliomyelitis vaccine, and (5) the total number of immunization rounds conducted. The Committee therefore issued standing recommendations to Member States for responding to circulating polioviruses in poliomyelitis-free areas. It also issued recommendations to the Director-General and the spearheading partners to support responses to poliomyelitis outbreaks in Member States reporting poliomyelitis cases due to imported viruses, and reaffirmed the measures countries at particularly high risk of importation could consider adopting in order to reduce that risk.\(^1\) The effective implementation of these recommendations requires immediate recognition of any circulating poliovirus as a potential international health threat, and appropriate responses.

**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 Fifty-ninth World Health Assembly the adoption of the following resolution:

The Fifty-ninth World Health Assembly,

Having considered the report on eradication of poliomyelitis;

Recalling the 2004 Geneva Declaration for the Eradication of Poliomyelitis, committing the six countries in which poliomyelitis is endemic and spearheading partners to interrupting the final chains of poliovirus transmission through intensified poliomyelitis immunization campaigns;

Recognizing that the occurrence of poliomyelitis is increasingly rare due to the intensification of poliomyelitis eradication activities globally, and that all Member States are enhancing surveillance for the detection of circulating polioviruses and are in the process of implementing biocontainment activities;

Noting that poliovirus importations into poliomyelitis-free areas constitute potential international health threats;

Recalling the standing recommendations of the Advisory Committee on Polio Eradication,²

1. URGES all poliomyelitis-free Member States to respond rapidly to the detection of circulating poliovirus by:

   (1) conducting an initial investigation, activating local responses and requesting international expert risk assessment within 72 hours of confirmation of the index case in order to establish an emergency plan of action;

   (2) implementing a minimum of three large-scale, house-to-house rounds of immunization using a type-specific monovalent oral poliomyelitis vaccine, the first round to be conducted within four weeks of confirmation of the index case, with an interval of four weeks between subsequent rounds;

   (3) targeting a minimum of two to five million children aged less than five years in the affected and adjacent geographical areas;

   (4) using independent monitoring to determine whether at least 90% immunization coverage has been reached;

¹ Document EB117/4.

(5) ensuring that at least two full rounds of poliomyelitis immunization are conducted after the most recent detection of poliovirus;

2. REQUESTS the Director-General:

(1) to ensure the availability of technical expertise to support Member States in their planning and emergency response related to an outbreak;

(2) to assist in mobilizing funds to implement emergency response to an outbreak;

(3) to advise at-risk Member States, on the basis of each risk assessment, on which, if any, additional measures are required nationally and internationally to reduce the further spread of poliovirus, taking into account the recommendations of the Advisory Committee on Polio Eradication.