Eradication of poliomyelitis

Report by the Secretariat

1. In 1988, when poliovirus 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 12 months and has been interrupted. Imported poliovirus was eliminated from nine 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 30%, but the number of poliomyelitis cases rose to 801 compared with 782 in 2004.

3. In Asia, since the introduction of monovalent oral poliomyelitis vaccine type 1, the locally circulating poliovirus has not been detected in one of the three remaining poliovirus reservoirs in India – Mumbai – and was further restricted to 28 of the 107 districts in Uttar Pradesh and Bihar with a total of 59 cases reported; a 51% decline in 2005. In Pakistan in 2005, 28 poliomyelitis cases were detected, in 18 out of 126 districts, with a 43% decline in the number of circulating wild-type poliovirus lineages as compared to 2004. In Afghanistan, nine 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 (1046 compared to 904 at 6 April 2006).

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 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 most geographical areas. 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 eradication of wild-type poliovirus, all countries need to implement recommended activities for the destruction or 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, which at 6 April 2006 was US$ 575 million for 2006-2008, of which US$ 150 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 further international spread from Nigeria in 2006 is an escalating risk, and that 54% 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. 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 HEALTH ASSEMBLY**

10. The Health Assembly is invited to consider the draft resolution contained in resolution EB117.R1.

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Countries with active poliovirus transmission at 6 April 2006

The boundaries and names shown and the designations used on this map do not imply the expression of any opinion whatsoever on the part of the World Health Organization concerning the legal status of any country, territory, city or area or of its authorities, or concerning the lines for which there may not yet be full agreement.

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