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ERADICATION OF POLIOMYELITIS IN THE EUROPEAN REGION AND PLAN OF ACTION FOR CERTIFICATION 2000–2003

The global effort to eradicate poliomyelitis, one of the ancient diseases of mankind, is among the largest public health initiatives in modern history. Extraordinary progress has been made in the European Region since 1989 towards the goal as stated in the HEALTH21 policy framework – to stop the transmission of wild poliovirus and to certify the European Region as a territory free of poliomyelitis by the year 2003 or earlier. For the first time in the history of the Region, no wild poliovirus circulation has been detected for over one year, since the last case occurred on 26 November 1998.

The quality of surveillance for acute flaccid paralysis and wild poliovirus has been improving, particularly in recently endemic countries. In 1999, the best results in surveillance performance were achieved to date, with many countries meeting the necessary performance criteria. The regional polio laboratory network is thoroughly established and also demonstrated improved performance in 1999. Actions to ensure the laboratory containment of wild poliovirus have been initiated in the Region. Despite the progress made, however, certain challenges need to be tackled at this stage, such as achieving the high quality of surveillance that is required for certification in each country of the Region, in order to minimize so far as possible the risk from importation of wild poliovirus from the remaining endemic countries.

Achievement of the goal – certification of the European Region as free of poliomyelitis – is within sight, but it will become a reality only if all countries of the Region unite their efforts to maintain high immunization coverage and high-quality surveillance, and take all appropriate actions to ensure laboratory containment of wild poliovirus.

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BACKGROUND

1. By resolution WHA 41.28, the Forty-first World Health Assembly on 13 May 1988 set the goal of eradicating poliomyelitis globally by the year 2000 *(1)*. Regional activities towards this goal were initiated in late 1989, when the WHO Regional Committee for Europe at its thirty-ninth session adopted resolution EUR/RC39/R5, endorsing the first regional plan of action for the eradication of poliomyelitis *(2)*. Four strategies have been recommended by WHO to eradicate the disease: to achieve and sustain high levels of routine immunization coverage; to carry out mass vaccination campaigns (national immunization days); to establish high-quality surveillance for acute flaccid paralysis (AFP) and for polioviruses; and to engage in "mopping-up operations" (limited mass vaccination campaigns targeting high-risk territories).

Current situation in the Region

2. At its forty-seventh session (Istanbul, September 1997), the Regional Committee adopted a resolution (EUR/RC47/R4) endorsing the regional plan of action for the period 1998–2000 *(3)*. The progress achieved in the past two years, the main challenges and planned actions are summarized in this document.

3. The average regional level of immunization coverage with polio vaccines has increased and remained high in the past few years – 92%. In 1997 and 1998, some countries (Belgium, Germany, Turkey) still had national levels of only around 80%. The Regional Committee therefore urged endemic and recently endemic countries to implement Operation MECACAR Plus, an unprecedented mass vaccination campaign, in the spring of 1998, 1999 and 2000. This effort, coordinated jointly by the regional offices for Europe (EURO) and the Eastern Mediterranean (EMRO), involved mass vaccination within and across 18 countries in the two regions. Moreover, carefully planned and coordinated mopping-up actions focusing on high-risk and border territories, using the house-to-house approach, were implemented during the autumn of 1998 and 1999. The success of this operation has ensured the protection of children under 5 years of age in all recently polio-endemic countries: even in the spring of 1999, supplementary doses of oral polio vaccine (OPV) were given (practically simultaneously) to 16 616 000 children.

4. The quality of AFP and wild poliovirus surveillance has improved, particularly in recently endemic countries. The "gold standards" for high quality of such surveillance, set by the Global Commission for the Certification of the Eradication of Poliomyelitis, are as follows: a rate of non-polio AFP of 1.0 per 100 000 children under 15 years, and not less than 80% of cases investigated with "two timely stool specimens" *(4)*. In 1999, the best level of surveillance was achieved to date. These indicators of the quality of AFP surveillance were much higher in 1999 than in 1998: the 1999 rate of non-polio AFP was as high as 1.3, and the proportion of cases with two stool samples was 74% (compared with figures of 0.9 and 66%, respectively, in 1998); a better performance was seen in the recently endemic countries. The regional reporting system also performed better in 1999: the number of countries reporting weekly to the Regional Office increased to 39, with data being sent electronically. Access to the database via the Internet and weekly feedback of information to countries have been introduced.

5. Laboratory-based surveillance for wild poliovirus has progressed reasonably well: the regional polio laboratory network (Labnet) was developed and its performance has improved, particularly in the last two years. Only three of the 38 national laboratories in the regional Labnet remained unaccredited at the end of 1999. A total of 1655 cases of AFP were investigated in these laboratories, and more than 5233 stool samples from both AFP cases and contacts were tested. No wild polioviruses were identified. The regional Labnet achieved good results in proficiency testing in 1998–1999, which testifies to the high technical qualifications of laboratory staff.

6. The last endemic transmission of wild polioviruses occurred in Turkey in 1998, with 26 virologically confirmed cases of poliomyelitis spreading through seven of the south-eastern provinces.

The last case of polio in the Region was observed so far on 26 November 1998 in Agri province, Turkey. Two rounds of a house-to-house mass vaccination campaign were conducted in south-east Turkey and neighbouring areas of Iran, Iraq and Syria in October and November 1998 in order to stop transmission (followed by other campaigns in 1999). No cases have been reported since.

7. The formal process of certifying the European Region as poliomyelitis-free by 2003 or earlier has been proceeding well. National certification committees have been established and are operational in 49 Member States. The standard document has been distributed to all countries of the Region. The Regional Certification Commission (RCC) has already reviewed documentation prepared by 32 non-endemic countries and has made practical recommendations to nearly each country for the improvement of surveillance *(5–7)*. The RCC recently finalized the action plan for the certification process for 2000–2003.

8. Laboratory containment of wild poliovirus is a new area of action that should be seen as part of the certification process. The topic was discussed and included in the resolution adopted by the Fifty-second World Health Assembly on 6 May 1999 *(8)*. Resolution WHA 52.22 requests the Director-General "to collaborate with Member States in the establishment of a mechanism for overseeing the process of laboratory containment of wild poliovirus in maximum containment laboratories". The Regional Office has already initiated certain steps to implement the action plan in all countries of the European Region.

9. The polio eradication partnership is functioning well. The main partners, who have continued to provide technical and financial support to the regional poliomyelitis eradication efforts, are the United Nations Children's Fund (UNICEF), Rotary International, the Centers for Disease Control in Atlanta (CDC), the United States Agency for International Development (USAID) and the United Nations Foundation. That support was channelled mainly to recently endemic countries and was coordinated by the Regional Office. National health authorities continue to demonstrate their strong commitment, implementing appropriate strategies in order to sustain the "zero-polio" status of the Region. The Regional Office was able to mobilize funds, with the assistance of WHO headquarters, to cover regional and national activities in 1998–2000.

Action taken in 1998–1999

10. The 1998–1999 plan of action for eradication of poliomyelitis in the European Region, which was approved by the Regional Committee in 1997 *(3)*, has been implemented in full. Additional action has also been taken to reach specific objectives, and US $5.8 million have been mobilized to fund the provision of vaccines and laboratory equipment and for carrying out operational activities (active surveillance, training, planning and supervision of mass vaccinations, etc.). The Regional Office concentrated in particular on actions to improve the quality of surveillance: interregional and regional meetings were held on that topic (in Kiev and Cairo in 1998, and in St Petersburg and Ankara in 1999). The quality of AFP surveillance was assessed jointly by WHO and national authorities in practically all countries participating in Operation MECACAR Plus. Financial support was offered to many countries to conduct and supervise active surveillance; and support was also offered for upgrading and meeting the current needs of national laboratories.

CHALLENGES

Surveillance

11. Despite the overall improvement in the quality of surveillance (see above), certain problems have been identified from reported data or during special independent assessment missions:

- not all stool samples from AFP cases have been processed in WHO-accredited laboratories;
- there are "silent territories" in a number of countries, where no AFP cases have been detected for several years, particularly in recently endemic countries;

- there are isolates of poliovirus which have not been submitted to the regional reference laboratories for completion of the virological investigation and genetic analysis.

12. It is not possible to verify whether interruption of transmission is highly probable, owing to sub-optimal surveillance of poliovirus circulation.

Importation of wild polioviruses

13. The risk of importation of wild polioviruses remains high, as long as the Region shares common borders with certain countries where extensive endemic transmission of wild poliovirus is continuing (Afghanistan, Iraq), and as long as poliomyelitis remains endemic in any country of the world. Moreover, there is a risk of the spread of poliovirus following importation because there are certain subgroups of the population with relatively low levels of immunization in a number of countries of the Region.

Laboratory containment of wild polioviruses

14. This is a new issue for the programme. As more and more countries become "polio-free", the risk posed by laboratory stocks of wild poliovirus increases substantially. Because of the large number of virological and other laboratories within the Region, making accurate national inventories of such laboratories is a complex task. Nor is it an easy matter to engage in the process of limiting the number of laboratories working with wild poliovirus, and to verify that process.

Certification

15. The European Region will be certified as a region free of poliomyelitis only when all 51 Member States have submitted standard national documentation with appropriate solid evidence that the transmission of wild poliovirus has been interrupted.

Political commitment

16. Poliomyelitis has apparently disappeared from the Region, and it therefore becomes more and more difficult to maintain strong political commitment in order to sustain important activities such as AFP surveillance.

PLAN OF ACTION FOR CERTIFICATION OF THE EUROPEAN REGION AS A "POLIO-FREE TERRITORY" IN 2000–2003

Objectives

17. As stated in HEALTH21 target 7, "By 2000 or earlier, poliomyelitis transmission in the Region should stop, and by 2003 or earlier this should be certified in every country."

Action at the regional level

18. The European Region will be certified as "polio-free" on a regional basis. This means that in certain countries national efforts to improve the quality of surveillance should be accelerated and well coordinated. High-quality surveillance of AFP and wild polioviruses is the key to achieving certification *(4)*. Coordination of these actions therefore remains an important factor in achieving success, even in this final stage.

19. The risk of importation of wild poliovirus remains high, particularly for certain countries in the Region that share common borders with endemic countries of the Eastern Mediterranean Region. Coordination of cross-border actions to minimize that risk will be one important task for the Regional Office for Europe.

20. Because the recently endemic countries will already be engaged in the certification process in 2000, they will start preparatory work in order to guarantee high-quality documentation for presentation to the RCC. Assistance with this work will be provided by the Regional Office.

21. As part of the certification process, assistance should also be provided in the field of laboratory containment of wild polioviruses. This includes activities such as publishing and distributing guidelines, and providing advice on drawing up a national inventory of laboratories that retain wild polioviruses and potentially infectious materials.

22. Work will be done with countries and partners to secure appropriate levels of funding and other support. In order to ensure the sustainability of high-quality surveillance up to final global certification, many countries of the Region should continue to receive both technical assistance and financial support, particularly for the surveillance of wild polioviruses (e.g. transportation of stool samples, laboratory supplies).

Action to be taken by countries

23. Countries should:

- sustain a high level of routine immunization coverage (with special emphasis on polio vaccines)
- maintain high-quality surveillance for AFP/enteroviruses
- carry out national or subnational immunization days in selected countries, as appropriate
- begin the process leading to the laboratory containment of wild polioviruses
- prepare or update national documentation for certification.

Outline plan of action and budget 2000–2001

24. An outline plan of action and a proposed budget for 2000–2001 are attached to this document (Annex 1).

CONCLUSION

25. The global effort to eradicate poliomyelitis, one of the ancient diseases of mankind, is among the largest public health initiatives in modern history. Extraordinary progress has been made in the European Region between 1989 and 2000 towards the HEALTH21 target of stopping transmission and certifying the European Region as a territory free from poliomyelitis by the year 2003 or earlier. This goal is within reach, but it will become a reality only when all the countries in the Region unite their efforts to maintain high immunization coverage and high-quality surveillance and are taking appropriate actions to ensure the laboratory containment of wild polioviruses.

References

1. *Handbook of resolutions and decisions of the World Health Assembly and the Executive Board, Vol III, 3rd ed. (1985–1992)*. Geneva, World Health Organization, 1993.
2. *Report of the thirty-ninth session of the Regional Committee for Europe*. Copenhagen, WHO Regional Office for Europe, 1989.
3. *Report of the forty-seventh session of the Regional Committee for Europe*. Copenhagen, WHO Regional Office for Europe, 1997 (document EUR/RC47/REC/1).
4. *Report of the first meeting of the Global Commission for the Certification of the Eradication of Poliomyelitis. Geneva, 16–17 February 1995*. Geneva, World Health Organization, 1995 (document WHO/EPI/GEN/95.6).
5. *Review of documentation for certification of poliomyelitis eradication (Denmark, Finland, Netherlands, United Kingdom). Report on the fifth Certification Commission meeting. Copenhagen, Denmark, 27–29 April 1998.* Copenhagen, WHO Regional Office for Europe, 1998 (document EUR/ICP/CMDS 03 03 02).

6. *European Regional Commission for the Certification of Poliomyelitis Eradication: Reviewing the documentation for the certification of non-endemic countries: report of the Sixth Meeting. Vienna, Austria, 20–24 February 1999*. Copenhagen, WHO Regional Office for Europe, 1999 (document EUR/ICP/CMDS 03 03 06).
7. *Review of the documentation for certification of polio eradication in southern and central European countries: report on a WHO meeting. Budapest, Hungary, 3–6 May 1999*. Copenhagen, WHO Regional Office for Europe, 1999 (document EUR/ICP/CMDS 03 03 10).
8. *World Health Assembly: resolutions and decisions, annexes.* Geneva, World Health Organization, 1999 (document WHA52/1999/REC/1).
9. *HEALTH21: the health for all policy framework for the WHO European Region*. Copenhagen, WHO Regional Office for Europe, 1999 (European Health for All Series, No. 6).

Annex 1

PLAN OF ACTION FOR THE ERADICATION OF POLIOMYELITIS IN THE EUROPEAN REGION

BUDGET FOR 2000–2001

	Objectives	Needs for 2000 US$	Needs for 2001 US$	Total needs 2000–2001 US$	Commitments received US$	Unmet needs US$
1	Improvement of surveillance of AFP/polio	840 830	713 830	1 554 660	1 193 330	361 330
2	Improvement of the regional Labnet	290 500	211 500	502 000	477 000	25 000
3	Certification and laboratory containment	348 000	216 000	564 000	272 000	292 000
4	Implementation of appropriate strategies in key countries to minimize the risk of importation of wild poliovirus	3 607 454	3 569 606	7 177 060	4 807 454	2 369 606
5	Staffing (all from voluntary donations)					
	Long-term staff	990 000	870 000	1 860 000	1 860 000	0
	Short-term staff	270 000	398 000	668 000	380 000	288 000
	Total	**6 346 784**	**5 978 936**	**12 325 720**	**8 989 784**	**3 335 936**
	Committed from WHO Regular Budget				218 000	