Report of the 21st\textsuperscript{th} Meeting of the European Regional Certification Commission for Poliomyelitis Eradication

Copenhagen, Denmark, 9-11 June 2008
ABSTRACT

The 21st Meeting of the European Regional Certification Commission for Poliomyelitis Eradication (RCC) reviewed the national polio eradication programme and laboratory containment activity updates from all Member States of the WHO European Region. The European Region has sustained its polio-free status but the risk of importation of wild poliovirus is still high and may be increasing. In spite of high poliovirus immunization coverage and good performance indicators for polio surveillance reported by most Member States, data suggest that the quality of AFP surveillance has been slowly declining throughout the Region since 2002 and that high-risk sub-populations and underserved areas remain, for which polio surveillance and immunization indicators are weak. This situation calls for strong political and financial commitment from all Member States to address these issues to ensure global eradication of poliomyelitis.

Keywords

POLIOMYELITIS - prevention and control
CERTIFICATION
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NATIONAL HEALTH PROGRAMS
EPIDEMIOLOGIC SURVEILLANCE - standards
CONTAINMENT OF BIOHAZARDS - standards
LABORATORY INFECTION - prevention and control
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<td>acute flaccid paralysis</td>
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<td>AFP Index</td>
<td>Non-polio AFP rate up to 1.0 * (% of AFP cases with at least 1 adequate stool specimen within 14 days)</td>
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<td>cVDPV</td>
<td>circulation of a vaccine-derived poliovirus</td>
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<td>IPV</td>
<td>inactivated polio vaccine</td>
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<td>iVDPV</td>
<td>vaccine-derived polio virus isolated from immunodeficient patient</td>
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<tr>
<td>mOPV1,3</td>
<td>monovalent oral polio vaccine type 1, 3</td>
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<tr>
<td>MECACAR</td>
<td>Mediterranean and Caucasian countries and central Asian republics</td>
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<td>NCC</td>
<td>national certification commission</td>
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<td>OPV</td>
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<td>RCC</td>
<td>Regional Certification Commission for Poliomyelitis Eradication</td>
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<td>SIA</td>
<td>supplementary immunization activity</td>
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Introduction

The 21st Meeting of the European Regional Certification Committee (RCC) for the Eradication of Poliomyelitis was held at the World Health Organization Regional Office for Europe, Copenhagen, Denmark 9 - 11 June 2008. Dr David Salisbury, Chairperson of the RCC, opened the meeting. Dr Nedret Emiroglu delivered a message from the WHO Regional Director, noting that this was the tenth year since the last indigenous case of poliomyelitis caused by a wild virus occurred in the Region. This remarkable achievement had been accomplished through the dedicated efforts of all countries in the Region and their international partners. Dr Emiroglu welcomed Dr. Salisbury as the new chair of the RCC taking over after the tenure of Sir Joseph Smith. She also noted with regret that Dr. Walter Dowdle will be resigning from the RCC following this meeting. Dr. Bruce Aylward, Director, Director General Response to Polio, WHO, welcomed the participants on behalf of the Director General, noting her personal recommitment to achieving global polio eradication following a programme review last week. Dr Harry Hull served as rapporteur. The programme is contained in Annex 1 and the list of participants is in Annex 2.

Scope and purpose of the meeting

The scope and purpose of the meeting were as follows:

- To brief the European RCC on the regional and global status of polio eradication and national plans of action;
- To review annual updated certification documentation on poliomyelitis in all Member States for 2007;
- To discuss the current status of sustaining polio-free status in selected Member States;
- To review the current status of regional laboratory containment;
- To review working procedures of the RCC and to discuss a plan of activities for 2008-2009;
- To brief the members of the RCC on recent meetings, including: the Advisory Committee on Poliomyelitis Eradication (ACPE, Geneva, November 2007); The Strategic Advisory Group of Experts (SAGE, Geneva, November, 2007 and April, 2008); the European Technical Advisory Group of Experts on Immunization (ETAGE, Copenhagen, August 2007); European Immunization Week (April 2008), 60th World Health Assembly (Geneva, May 2007) and the Eastern Mediterranean RCC meeting (Cairo, April 2008).

Progress towards global eradication of wild poliovirus: challenges and perspectives

As the global polio eradication initiative enters its twenty-first year since the goal was originally established in 1988, the challenge ahead is whether the transmission of wild poliovirus can be stopped globally by the end of 2009. The Intensified Polio Eradication Initiative was recently
launched by the Director General to meet the challenges ahead. The intensification relies on developments in three areas. The first is better tools, most notably the use of monovalent oral polio vaccines and improved laboratory techniques. The second area is better tactics tailored to meet area-specific problems. The third area is better advocacy with the Director General personally leading these efforts. Progress against type 1, wild polio virus has been remarkable in India, with only five cases so far in 2008. India saw large increases in type 3, wild polio virus as a result of the use of mOPV1. There is cautious optimism that SIAs with mOPV3 in 2008 are bringing that outbreak to an end. Wild polioviruses are circulating in only limited areas of Afghanistan and Pakistan. The situation in Nigeria is of great concern with the number of polio cases in Nigeria at twice the level it was four years ago. Historic importations into Angola, Democratic Republic of the Congo and Sudan have still not been controlled. It appears that type 1 WPV transmission may be halted in Asia by the end of 2009, but will be delayed in Africa by one year. Planning for the post-eradication era continues to move forward. The long-term containment plan (GAP III) has been drafted and is under review. The current challenges for the polio-free Regions, including EUR, are to maintain high quality surveillance and response capacity to detect and respond to any importations; establish and maintain sensitive surveillance for the post-OPV era; and keep abreast of plans for containment of polioviruses. International commitment and capacity to finish polio eradication is now at an all-time high. However, polio-free countries are increasingly and inappropriately complacent about polio risks.

**Progress towards Regional certification of the WHO Eastern Mediterranean Region**

The Eastern Mediterranean Region continued intensified efforts to eradicate wild poliovirus. Only 58 polio cases were reported from four countries in 2007, the lowest level ever reported. AFP surveillance indicators are high throughout the Region and all laboratories in the network are accredited. Supplementary Immunization Activities (SIAs) are being conducted every 4-6 weeks in the two endemic countries, Afghanistan and Pakistan, as well as Somalia. Advocacy efforts have been initiated with the new Government and local authorities in Pakistan as well as both sides of the conflict in Afghanistan. Basic documentation for certification has been accepted from 19 countries including final documentation from the 14 countries that have been free of polio for five years or more. In addition to stopping ongoing wild poliovirus transmission and preventing importation into additional countries, the priorities for the region are to ensure completion of Phase I of laboratory containment and preparing for regional and global certification.

**Sustaining poliomyelitis-free status of the WHO European Region: and strategic plan of action for 2009-2013**

As it celebrates its 10th year since the last indigenous case of polio in 1998 in Turkey, the Region is moving forward on its efforts to strengthen national immunization programmes in the context of overall health systems development, emphasizing sustaining polio-free status, achieving measles/rubella elimination by 2010, supporting the introduction of new and under-utilized vaccines and strengthening national vaccine-preventable disease surveillance systems, including laboratory networks. Most countries in the Region report national polio immunization coverage at 95% or
greater. Timely provision of immunisation is a problem in several countries. There is an overall trend in the Region to move from relying solely on OPV to introducing mixed OPV/IPV schedules or IPV only schedules. Analyzing data at the sub-national level often reveals under-performing districts. Providing immunization services to vulnerable and hard-to-reach populations is a particular challenge. Most countries conduct AFP surveillance but some industrialized countries rely exclusively on enterovirus and environmental surveillance. A slow decline in the quality of AFP surveillance is evident since the Region was certified free of polio. Guidelines on Responding to the Detection of Wild Poliovirus in the WHO European Region have been published. Seventeen countries were able to revise their national plan of action to sustain polio-free status and submit a new plan of action for 2008-2010. Key areas for action by the Regional Office are: ensuring continuous political commitment and support for polio eradication; maintaining high level immunity against poliomyelitis; sustaining high quality AFP surveillance; preserving and expanding (if necessary) supplementary virological surveillance for polioviruses; assuring appropriate response to possible importation of wild poliovirus or detected cVDPV circulation; meeting requirements for laboratory containment of wild polioviruses; preparing for cessation of OPV; and assuring appropriate financial and human resources. The European Regional Strategic Plan to Sustain Polio-Free Status of the Region: 2008-2013 has been finalized and is being published.

**Regional overview for 2007**

Because of the diversity of the 53 Member States in the Region, the information provided by the countries was reviewed in a format of six geographical zones. Three countries (Luxembourg, Monaco and San Marino) have not submitted reports since 2003. Indicators analysed for each country included the number of meetings of their national certification commissions (NCC) in the period 2004–2007; immunization coverage (percentage of children vaccinated with three doses of polio-containing vaccine by one year of age reported in the WHO/UNICEF Joint Reporting form for 2000–2006 and provisional data for 2007); and the immunization policy reported in the annual country update. Surveillance indicators analysed included: the AFP index for 2000–2007; the AFP index for 2007 mapped by sub national areas and the quality indicators for AFP surveillance for 2007, including non-polio AFP rate, the percentage with one stool within 14 days of onset, the percentage follow-up within 60–90 days and % of cases for which an immunization history was recorded. Additional indicators reviewed were surveillance for wild poliovirus in AFP cases (number of non-polio enterovirus and poliovirus isolates in 2007) and supplementary surveillance for wild poliovirus (enterovirus surveillance and environmental surveillance).

**Nordic/ Baltic zone** *(Denmark, Estonia, Finland, Iceland, Latvia, Lithuania, Norway, and Sweden)*

Denmark and Norway did not hold any NCC meetings in the period 2004–2007. Iceland did not hold an NCC meeting in 2006 and it was unclear if a meeting was held in 2007. Most countries in the epidemiological zone have switched to IPV. Estonia will switch from OPV to IPV in 2008. Latvia used a mixed IPV/OPV schedule in 2007. Immunization coverage has been universally high (>90%). Denmark changed their methodology for measuring immunization coverage in 2007 and reported a coverage of 65%. The extent that this drop in reported coverage is an artefact is unclear. Iceland did not submit a report on immunization coverage for 2007. Denmark, Finland, Iceland and Sweden do not conduct AFP surveillance. AFP surveillance declined in Norway after improving in 2006. Latvia and Lithuania had high quality AFP surveillance. Estonia did not report any AFP cases in 2007. Many sub-national geographic regions have small populations that could be
expected to report <1 AFP case/year, although some continue to report no cases after five years. All countries conduct enterovirus surveillance. Three countries conduct environmental surveillance. Sweden conducts aseptic meningitis surveillance.

**Conclusion**

There is apparently no NCC activity in three countries. The majority of countries have sustained high immunization coverage and high-quality surveillance through AFP and/or supplementary surveillance. The major challenges for these countries are to maintain their political commitment, update and implement plans of action to sustain their polio-free status, sustain high-quality poliovirus surveillance and strengthen the activities of their NCCs.

**Western zone** *(Austria, Belgium, France, Germany, Ireland, Luxembourg, Monaco, Netherlands, Switzerland, and United Kingdom)*

Overall, NCC activity in the Western Zone is low. No reports had been received from Ireland, Luxembourg or Monaco. NCCs met in Austria, Belgium, France and Germany. NCCs for the Netherlands and Switzerland did not meet in 2007. All countries are using IPV exclusively and coverage is universally high. However, Belgium, France, Luxembourg and Monaco did not submit coverage data for 2007. High-risk populations exist in many countries. Of particular concern is the frequent contact with the remaining endemic countries and countries with re-established transmission due to imported virus. Five countries conduct AFP surveillance but the quality of AFP is low and declined precipitously in Austria and Ireland. Areas reporting zero cases are a concern. The collection of stools is not prompt and follow-up incomplete. All reporting countries have enterovirus surveillance. France and the Netherlands conduct enterovirus surveillance.

**Conclusion**

NCC activity has declined in five countries. Most countries maintain high levels of immunization coverage. The quality is inadequate in all countries conducting AFP surveillance. Supplementary surveillance is well established in most countries of the zone. The major challenges for these countries are to: strengthen NCC activities, maintain or regain political commitment; maintain high coverage, particularly in high-risk subpopulations; and to sustain good quality poliovirus surveillance with regular, ongoing collection of supplementary surveillance data, particularly in countries without AFP.

**Southern zone** *(Andorra, Croatia, Cyprus, Greece, Israel, Italy, Malta, Portugal, San Marino, and Spain)*

No report was received from San Marino and Andorra. It is unclear if NCC meetings were held in Malta or Portugal in 2007. Immunization coverage is high in most countries with the exception of Malta, where coverage has increased at 80%. Most countries are using IPV, although a mixed IPV/OPV schedule is used in Croatia and Cyprus and Malta uses OPV. Andorra and Greece did not report coverage data for 2007. AFP surveillance is suboptimal in most of the zone with only two countries achieving medium quality surveillance standards. The use of supplementary surveillance is expanding in the zone with six countries now conducting enterovirus surveillance and five conducting environmental surveillance.
**Conclusion**

NCC activity has declined in three countries. The majority of countries sustained high immunization levels and continued a combination of AFP and supplementary surveillance. The quality of AFP surveillance remains, however, suboptimal. Major challenges for the countries in this zone are to: strengthen and sustain NCC activities; continue to provide good-quality surveillance and immunization for high-risk subpopulations; strengthen the sensitivity of surveillance, focusing on case reporting and timeliness of reporting; and continue regular collection of supplementary surveillance data.

**Central-eastern zone** *(Albania, Bosnia & Herzegovina, T.F.Y.R. Macedonia, Moldova, Montenegro, Romania, Serbia, and Ukraine)*

The number of countries in this region has increased in recent years. Montenegro has not had sufficient time to set up an NCC and submit a complete report. Although an NCC has been formed in Bosnia and Herzegovina, no formal meeting was held and no report submitted. WHO has encouraged partners to integrate national data. NCCs are active in the remaining Member States with the exception of Ukraine, where it is unclear if the NCC has met since 2004. Routine immunization coverage is high in all reporting countries. Bosnia and Herzegovina did not submit a report. Serbia did not provide specific data for Kosovo. Bosnia and Herzegovina, Romania and Serbia all have subpopulations with 50–60% coverage. All countries are using OPV with the exception of Ukraine, which has a combined IPV/OPV schedule. While AFP surveillance was good to excellent in most countries, Bosnia and Herzegovina, Romania and Serbia all experienced a severe decline in the quality of their AFP surveillance system. Albania was able to greatly improve its AFP surveillance. Montenegro did not report any AFP cases. Five countries conduct enterovirus surveillance and two conduct limited environmental surveillance. Polioviruses continue to be isolated in countries using OPV.

**Conclusion**

NCC activities have declined in three countries. The majority of countries sustained high immunization coverage. The quality AFP surveillance was maintained by four countries, while a marked decline in AFP quality was noted in three countries. This sub-region hosts significant minority populations, which may be at high risk. Major challenges for the countries are to: maintain or regain political commitment; strengthen NCC activities; sustain or achieve high quality surveillance covering all territories and targeting high-risk groups/territories; and maintain high levels of immunization coverage, particularly in high-risk sub-populations.

**Central zone** *(Belarus, Bulgaria, Czech Republic, Hungary, Poland, Slovak Republic, and Slovenia)*

Poland and Slovakia have inactive NCCs. It is unclear if Hungary held an NCC meeting in 2007. Polio vaccination coverage is uniformly high. Belarus, Bulgaria, the Czech Republic, Hungary, Slovakia, and Slovenia use an all-IPV schedule. Poland is using a mixed OPV/IPV schedule. While all countries are conducting AFP surveillance, the quality is high only in Belarus and Bulgaria. It is of medium quality in the four remaining countries. Falling quality of surveillance is of concern for the Czech Republic and Poland. Many districts are not reporting AFP cases. Isolates of Sabin-like polioviruses were identified in several countries using OPV. Enterovirus surveillance...
is conducted in all countries except Belarus. Environmental surveillance is performed in three countries.

**Conclusion**

NCC activities have declined in three countries. All countries sustained polio immunization in all sub-national territories at a high level. Only two countries sustained high quality AFP surveillance. The most important weakness is the low non-polio AFP rate. Major challenges for the countries are to: maintain or re-gain political commitment; sustain high levels of immunization in all high-risk sub-populations; and maintain high quality poliovirus surveillance with regular, ongoing collection of supplementary surveillance data.

**MECACAR zone** *(Armenia, Azerbaijan, Georgia, Kazakhstan, Kyrgyzstan, Russian Federation, Tajikistan, Turkey, Turkmenistan, and Uzbekistan)*

This is the largest zone both in terms of geography and population. With the exception of Kazakhstan, NCCs met in all MECACAR countries in 2007. However, the number of NCC meetings declined in most countries. All countries continue to use OPV. Russia will move to an IPV schedule in the next year and Turkey will move to a mixed IPV/OPV schedule. Vaccination coverage was high with the exception of Armenia, Georgia and Tajikistan - all between 80% and 90%. There are, however, sub-national areas within countries where coverage is low, particularly Georgia, Tajikistan and Turkey. SIAs were conducted in Azerbaijan, the Russian Federation, Tajikistan and Turkmenistan in 2007. AFP surveillance was generally good. Notably, the quality of AFP surveillance improved in Armenia. In both Azerbaijan and Georgia there are geographical areas where surveillance reports are provided by international organizations. AFP surveillance quality in Turkey has improved at the national level, but remains suboptimal in some high-risk areas. Follow-up of AFP cases was good except in Armenia. Many isolates of Sabin-like poliovirus were reported, consistent with the use of OPV in the zone. Six countries conduct enterovirus surveillance and five environmental surveillance.

**Conclusion**

NCC’s continue to be active with the exception of Kazakhstan. The majority of countries maintained high routine immunization coverage and high-quality AFP surveillance, although some failed to meet standard criteria at sub-national level, particularly in the Caucasus region. Areas of sub-optimal immunization coverage remain in certain countries. Four countries conducted supplementary immunization activities, and two employed outreach strategies for increasing immunization coverage in high-risk territories. Major challenges for the countries are to: sustain political commitment, particularly in light of restructuring of some ministries of health; sustain national surveillance activities in the face of decreasing funding; update national plan of action to sustain polio-free status and to respond to an importation of WPV; assure timely delivery of stool specimens to national and regional reference laboratories; sustain accuracy and timeliness of reporting and classification of AFP cases; and maintain high-levels of immunization coverage, particularly in high-risk sub-populations.
Performance of the Regional Poliomyelitis Laboratory Network (LabNet) in 2007-2008

The LabNet plays a central role in maintaining the polio-free status of the Region by documenting the absence of wild polioviruses and rapidly detecting any importations of poliovirus that occur. All network labs are fully accredited and passed their annual lab proficiency test in 2007. The Member States reported 156,988 specimens that were analysed in 2007 from predominantly three sources – cases of AFP and their contacts, patients with enterovirus infections and samples from the environment (effluents of water treatment facilities). Approximately 2500 of these samples were collected from AFP cases and their contacts. The majority of samples (98.6%) were investigated in a timely fashion. The vast majority of samples were from enterovirus surveillance (123199; 78.5%). The network continues its efforts to improve the sensitivity of enterovirus surveillance for polio, e.g., by recommending to Member States to collect faecal samples and cerebrospinal fluid (CSF).

The network was able to detect one imported wild-type poliovirus, 1688 Sabin-like viruses and eight vaccine-derived polioviruses. The wild virus was a type 1 virus that apparently originated in Chad based on the 98.8% nucleotide homology (VP1 genomic region) with the recent isolates from this country and was imported into Switzerland. It was isolated from sewage from the canton of Geneva in August 2007. The virus was never detected again despite continued sampling and there was no spread in humans.

A type 2 iVDPV (1.88% nucleotide divergence from Sabin 2 in VP1 region) was isolated from an immunodeficient boy in Belarus in May 2007. The patient is currently not excreting the virus based on the recent sampling (June 2008). There are two known long-term immunodeficient excreters in the Region, one in the UK (iVDPV type 2, 17.4% divergence) and one in Germany (iVDPV type 1, 10.5% divergence).

A highly diverged type 2 VDPV continues to be seen in sewage samples collected in N. Tel Aviv in Israel. The virus was first identified in 1998 and was last seen in February 2008 (highest divergence is 15.06%). The genomic properties of these viruses as well as pattern of excretion and a relatively small geographic area where they are isolated indicate that the most likely source of these viruses is an immunodeficient person.

The LabNet also played a crucial role in establishing etiology of multiple aseptic meningitis outbreaks and sporadic cases. It isolated 11,187 non-polio enteroviruses. The LabNet’s involvement in surveillance for enteroviruses is a key factor in maintaining high quality lab-based surveillance for polio in the Region.
Review of national updates for 2007 and presentations by selected countries

Regional summary

There is a continuing downward trend in the number of Member States which are conducting meetings of their NCCs. The quality of the reports provided by some countries is substandard with information incomplete or lacking clarity. Of particular concern, the membership of the NCC is often not clear and their role in preparing the report is ill-defined. In some instances, it was not even clear that the NCC had reviewed the report prior to submission. The quality of NCC work must be substantially improved if the Region is to meet the requirements of global certification. Overall AFP surveillance has declined since the Region was certified free of polio in 2002. There are many localities that have either reported no AFP cases or have suboptimal performance. The Region has seen declining use of OPV with the increasing adoption of all-IPV schedules, which may increase the risk of poliovirus transmission in under-immunized populations.

Armenia (Dr. Gayane Sahakyan)

Armenia reported its last polio case in 1996. Routine immunization coverage in Armenia was above 90% until 2004, when coverage fell to 85% as a result of vaccine shortage. Immunization coverage as determined by administrative methods currently stands at 86%. However, the country believes the percentage of children immunized is actually higher based on a lot quality survey conducted in 2006, which found national coverage at 95%. Concern remains, though, about several regions that have coverage as low as 50-60% by the administrative method. AFP surveillance was initiated in 1996. While at high levels at the time of Regional certification, quality fell in 2006, when only eight AFP cases were reported. 16 AFP cases were reported in 2007. The non-polio AFP rate in 2007 was 2.5, up from 1.1 in 2006. 87.5% of AFP cases had one adequate stool specimen within 14 days of the onset of paralysis. 56.2% had two stool specimens taken one day apart. AFP cases were reported from eight of the 11 regions in Armenia in 2007. The country has active AFP surveillance at infectious and neurological hospitals. 144 samples were tested under enterovirus surveillance, yielding five non-polio enteroviruses and one ECHO virus. Environmental surveillance was conducted at a single child care home with no positives among 25 samples collected. A national plan for maintaining polio-free status has been formally adopted by the government. An SIA is planned for 2008.

Country-specific feedback from RCC:

The evidence presented by Armenia provides confidence that there is no polio in the country and that if there were, it would be found. The NCC meets and is functioning well. The report is complete and provides details of the individual members of the committee. The RCC is concerned over the drop in immunization coverage, initially due to shortage of vaccine, and the possibility that it might occur again. The RCC asks the government to consider what can be done to prevent a recurrence of the shortage and to review the security of the national vaccine supply.
Bosnia and Herzegovina

Representatives of Bosnia and Herzegovina were unable to attend the meeting. No presentation was submitted.

Switzerland (Dr. Ingrid Steffen)

Switzerland has universal access to health care. Five doses of IPV are recommended in infancy and early childhood. The latest survey data are from 2006 with National IPV3 coverage averaging 94%. Four central cantons had coverage between 85 and 89%. The last indigenous case of polio was in 1982; the last imported case was in 1987. There has been voluntary notification of AFP cases since 1995. The AFP rate has been over one for the last two years. However, adequate stool collection rates were below 20% in both of those years. There has been mandatory reporting from laboratories since 1974. The last virus notified was a Sabin-3 virus in 2007. Containment has been initiated with 13 laboratories retaining either WPV infectious materials or potentially WPV infectious materials. A wild type-1 virus was isolated from sewage samples in Geneva in August 2007. This virus is very closely related to a virus of Nigerian origin circulating in Chad. An investigation failed to find any evidence that this virus had circulated or caused disease. Continuing sampling of sewage from Geneva has identified a Sabin-like, type 2 virus in January 2008, but no additional wild viruses. The issues that must be addressed to maintain the polio free status of the country are: maintaining high vaccination coverage; monitoring of vaccination coverage at cantonal level; continuing supplementary surveillance for polioviruses; and improving AFP surveillance.

Switzerland has not had an NCC chair since 2006, and the NCC did not meet in 2007.

Country-specific feedback from RCC:

The RCC notes with concern that Switzerland has had no chair of its NCC for two years. The RCC is concerned that the report provided is not of uniformly high quality. AFP surveillance is not uniformly representative of the country and the rate of stool sampling is very low. It is unclear how AFP cases are assessed. The imported virus appears to be controlled. Overall, surveillance needs to be improved if the country is to ensure that it is free of polio.

Turkey (Professor Ufuk Beyazova)

No new cases of poliomyelitis have occurred in Turkey since the last case reported in November 1998. While the polio eradication initiative began in Turkey in 1989, the level of polio cases remained static until NIDs were initiated in the mid-1990s. Mopping-up immunization eliminated the final chains for transmission. Subsequent SIAs have kept the country free of polio. The government of Turkey recently made a strong commitment to maintaining high levels of routine immunization coverage. As a result, national immunization coverage now stands at 96%. Only seven provinces have coverage between 80% and 90%. SIAs are being planned in the provinces with low OPV3 coverage rates and poor AFP surveillance indicators in 2007. Turkey moved to a combination IPV/OPV schedule at the beginning of 2008 with OPV given at doses 3 and 4 and a booster at six years of age. The national AFP rate has been either close to one or above since 1998 and was 1.1 for 2007. Adequate stool specimens are collected on 80% of cases. AFP rates are above one and stool collection rates above 80% in most subdivisions of the country. Containment
has begun with WPV containing materials only in one lab and materials potentially containing WPV in two others. A BSL-3/polio laboratory is under construction. Turkey is committed to sustaining its poliovirus-free status.

Country-specific feedback from RCC:
The RCC wishes to compliment Turkey on the overall excellence of its report. The material presented was complete and clear. The NCC was clearly identified. Turkey is also complemented on the progress that has been towards eradicating polio and improving routine immunization in the country. Based on the data presented, the RCC is confident that Turkey is free of polio. However, it is a time of change and consolidating achievements. As the country moves to a mixed schedule of OPV/IPV, it must take care that there is no drop off in the performance of its routine immunization program. Because of the geographic situation of the country, there is a high risk that poliovirus will be imported. The country must maintain the high standard of AFP surveillance that it has worked so hard for so many years to achieve.

Containment activities in 2008-2009: policy, strategies, actions

Globally, 168 countries (78%) have completed their Phase I survey and inventory. Ten countries are in progress. The situation in regard to containment has improved with WPV containing materials being destroyed by some laboratories. Approximately 600 facilities with WPV have been identified. Within EUR, 90 laboratories in 23 countries are holding infectious WPV-containing material. This compares with 111 labs in 25 countries in 2006. 201 labs currently hold potentially infectious material compared with 265 in 2006. The number of countries reporting no infectious materials currently stands at 29, an increase of two in the past year. In anticipation of Phase II activities, Member States should conduct the following activities: 1. Ensure administrative and financial resources for implementing and documenting containment activities required at the Global Certification stage. 2. Initiate development of national long term policy on polioviruses for post-eradication/post-OPV cessation. 3. Initiate work on establishing national poliovirus regulations and regulatory infrastructures to ensure its consistency with the international regulations. 4. Initiate destruction of low value wild poliovirus-containing materials. Plans for 2008-2009 include piloting the WHO global strategy to ensure that wild poliovirus reintroduction is part of a national biosafety strategy; conducting a survey of facilities with vaccine and infectious material; and strengthen biosafety. The development of plans for risk-elimination and risk-management in facilities that have poliovirus is in progress in France. The results will be shared as a model for other countries.

Key meetings and activities

Advisory Committee on Poliomyelitis Eradication (Geneva, November 2007)

Major developments reported to the ACPE were that the lowest incidence of WPV1 ever reported was in 2007 and a contribution of $200 million was to be made by Rotary International and the
Gates Foundation over the next four years. The ACPE noted that the 84% reduction of WPV cases was primarily due to the extensive use of mOPV1, particularly in India. They recommended that, for SIAs in endemic areas, an appropriate mix of mOPV1, mOPV3 and tOPV should be used to interrupt remaining WPV transmission. All countries re-infected with poliovirus should fully implement the ACPE recommendations on outbreak response. Prevention of cVDPVs required a focus on detection and strengthening routine immunization systems. All polio-free countries should complete phase 1 containment activities by the end of 2008. Exploratory work continues on a bivalent vaccine for types 1 and 3 OPV and a Sabin IPV. Work needs to continue on affordable and safe ways of producing IPV for the period after OPV use is halted.

Meeting of the Global Certification Commission (Geneva, November 2007)

This was not an official meeting of GCC; rather chairs of the six RCCs met to share experiences and discuss issues of mutual concern. Their primary concern was progress in the endemic regions. Chairs from the other regions praised the work of the European RCC. They felt that other Regions could learn from the experience with containment in EUR. Classification of countries by risk of transmission could be adopted by other RCCs. The European Regional Plan to Maintain Polio-Free Status, 2008-2013 was, again, felt to be a model. The Western Pacific RCC discussed the challenges for the polio-free regions in maintaining the laboratory network and keeping programs operational in anticipation of global eradication. There was agreement on the need for new terms of reference for the NCCs in the polio-free Regions as both the RCCs and NCCs play a vital role in keeping programs moving forward and maintaining quality of work.

European Technical Advisory Group of Experts on Immunization (ETAGE) (Copenhagen, August 2007)

This was the 7th meeting of ETAGE. An update was received on maintaining the polio-free status of Europe. The European Regional Strategic Plan to Sustain Polio-Free Status of the Region: 2008-2013 was reviewed and endorsed. The ETAGE also reviewed progress towards measles and rubella elimination and discussed creating commissions for the certification of the elimination of measles and rubella. The meeting concluded that there was a need to remain vigilant and step up efforts on measles and rubella elimination and maintaining polio-free status of the Region. This will prove challenging within the context of communicable disease reform within WHO EURO.

European Immunization Week, 21-27 April 2008

The European Immunization Week is the Region’s main advocacy event for immunization. Thirty-three Member States participated in the 2008 European Immunization Week. The overall message was the needs and rights for every child to be immunized, focusing on high-risk groups. During this week, each country implements its own programme to inform and engage key target groups and target critical immunization challenges in their country. The 2008 European Immunization Week was held in coordination with the Regional Vaccination Week in the Americas. The ultimate goal is
a global immunization week. More information about the European Immunization Week can be found at the WHO Regional Office for Europe’s Vaccine-Preventable Diseases and Immunization website (www.euro.who.int/vaccine).

**SAGE (Geneva, November 2007; April 2008)**

The last two meetings did not focus extensively on polio, but heard reports on post-eradication strategies. SAGE indicated that future discussions should focus on how to interrupt transmission. The SAGE meeting to be conducted in September 2008 will have polio eradication as a major agenda item. The session is not intended to be the nuances of post eradication strategies, but an open and frank discussion about barriers and how they will be overcome. SAGE will want to know what the real prospects are of the challenges being met. SAGE will then advise the DG on the most strategic way of moving forward.

**Conclusions and recommendations**

**Conclusions**

The RCC reviewed all available country reports and supplementary information provided by the Secretariat and concluded that the European Region remains free of wild poliovirus transmission ten years after the last indigenous case of polio in the Region. The RCC noted that, unfortunately, the performance of many National Certification Committees has declined in recent years and concluded that NCCs must be revitalized both to assure the continuing polio-free status of the Region and to prepare the Region for Global Certification. The RCC remained greatly concerned that, in spite of progress achieved globally, the risk of importation of wild poliovirus into the Region remains very high due to continuing transmission of wild poliovirus in the four remaining endemic countries and countries where transmission of imported viruses has been re-established. Frequent travel between these countries and Europe increases the risk of importation. While immunization coverage is sufficiently high to prevent poliovirus transmission in most areas of the Region, an imported wild poliovirus or vaccine-derived poliovirus could spread in geographical areas and/or subpopulations with low immunization coverage. The RCC was concerned that surveillance indicators had been generally declining throughout the Region and emphasized the importance of all countries within the Region maintaining high-quality surveillance for poliomyelitis as well as other vaccine-preventable diseases. The RCC commended the minority of countries that had made significant efforts to maintain or improve immunization coverage, identify high-risk populations and conduct high-level surveillance for polioviruses.

The current global situation calls for the strong political commitment of all WHO Member States to stop poliovirus transmission and provide sustained financial support for the global polio eradication programme. The continuing financial support of the industrialized countries for the global programme is crucial. The RCC looks forward to continuing support from the Regional Director for sustaining...
Europe’s polio-free status and increasing advocacy for political and financial support for the global polio eradication initiative.

As the Region celebrates the tenth anniversary of its last indigenous polio case, the RCC wishes to extend its gratitude to Dr. Walter Dowdle for his many years of meritorious service on the Commission.

**General recommendations**

1) The Regional Certification Commission is concerned about the significant number of National Certification Committees that have not held a meeting in recent years and the lack of clear delineation of NCC review and approval of national reports received. Accordingly, the Regional Certification Commission requests that the Regional Director send a letter to all member states emphasizing the risk of both wild PV and VDPV being imported into their country, the importance of maintaining their polio-free status and the central role that National Certification Committees in validating the national status. The letter should also strongly urge countries to take the following steps:

   a) NCCs should be constituted or reconstituted so that they are clearly independent from the program, have a specified membership and have clearly defined responsibilities as outlined in the current terms of reference. NCCs should have no operational responsibility for the polio program. Governments should ensure that their NCCs are active, review program performance at least annually and approve reports submitted to the RCC. Countries should report back to the WHO Secretariat on their NCCs within 3 months.

   b) Review the quality of their AFP surveillance. Where the quality of AFP surveillance does not meet accepted performance criteria, the country should either implement a plan to improve AFP surveillance or consider moving to high quality, standardized enterovirus surveillance relying on stool specimens. In either instance, appropriate funding must be provided to sustain surveillance for the long term. Countries that are unable to conduct effective poliovirus surveillance should provide evidence that their health infrastructure is of such high quality that any case of polio would be detected early.

   c) Develop/review their specific plan for action in response to a polio importation as part of their emergency response plan under the international health regulations. The polio annex to the plan should identify persons with specific polio expertise who would guide the response. The plan should also specify the vaccine that would be used to control any importation, the rationale for choosing this vaccine and the source for an emergency vaccine supply. By June 2009, countries should conduct an exercise to test the national response plan.

2) Country reports for the 2009 RCC meeting should provide specific details of the country plans for sustaining surveillance in the long term.

3) Country reports for the 2009 RCC meeting should report on results of the exercise testing the national response to an imported poliovirus or specify dates when this exercise will be conducted before the end of 2009.
4) By the end of 2008, the WHO Secretariat should review the form used for NCCs to submit their annual information to ensure that the submitted information accurately and completely reflects the polio-free status of each country.

5) The RCC requests that the ETAGE address the issue of which vaccines can/should be used for controlling an introduction of poliovirus into one of the member states of the Region and how vaccine can/should be stockpiled.

6) The RCC wishes to have more direct communication with the NCCs. The WHO secretariat should keep the RCC chair informed on progress towards reconstituting the NCCs and assist the chair in establishing relationships with the individual NCC chairs. The NCC chairs also should have a stronger presence at RCC meetings to more effectively communicate the national situation at to the RCC. The WHO secretariat should explore alternatives for conducting RCC meetings so as to facilitate the involvement of NCC chairs. WHO should also seek additional financial resources should it be necessary to change the location, or increase the frequency and/or size of RCC meetings.

7) The RCC reviewed the data provided by each national programme and made their annual assessment of the potential for poliovirus transmission to occur following in introduction of a wild poliovirus or a vaccine-derived polio virus. The RCC considers that the Region remains at low risk of poliovirus transmission with the exception of the following countries (Table and Figure):

<table>
<thead>
<tr>
<th>High risk</th>
<th>Intermediate risk</th>
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<tr>
<td>Armenia</td>
<td>Azerbaijan A</td>
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<td>Bosnia and Herzegovina</td>
<td>Greece</td>
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<td>Georgia</td>
<td>Netherlands</td>
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<tr>
<td>Tajikistan</td>
<td>Russian Federation (northern Caucasus region only)</td>
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<tr>
<td>Turkey (southern and eastern) areas only</td>
<td>Turkey (except the high risk south and east and the low risk western coast)</td>
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<td>Turkmenistan</td>
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<td>Uzbekistan</td>
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8) The tentative date for the 22nd RCC meeting is scheduled for 22-24 June 2009.
Annex 1

**Programme of the 21st Meeting of the European Regional Certification Commission for Poliomyelitis Eradication**

**Day 1**

**Monday, 9 June 2008**

<table>
<thead>
<tr>
<th>Time</th>
<th>Activity</th>
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<tbody>
<tr>
<td>12.30-13.00</td>
<td><strong>Registration</strong></td>
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<tr>
<td>13.00-13.30</td>
<td><strong>Opening</strong></td>
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<td>• EURO</td>
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<td>• Chairperson RCC</td>
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<tr>
<td>13.30-14.30</td>
<td><strong>Progress towards global eradication WPV: Challenges and perspectives</strong></td>
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<td></td>
<td>Dr Bruce Aylward</td>
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<td></td>
<td>Discussion</td>
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<tr>
<td>14.30-15.00</td>
<td>Coffee break</td>
</tr>
<tr>
<td>15.00-16.00</td>
<td><strong>Progress towards the Regional Certification of the WHO Eastern Mediterranean Region</strong></td>
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<td></td>
<td>Dr M.H. Wahdan (presented by Dr. Magda Aly El Sayed Rakha)</td>
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<tr>
<td></td>
<td>Discussion</td>
</tr>
<tr>
<td>16.00-17.00</td>
<td><strong>Sustaining poliomyelitis-free status of the WHO European Region: and strategic plan of action for 2009-2013</strong></td>
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<tr>
<td></td>
<td>Mr Eric Laurent</td>
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<tr>
<td></td>
<td>Discussion</td>
</tr>
<tr>
<td>17.15-18.00</td>
<td><strong>Reception on the occasion of the 21st Meeting of the European Regional Certification Commission for Poliomyelitis Eradication</strong></td>
</tr>
</tbody>
</table>

**Day 2**

**Tuesday, 10 June 2008**

Registration
Plenary Session 2: Sustainability of “polio-free” Europe: Review of national updated documents for 2007 by epidemiological zones

08.30 – 08.40
*Introduction to sub-regional zones*
Dr Rebecca Martin

Discussion

*Review of 2007 national data by epidemiological blocs* (10 min. presentation and 20-30 min. discussion)

08.40 – 09.10
*Regional overview: Update information for 2007 in the Nordic/Baltic epidemiological zone (8 countries)*
Dr Galina Lipskaya

Discussion

09.10 – 09.50
*Regional overview: Update information for 2007 in the Western epidemiological zone (10 countries)*
Dr Rebecca Martin

Discussion

09.50 – 10.20
Coffee break

10.20 - 11.00
*Regional overview: Update information for 2007 in the Southern epidemiological zone (10 countries)*
Dr Eugene Gavrilin

Discussion

11.00 - 11.30
*Regional Overview: Update information for 2007 in the Central – Eastern epidemiological zone (8 countries)*
Dr David Mercer

Discussion

11.30 - 12.00
*Regional Overview: Update information for 2007 in the Central epidemiological zone (7 countries)*
Mr Eric Laurent

Discussion

12.00 - 13.00
Lunch
Day 2
Tuesday, 10 June 2008

Plenary Session 2: Sustainability of “polio-free” Europe: Review of national updated documents for 2007 by epidemiological zones (cont)

13.00 - 13.40  **Regional Overview: Update information for 2007 in MECACAR zone (10 countries)**
Dr. George Oblapenko
Discussion

13.40 - 14.10  **Performance of the Regional Polio LABNET in 2007-2008**
Dr Eugene Gavrilin
Discussion

Review of national update for 2007 – presentations by selected countries
_(20 min. presentation and 10 min. discussion)_

14.10 -15.10  
Armenia
Bosnia & Herzegovina

15.10 – 15.40  
Coffee break

15.40 – 16.40  
Turkey
Switzerland

16.40 - 18:30  **Private meeting of the EUR RCC**

General discussion of update information for 2007 and formulation/drafting recommendations

Review of Risk Assessment for potential transmission in the event of a wild poliovirus importation, 2007
Dr George Oblapenko
Day 3
Wednesday, 11 June 2007

09.00 – 09.30  Private meeting of the EUR RCC

09.30 – 10.30  Plenary Session 4

09.30 – 10.00  Containment activities in 2008-2009: policy, strategies, actions

Dr Galina Lipskaya

Discussion

10.00 – 10.30  Feed-back to counties

10.30 - 11.00  Coffee break

Closed Session 5: Private meeting of the EUR RCC

11.00 - 12.00  Information on key meetings

➢ ACPE Meeting (Geneva: November, 2007) – Dr Leo Weakland
➢ Meeting of the Global Certification Commission (Geneva: November 2007) – Dr Walter Dowdle
➢ Meeting of the European Technical Advisory Group of Experts on Immunization (Copenhagen, August 2007) – Mr Eric Laurent
➢ The European Immunization week: 21-27 April 2008 - Ms Naroesda Jagessar
➢ SAGE (Geneva, November 2007; April 2008) – Dr David Salisbury

12.00 – 13.00  Lunch

13.00 - 13.30  Review of a format for country update 2008

Discussion

13.30 – 14.00  Working procedure of the RCC in 2008 and beyond

TOR for the NCC: post-EUR certification situation but before the Global Certification of poliomyelitis eradication
14.00 - 14.30

**Plan of Action 2008-2009**

- County visits (Where, who, when and objectives)
- The RCC meeting in 2009
- Participation in meetings

14.30 Closure
Annex 2

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