WORLD HEALTH ORGANIZATION
EUROPE

Report of the 23rd Meeting of the European Regional Certification Commission for Poliomyelitis Eradication

Copenhagen, Denmark, 28-29 June 2010

ABSTRACT

The 23rd Meeting of the European Regional Certification Commission for Poliomyelitis Eradication (RCC) reviewed updates on the national polio eradication programme and laboratory containment activity from all Member States of the WHO European Region. The prior concerns about the potential for wild poliovirus to be imported into the Region were realized through a large outbreak of polio in Tajikistan in early 2010 due to a type 1 poliovirus from northern India. While 4 rounds of NIDs have been conducted with mOPV1 and two additional NIDs are planned with tOPV, delayed recognition of the outbreak permitted the virus to spread rapidly in the country and spread outside the country. Additional cases have been confirmed in the Russian Federation. While the risk of polio being imported into countries of the European Region is declining due to significant progress in India and Nigeria, the current outbreak significantly increases the risk that wild poliovirus will be introduced into additional countries in the Region. Although high routine poliovirus immunization coverage has been maintained in most and good performance indicators for polio surveillance are reported by most Member States, data suggest that the quality of AFP surveillance has been slowly declining throughout the Region since 2002. High-risk sub-populations and underserved areas remain, for which polio surveillance and immunization indicators are weak. The occurrence of a large outbreak, despite the good immunization coverage and high quality AFP surveillance previously reported by Tajikistan, causes the RCC to question the accuracy of the data submitted in some NCC reports. The RCC is also concerned that there has been a significant deterioration of immunization coverage in Ukraine; creating the potential for a large outbreak should poliovirus be introduced there. The RCC calls on all Member States to ensure that they have uniformly high routine immunization coverage and to bring their polio surveillance back up to certification standards to assure that the European Region can maintain its polio-free status and that poliomyelitis will be eradicated globally. The situation calls for strong political and financial commitment from all Member States to address these issues.

Keywords

POLIOMYELITIS – prevention and control
CERTIFICATION
IMMUNIZATION PROGRAMS
NATIONAL HEALTH PROGRAMS
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CONTAINMENT OF BIOHAZARDS – standards
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Glossary

AFP	acute flaccid paralysis
AFP index	non-polio AFP rate up to 1.0 (percentage of AFP cases with at least one adequate stool specimen within 14 days)
BSL-2	Biological Safety Level-2
GAP II, III	Global Action Plan for Laboratory Containment of Polioviruses, Versions II & III
IPV	inactivated polio vaccine
MECACAR	Mediterranean and Caucasian countries and central Asian republics
NCC	national certification commission
NID	National Immunization Day
NIS	Newly Independent States of the former Soviet Union
NPEV	non-polio enterovirus
OPV	oral polio vaccine
bOPV	bivalent oral polio vaccine, types 1 & 3
mOPV1, 3	monovalent oral polio vaccine types 1, 3
tOPV	trivalent oral polio vaccine
RCC	Regional Certification Commission for Poliomyelitis Eradication
RLL	Regional Reference Laboratory
SIA	supplementary immunization activity
VDPV	vaccine-derived poliovirus
cVDPV	circulating vaccine-derived poliovirus
iVDPV	vaccine-derived poliovirus isolated from immunodeficient patient

Introduction

The 23rd meeting of the European Regional Certification Committee (RCC) for the Eradication of Poliomyelitis was held at the World Health Organization (WHO) Regional Office for Europe, Copenhagen, Denmark, from 28 to 29 June 2010. Ms. Szuzsanna Jakab, the Regional Director, opened the meeting. She highlighted the importance of the current outbreak in Tajikistan both within the Region and globally, noting that the outbreak threatens both the polio-free status of the Region and the eradication of polio globally. She reaffirmed the strong commitment of the Regional Office in maintaining the polio-free status of the Region. She emphasized that, while WHO will provide assistance; it is the responsibility of the Member States to maintain their polio-free status. Professor Salisbury, Chair of the RCC, noted that the RCC had raised concerns about the potential for polio to be reintroduced into the Region at previous meetings and, unfortunately, those concerns have now been realized. While vigorous efforts are being made to control the outbreak, there is a high risk that polio may spread to other countries. He thanked Professor Christos Kattamis from Greece and Professor Ludmila Viksna from Latvia, who have stepped down from the Commission, for their service. On behalf of the Regional Office, Dr. Rebecca Martin welcomed the national representatives of the countries, the members of the Commission, representatives of the polio partners and guests. 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 Regional Commission for Certification of Poliomyelitis Eradication (RCC) on the global and regional status of polio eradication and national plans of action to sustain polio-free status;
- To review annual updated certification documentation on poliomyelitis in all Member States of the WHO European Region for 2009;
- To assess epidemiological situation and control measures implemented by Tajikistan to interrupt transmission of imported wild poliovirus type 1 in 2010.
- To review the current status of sustaining polio-free status in selected Member States, which are defined to be in the high and intermediate risk groups and discuss actions required to assure sustainability of polio-free status within countries of the Region;
- To review the current status of regional laboratory containment in view of recent importation of wild poliovirus type 1.
- To review working procedures of the RCC and to discuss a plan of activities for 2010;
- To brief the Members of the RCC on recent meetings, including the 63rd World Health Assembly (Geneva, May 2010); the Advisory Committee on Poliomyelitis Eradication (ACPE, Geneva, November 2009); The Strategic Advisory Group of Experts (SAGE, Geneva, November 2009 and April 2010); the European Technical Advisory Group of Experts on Immunization (ETAGE, Copenhagen, August 2009); and the Eastern Mediterranean RCC meeting (Cairo, November 2009 and April 2010).

Progress towards global eradication of wild poliovirus

As the Global Polio Eradication Initiative enters its 23rd year since the goal was originally established in 1988, the challenge is sustaining the momentum that has been achieved and rapidly ending transmission in the remaining endemic countries. Without significant progress in 2010 and 2011, there is a risk of losing donor support. With the introduction of bivalent, types 1 and 3 OPV and the adoption of new strategies tailored to the local epidemiologic situation, wild poliovirus transmission has been reduced substantially in India and Nigeria. However, the low levels of circulating virus being seen in the current low season may lead to a premature feeling of success, inducing complacency and leading to low quality SIAs. Undetected gaps in surveillance and problems with access in conflict areas remain as important challenges that must be addressed.

The major objectives of the Global Strategic Plan for 2010-2012 are to: interrupt wild poliovirus transmission in Asia; interrupt wild poliovirus transmission in Africa; enhance surveillance and outbreak response; and strengthen immunization systems. The plan calls for: 1. District specific planning processes in the "persistent transmission areas" of Afghanistan and Pakistan that account for 95% of cases in those countries; 2. New campaign monitoring strategies using finger marking in Pakistan and LQAS to measure coverage in 5 northern Nigerian states; 3. Addressing the immunity thresholds required to stop transmission in South Asia, where 95% coverage is required compared with 80% in Africa; and 4. Tailoring of activities to limit international spread based on better understanding of polio importation and outbreak risks. The timeline of the plan calls for poliovirus transmission to be interrupted in all countries with new importations in 2009 by mid-2010, all countries with re-established polioviruses by the end of 2010, 2 of the 4 endemic countries by the end of 2011, and all countries with endemic viruses by the end of 2012. A new, fully independent global advisory body will be put in place to monitor plan implementation, mid-course corrections and impact on a quarterly basis. In order to do this, a gap of US$ 1.3 billion in the US$2.6 billion 2010-2012 budget must be closed.

Sustaining the polio-free status of the WHO Western Pacific Region

The WHO Western Pacific Region was certified free of polio in 2000 and was the second to be certified. The Region and its Member States are dealing with many of the same challenges facing the European Region. Positive developments are that wild poliovirus importations into Singapore and Australia did not lead to secondary cases, 3 cVDPV outbreaks were quickly brought under control with 2-3 rounds of SIAs using tOPV, phase 1 wild poliovirus laboratory containment was completed in 2008, and Member States have a strong realization for the need for continued efforts to protect their polio-free status and investment made to achieve these results. With the exception of two industrialized countries, all countries in the region have continued to conduct AFP surveillance. While the quality of surveillance has declined over time, decay has been slower than anticipated. NCCs and expert review panels continue to function in all countries. With one exception, the 43 laboratories in the Regional network continue to be accredited. The Western Pacific Region has adopted criteria for assessing country-level risk

similar to that used in the European Region. RCC meetings are held annually in high-risk countries as one additional method of advocating for the programme. Challenges faced by the initiative include loss of institutional memory with the passage of time, reduced financial support for polio eradication, increased programmatic responsibility for measles, hepatitis B and other vaccine preventable diseases without an increase in WHO staff, and the need for both WHO and Member States to respond to new diseases, including SARS, avian influenza and H1N1 pandemic influenza.

Sustaining the poliomyelitis-free status of the European Region

Twelve years after the last indigenous case in Turkey in 1998, the European Region was free of circulating wild poliovirus through 2009. National health systems are strong within most countries of the Region, so that any case of paralytic polio will be detected clinically and subjected to timely laboratory investigation. Immunization services are well established with high and stable coverage with 3 doses of polio vaccine in a vast majority of Member States. Countries are conducting outreach programs for groups at high risk – socially isolated, internally displaced and refugee populations particularly in association with the annual European Immunization Week. Overall, surveillance for polioviruses remains strong in the Region with 43 countries employing AFP surveillance, 38 relying on enterovirus surveillance and 21 conducting environmental surveillance. AFP rates remain high at national level for most countries using AFP surveillance. Concerns for the Region include: the timely provision of immunization and under-performing districts in several countries, the slowly declining quality of AFP surveillance (particularly in the western part of the Region), and the declining quality of National Certification Committee work.

The greatest challenge to maintaining the polio-free status of the European Region is the current, ongoing outbreak of type 1, wild poliovirus in Tajikistan. As of 28 June 2010, 643 AFP cases have been reported; of which 317 are laboratory-confirmed wild virus. A total of six laboratory confirmed cases have been reported from the Russian Federation; all caused by viruses linked to the Tajikistan outbreak. Two of the cases arrived directly from Uzbekistan and no link with Tajikistan has been established to date.

The most urgent priorities for the Region are to stop the current outbreak in Tajikistan, prevent spread to neighbouring countries, and reduce the risk of subsequent outbreaks. Surveillance must be strengthened in all high risk countries to ensure certification-level standard surveillance. Tajikistan must also demonstrate to the RCC that the outbreak has been stopped so that polio-free status for the Region is sustained. Long-term actions must be taken to rreview and strengthen demand for routine immunization – particularly in under-served populations

Additional priorities for the Region are: ensuring continuous political commitment and support, 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 to support the work of the initiative.

Sub-regional overview for 2009

Because of the diversity of the 53 Member States in the Region, the information provided by countries was reviewed by six geographical zones. Three countries (Luxembourg, Monaco and San Marino) have not submitted reports since 2003. Andorra did not submit an update for 2009. Indicators analysed for each country included: the number of meetings of their national certification commissions (NCC) in the period 2004–2009; 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 2000–2008 and provisional data for 2009; and the number of sub-national territories, where coverage is <90% from the annual update. Surveillance indicators analysed included: surveillance for WPV in AFP cases using the number of non-polio enterovirus isolates in 2009 and the number of poliovirus isolates in 2009; the use of supplementary surveillance for WPV including the implementation of enterovirus surveillance and environmental surveillance; the AFP index 2000-2009 (Non-polio AFP rate per 100,000 per year) x (% specimens in 14 days) with the minimum and maximum level demonstrated during pre-certification period (2000-2002) and the AFP index achieved in 2007 – 2009; the AFP index for 2009 mapped by first sub-national area; and quality indicators for AFP surveillance 2009 including the non-polio AFP rate, the number of AFP cases, the number of "hot AFP cases" reported/missed and the timeliness of reporting to WHO/EURO. Additional criteria used for the assessment were: the preparation of a Plan of Action to Sustain Polio-Free Status as noted in the annual updates to the RCC 2007-2009, which includes a preparedness plan to control importation: from annual updates to the RCC 2007-2009 noting the vaccine policy and the target group for SIAs; and a risk assessment for substantial transmission after importation of WPV status based on the health system, routine immunization coverage high risk groups, the stability of high-quality surveillance, preparedness planning and the health authorities' support to sustain polio-free efforts.

Nordic/Baltic zone

Denmark and Iceland did not hold any NCC meetings from 2004 to 2008. Iceland and did not submit updates for 2009. Most countries in this zone use IPV and immunization coverage has been universally high (>90%). Denmark changed its methodology for measuring immunization coverage in 2007 and the current coverage level is reported as 89%, but this may be an underestimate. Four countries, Estonia, Latvia, Lithuania and Norway, employ AFP surveillance, but of these, only Latvia and Lithuania have achieved a high AFP surveillance index in 2009. Eight countries conduct enterovirus surveillance while 3 conduct environmental surveillance. Estonia, Finland, Latvia, Lithuania and Sweden have plans for sustaining their polio-free status. However, key elements are missing from several plans.

Conclusion

National updates submitted by the countries in the sub-region demonstrate that: 6/8 countries have shown commitment to maintaining polio-free status as judged by continued NCC activity; coverage remained high throughout the sub-region; the sub-region increasingly relies on

supplementary surveillance systems which are in place in all countries; AFP surveillance is of value in some countries, but performance is mostly suboptimal; and 5/8 countries have approved, up-to-date National Plans for Maintaining Polio-free Status. The Secretariat therefore concludes that: Probability is high that WPV had not been circulating in the sub-region in 2009; WPV importation, if any, would have been detected by existing surveillance systems; and the risk of transmission following importation of WPV in countries of this zone is very low. The RCC concurs with this assessment.

Western zone

No NCC reports were received from Luxembourg or Monaco. There is no NCC in the Netherlands. All countries are using IPV exclusively. Coverage is universally high with the exception of Austria, where coverage was 83% in 2008. High-risk populations exist in many countries. Of particular concern is the concentrated population of persons who refuse immunization on religious grounds in the Netherlands. Frequent travel between Western zone countries and countries with endemic transmission poses a high risk for viruses to be imported. Five countries conduct AFP surveillance but the quality of AFP is low. All countries with the exception of Luxembourg and Monaco have enterovirus surveillance. Two countries conduct environmental surveillance. Austria, Belgium and the Netherlands have finalized plans for sustaining their polio-free status; Germany and the United Kingdom have draft plans.

Conclusion

National updates submitted by the countries in the sub-region demonstrate that: only 4/10 countries have shown commitment to maintaining polio-free status as judged by continued NCC activity; coverage is high throughout the sub-region except in Austria; the sub-region primarily relies on supplementary surveillance systems which are in place in 8/10 countries; AFP surveillance is in place in 5/10 countries, but performance is suboptimal; and only 3/10 countries have approved up-to-date National Plans to Maintain Polio-free status. The Secretariat therefore concludes that: the probability is high that WPV had not been circulating in the sub-region in 2009; WPV importation would have been detected by existing surveillance systems; and the risk of transmission following importation of WPV in countries of this zone is low. The Netherlands and Austria are countries of concern. The RCC concurs with this assessment.

Southern zone

No report was received from Andorra or San Marino. Croatia did not hold a NCC meeting. Portugal has held the first meeting of a reconstituted NCC. No NCC meetings were held in Italy and Malta. Reported immunization coverage is above 90% with the exception of Malta at 73%. Most countries are using IPV. AFP surveillance is conducted in 9 of the 10 Southern zone countries, with San Marino being the only exception. AFP surveillance is suboptimal in the zone, with only Cyprus and Greece achieving an AFP index above 0.5. Seven countries now conduct enterovirus surveillance and four use environmental surveillance. Cyprus, Greece, Israel, Italy and Spain have finalized plans to sustain their polio-free status; Croatia has a draft plan. Three final plans are judged incomplete.

Conclusion

National updates submitted by the countries in the sub-region demonstrate that: 6/10 countries have shown commitment to maintaining polio-free status as judged by continued NCC activity; coverage is high throughout the sub-region except in Malta; the sub-region largely relies on supplementary surveillance systems which are in place in 7/10 countries; 9/10 countries have AFP surveillance, but performance is suboptimal in most; and only 3/10 countries have up-to-date National Plans to Maintain Polio-free Status. The Secretariat therefore concludes that: the probability is high that WPV had not been circulating in the sub-region in 2009 and WPV importation would have been detected by existing surveillance systems. The risk of transmission following importation of WPV in countries of this zone is intermediate. Malta is of concern. The RCC concurs with this assessment.

Central-eastern zone

Montenegro has not been able to establish an NCC, while NCCs were very active in the remaining countries. Routine immunization coverage is above 90% in all countries, with the exception of Ukraine, where reported coverage is 80%.There are significant subpopulations with low coverage in several countries. All countries conduct AFP surveillance, which was of moderate to excellent quality except in Romania. There are significant numbers of sub-national territories that did not report any AFP cases in 2008. Five countries conduct enterovirus surveillance and two conduct limited environmental surveillance. Sabin polioviruses continue to be isolated in countries using OPV. All countries have finalized plans of action for sustaining their polio-free status, but these plans are missing significant elements in two countries.

Conclusion

National updates submitted by countries show that: 5/8 countries demonstrated political commitment to maintaining polio-free status as judged by continued NCC activities; Sub-national territories with coverage <90% existed in 6/8 countries, with highest number in Ukraine and Moldova; AFP surveillance performance was stable, excepting Romania, where it declined sharply; 5/8 countries conduct supplementary surveillance; all countries developed national plans of action to maintain polio-free status, but two were not updated. The Secretariat therefore concludes that: the probability is high that WPV has not been circulating in this sub-region during 2009 and any WPV importation would have been detected by existing surveillance systems; and the overall risk of spread following importation of WPV is intermediate in this sub-region mainly due to gaps in immunization coverage. Bosnia and Herzegovina, Romania, and Ukraine are countries of concern. The RCC concurs with this assessment.

Central zone

Slovakia has an inactive NCC and Poland is in the process of reconstituting its committee. NCCs in the other 5 countries of the sub-region held meetings in 2009. Polio vaccination coverage is uniformly very high with very few sub-national territories with low coverage. All countries

conduct AFP surveillance. Slovenia reported zero AFP cases since 2007. AFP surveillance quality is low in Hungary, Poland and Slovakia. High quality surveillance is reported by Belarus, Bulgaria and the Czech Republic. There are significant numbers of sub-national territories reporting no AFP cases. All countries conduct enterovirus surveillance and four conduct environmental surveillance. Four Central zone countries have a finalized plan of action for maintaining their polio-free status.

Conclusion

National updates submitted by countries show that: 5/7 countries demonstrated political commitment to maintaining polio-free status as judged by continued NCC activities; no sub-national territories with coverage <90%, excepting Bulgaria; AFP surveillance performance is sub-optimal with a steep decline in Hungary, but all countries conduct supplementary surveillance; and 4/7 countries have national plans of action to maintain polio-free status, but only two are updated The Secretariat therefore concludes that: the probability is high that WPV had not been circulating in this sub-region during 2009 as immunization coverage was good and WPV importation would have been detected by existing surveillance systems; the overall risk of spread following importation of WPV is low in this sub-region due to good immunization services and supplementary surveillance, but only two countries had national preparedness plans to respond to importation of WPV. Bulgaria and Poland are countries of particular concern. The RCC concurs with this assessment.

MECACAR zone

NCCs were active in all MECACAR countries in 2009. While all countries continue to use OPV Russia and Turkey use IPV for initial doses in newborns. Reported immunization coverage has been traditionally high in MECACAR countries and remains so with only Georgia reporting significant numbers of sub-national territories where coverage is low. AFP surveillance is conducted in all countries and was generally of good to high quality. A significant number of sub-national territories reported zero AFP cases in 2009, particularly in the Caucasus, Turkey and Russia. In both Azerbaijan and Georgia there are territories where surveillance reports are provided by international organizations. Six countries conduct enterovirus surveillance and seven conduct environmental surveillance. Many isolates of Sabin-like poliovirus were reported, consistent with the widespread use of OPV in the zone. All countries with the exception of Turkey have finalized plans for sustaining their polio-free status. Armenia, Azerbaijan, Kazakhstan and Russia have not specified target population in case of an importation.

Conclusion

National updates submitted by countries show that: all countries demonstrated political commitment to maintaining polio-free status as judged by continued NCC activities; areas of immunization coverage <90% still existed in Azerbaijan, Georgia, Tajikistan, and Turkey; AFP surveillance performance was stable except for Turkey, but timeliness/completeness of reporting to WHO declined; and all countries have updated national plans of action to maintain polio-free status, excepting Turkey. The Secretariat therefore concludes that: the probability is high that WPV had not been circulating in this sub-region during 2009 and any WPV importation would have been detected by existing surveillance systems. The overall risk of spread following

importation of WPV is intermediate in this sub-region mainly due to gaps in immunization coverage, and historical risk factors in certain areas. Tajikistan, Georgia, South-East Turkey, and Uzbekistan are countries of particular concern. The current polio outbreak in Tajikistan confirms its risk ranking. The RCC concurs with this assessment.

Performance of the Regional Poliomyelitis Laboratory Network (LabNet) in 2009-2010

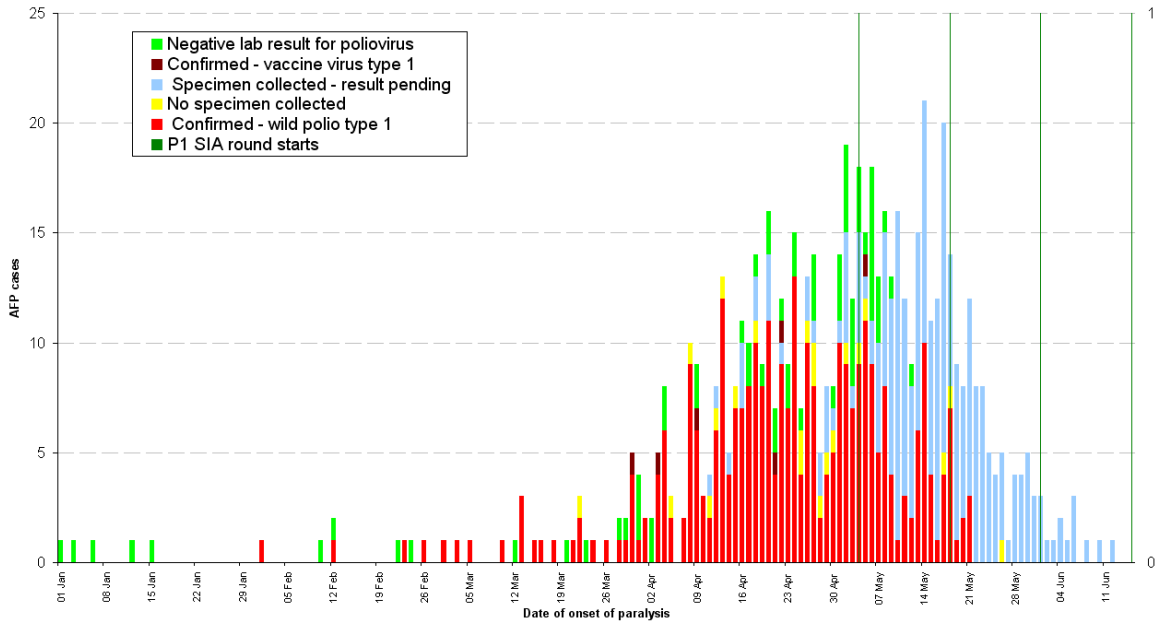
The LabNet plays a central role in maintaining the polio-free status of the Region by documenting the absence of wild poliovirus and rapidly detecting any imported poliovirus or cVDPV. All network laboratories are fully accredited and passed their annual laboratory proficiency test in 2008 and 2009. Member States reported that139,159 samples were analysed in 2009 from three sources – AFP cases (3786), patients with suspected enterovirus infection (111,180) and environmental (sewage) sampling (24,435). These analyses yielded 0 wild polioviruses, 17 VDPV, 723 Sabin polioviruses, and 9501 NPEV isolates. 98.4% of samples from AFP cases were typed within 28 days. The wild poliovirus outbreak in Tajikistan has produced a tremendous workload for the RRL in Moscow. The Moscow laboratory has analysed more than 1000 specimens so far this year from Tajikistan alone, compared with 1559 in all of 2009. A large number of specimens from Tajikistan are still awaiting the results of virological investigation. Improper packaging of specimens has been a critical problem, increasing the work involved in safely and accurately analysing the specimens and lengthening the time required to produce results. Real-time RT-PCR (rRT-PCR) is being introduced into the RRLs with the Moscow lab being a priority. The network continues to evaluate new testing methods that would have the same accuracy as cell culture but would not involve the transport of live viruses. Such methods would greatly facilitate analysis and validation of specimens while reducing the cost of and delays in transport. The network has been conducting workshops to improve biosafety and biosecurity and is developing new software to facilitate sharing of information between laboratories. Additional funding is needed to support laboratory work throughout the Region, with Moscow having a particularly acute need to cope with the outbreak.

Tajikistan: action taken to control outbreak due to imported wild poliovirus type 1 and future plan.

Routine immunization coverage in Tajikistan rose from 83% in 2007 to 93% in 2009. In 2007, 44 (67%) of districts were below 90% coverage with 3 districts below 80%. In 2009, the number of districts below 90% fell to 9 (13%). A multi-indicator cluster survey (MICS-3) conducted by UNICEF in 2005 reported a drop-out rate of 13 percentage points from 92% for OPV1 by 12 months of age compared to 79% for OPV3 among 18-29 month old children. The survey also reported OPV3 coverage in Dushanbe to be 23.9% in some geographic areas among 18-29 month old children and 47.4% in Khatlon. This household survey found a lower coverage than reported

through administrative coverage. SNIDs were conducted in 2007.The AFP rate for 2009 was 1.4 with 35 AFP cases reported. Timeliness and completeness of reporting were suboptimal. A large number of AFP cases were reported starting in March 2010. Although samples were normally shipped to the Moscow RRL every 3 months, these were delayed for reasons beyond the control of the laboratories involved. Type 1, wild poliovirus from a northern Indian lineage was eventually confirmed by the Moscow laboratory. Control efforts have been initiated and more the 650 AFP cases have been reported so far with more than 300 confirmed. (Fig. 1) Final reports are still pending on many specimens. Preliminary investigation results show that, despite reported high immunization coverage and SNIDs in the past, only 46% of 312 confirmed cases have documentation of 4 or more OPV doses. While initial cases were primarily under 6 years of age, many older children, adolescents and young adults have been affected. Four rounds of NIDs using mOPV1 have already been conducted. Two additional rounds with tOPV are scheduled. The age range for NIDs had been expanded to include persons up to 17 years of age.

Fig 1. Acute flaccid paralysis and laboratory confirmed polio cases by day of paralysis onset, Tajikistan, 2010



Data as of 25 June 2010

Country-specific feedback from the RCC

The RCC notes the efforts taken to control the outbreak. The RCC is concerned about previous arrangements for transport of laboratory specimens to the RRL only every three months. Specimens should be submitted on at least a weekly basis if an AFP case is reported, otherwise as AFP cases are reported. The 2009 report, which gives an inaccurate picture of the true level of risk in the country, gives the RCC cause for concern about the validity of current and future data from

Tajikistan, as well as some other countries in the Region. Had the true situation of low coverage in the face of poor surveillance been fully appreciated earlier and action taken, then this outbreak could have possibly been avoided and certainly brought under control at a much earlier stage. This would have limited the risk of other countries in the Region becoming infected. Tajikistan must make a continuous effort to improve routine coverage and AFP surveillance to prevent future outbreaks and enable the Region to maintain its polio-free status. The RCC requests that Tajikistan conduct a surveillance review as soon as possible and provide a progress report on control of the outbreak in January 2011.

Review of national updates for 2008 and presentations by selected countries

Armenia

Routine immunization coverage has traditionally been high in Armenia, well above 90%. Because immunization coverage had fallen below 90%, NIDs were conducted in 2008, reaching 98% of children aged 0-5 years nationwide. Immunization coverage in the first quarter of 2010 is above 90% throughout the country, but is lowest in Yerevan province, the capital. Nine AFP cases were reported in Armenia in 2009 for a rate of 1.5 cases per 100,000. All cases were investigated with 2 stool samples with 89% collected within 14 days of onset. Seven AFP cases have been reported in the first half of 2010. While the geographical spread of AFP cases was wide in 2009, there are a number of provinces that have reported 0 AFP cases during the 3 year period 2007-2009. AFP case notifications are late with consequent late collection of the second stool specimen. Risk assessment indicates that Yerevan is the highest risk province in the country. The global economic crisis and the limited financial capabilities of the country put the country at risk for deterioration of the progress achieved.

Country-specific feedback from the RCC

The RCC believes that the country is free of polio at the present time, but the risk of importation remains. The country should continue to work to improve routine immunization coverage and AFP surveillance in low performing geographic areas. The RCC encourages the NCC to strengthen its statement, providing further evidence of why the NCC believes that Armenia is free of wild poliovirus.

Georgia

While immunization coverage in Georgia is above 90% nationally, there are 4 regions with coverage less than 90%. The lowest of these is 82%. There were a total of 21 districts with immunization coverage <90% in 2009. Supplemental immunization campaigns were conducted in 2008 to provide one dose to 84% of high-risk children <6 yrs. SNIDs were also conducted in a high risk district in June, 2010. Polio vaccine is provided by the Government of Georgia to Abkhazia and South Ossetia, territories which are not under government control. While the number of doses provided is known, the government does not have actual coverage data from these territories. AFP surveillance is well established, with an AFP rate of 1.6 in 2009 and 0.5 to date in 2010. Timely stool collection rates are high. One AFP case was reported from Abkhazia in 2009 and none from

South Ossetia. The populations of these regions are so small that the expected non-polio AFP rate is substantially less than 1 case per year. A national plan of action to maintain the country's polio-free status has been finalized including target populations and vaccine policy in case of an outbreak.

Country-specific feedback from the RCC

Georgia's report is commendable and presents a clear picture that the country is free of polio. The RCC is concerned about lack of information on immunization coverage in Ossetia and Abkhazia. Continued efforts are needed to immunize and obtain surveillance and coverage data from these areas. The country should report back to the RCC by end of year on efforts to improve coverage and surveillance in these areas. The RCC supports the country's efforts to immunize high-risk populations.

Poland

Routine immunization coverage is high in Poland, which uses IPV with a booster dose of OPV at 6 years of age. National coverage has been well above 95% for many years with all districts also above 95%. AFP surveillance has been in place since 1998. The rate has deteriorated since 2002 and currently below 0.60 per 100,000, with only two thirds of cases having stools collected. The number of provinces reporting 0 AFP cases has been increasing over time. Delays in notification and investigation are common and few samples are tested at the National Laboratory. Enterovirus surveillance involves 15 laboratories, but few samples are actually tested.

Country-specific feedback from the RCC

The RCC calls on Poland to fully reconstitute its NCC as soon as possible. There is a need to rapidly improve AFP surveillance, which has been at less than desired levels for many years. Surveillance could be improved using either the existing AFP surveillance system or active search of hospitals for paralyzed individuals. The RCC also emphasizes the importance of a fully functional, accredited national laboratory to maintaining high-quality surveillance.

Portugal

Immunization coverage in Portugal has been above 90% for many years, currently using an IPV only schedule. Coverage is high in all provinces of the country. Serological surveys confirm a high level of protection against polio for the population. The AFP rate has been below 0.5 per 100,000 for many years, with the majority of provinces reporting 0 or 1 case per year. Most cases are classified as Guillain-Barré Syndrome. The AFP index fell to 0.06 in 2009. The country states that the risk of importation of wild poliovirus from Angola is low.

Country-specific feedback from the RCC

The RCC is pleased with revitalization of polio activities in Portugal, including the appointment of new leaders for the national polio control effort. However, the RCC remains concerned that AFP surveillance is performing at a low level and needs to be brought back up to certification level standards. The RCC remains concerned about the potential risk for wild poliovirus to be imported into Portugal because of its links with Angola although the representative from Portugal briefed the RCC on routine efforts that are made to ensure immunisation of immigrants (legal and illegal) from Angola..

Turkey

Immunization coverage in Turkey has been above 95% nationally for the period 2007-2009 using a schedule with pentavalent, IPV-containing vaccine with OPV boosters a 6 m, 18 m and 6 years. In two provinces in the Southeast of the country, coverage is between 80% and 90% only. No supplementary immunization activities have been conducted since 2008. The AFP surveillance rate has declined for the past 2 years, and currently stands at 0.84 per 100,000 for 2009. Non-polio AFP rates are generally lower in the east of the country than the rest and there are many provinces reporting zero cases. More than 80% of AFP cases have stools collected on time. Turkey plans to increase their efforts to achieve high levels of AFP surveillance throughout the country.

Country-specific feedback from the RCC

The RCC commends Turkey for the improvements in their immunization system over time. The report submitted by the NCC is overall of good quality. Existing additional data that supports the high immunization coverage should be included in NCC reports. Because the country is no longer doing NIDs and SNIDs and has shifted to IPV for the initial doses in routine immunization, Turkey must ensure that high immunization coverage is achieved in high risk areas. The country should also focus on improving surveillance in the highest risk province(s) in Southeast. The RCC requests that Turkey report back to the RCC by the end of the year on acceleration of efforts in the two high risk provinces. An updated plan of action should be submitted to the Secretariat.

Ukraine

Immunization coverage using a mixed IPV/OPV schedule was uniformly above 90% in Ukraine in 2007, but fell in 2008 and 2009 due to a shortage of vaccine. National coverage is now just above 80%. The country has reported more than 100 AFP cases per year for the past three years, achieving an AFP rate of 1.55 for 2009. 97% of cases had stools taken within 14 days. Seven provinces, concentrated in the West of the country had AFP rates below 1 in 2009. Sabin polioviruses and non-polio enteroviruses are regularly identified through AFP surveillance, enterovirus surveillance and environmental surveillance. There has been an increasing number of hot AFP cases reported due to the declining immunization coverage. The country has prepared a plan to maintain their polio-free status.

Country-specific feedback from the RCC

The NCC report shows no evidence of poliovirus circulation in 2009 in Ukraine. However, the RCC is greatly concerned about deterioration of routine immunization coverage and lack of vaccine supply for a long period of time. No ministerial commitment to revitalize the immunization program is apparent. The situation is of grave concern as it may result in an outbreak. Unless corrected, it threatens the certification of the entire Region as being polio-free. WHO should report to the RCC on status of vaccine supply and immunization coverage within two months.

Uzbekistan

Polio immunization coverage has been above 97% for more than a decade in Uzbekistan. There are no regions of the country where immunization coverage is less than 95%. In response to the

outbreak in Tajikistan, Uzbekistan has implemented 2 rounds of NIDs for all children < 5 years with mOPV1 in May and June of 2010. Non-polio AFP rates have remained above 1.0 for the past decade. Stool collection rates are near 100% and other surveillance indicators are at high levels. Both Sabin polioviruses and non-polio enteroviruses are regularly isolated from AFP cases. Problems with AFP surveillance include late reporting by hospitals, AFP rates below 1 in 5 provinces (only 1 was below 0.5), delayed 0 reporting from 20% of reporting stations and late implementation of the 60 day follow-up examination for many AFP cases.

Country-specific feedback from the RCC

The RCC congratulates Uzbekistan on their reports of high coverage and adequate surveillance in 2009. However, the RCC is greatly concerned about the failure of Uzbekistan to submit laboratory samples to the RRL. This failure decreases the credibility of the country report. A failure to submit credible evidence on circulation of polioviruses may result in the failure of the Region to be certified free of polio. Failure to submit specimens to the Regional Reference Laboratory also endangers the accreditation status of the national laboratory. The RCC strongly encourages the country to share polio samples with RRL. Potentially, virologists from RRL could visit NL to examine samples there as a short term solution.

The RCC notes that Uzbekistan has conducted NIDs in order to attempt to prevent the outbreak from Tajikistan spreading to Uzbekistan.

Because of the concentration of polio cases in Tajikistan along the border with Uzbekistan, suspect polio cases of any age should be investigated and reported as 'hot' cases.

Containment Activities in 2010-2011 in view of recent importation of wild poliovirus type 1: policy, strategies and actions

Containment of polioviruses is a necessary step for achieving global eradication. The global strategy for containment consists of risk elimination by destruction of poliovirus materials in all but a few essential facilities and risk management of such facilities by strict adherence to required safeguards. Containment activities in the Region have been affected by several recent developments. The outbreak in Tajikistan with subsequent importation in to the Russian Federation has increased the probability that wild poliovirus will be imported into other countries, particularly the NIS. This has reinforced the need for strict adherence to biosafety procedures for collecting, packaging for shipment and processing clinical specimens in laboratories involved in stool samples investigation in sub-region.

In addition to polio laboratories in the NIS, at least 5 countries have also been collecting stool samples for rotavirus surveillance to evaluate the disease burden in preparation for the introduction of that vaccine. Current and future testing of these samples with inadequate biosafety poses a risk of release of wild poliovirus. Testing of stored stool samples collected for scientific research in Europe and other Regions has demonstrated the presence of both wild- and Sabin-type polioviruses that could escape from the laboratory without proper containment procedures. Laboratories in the Rotavirus network that now contain potentially infectious

material must be identified and upgraded to meet BSL-2 standards. All laboratories that contain wild poliovirus infectious and potentially infectious materials must be monitored closely.

WHO and the governments of France and the United Kingdom are implementing Containment Phase II pilot projects for regulating national Polio Biosafety & Biosecurity in order to develop a legal international framework for containment.

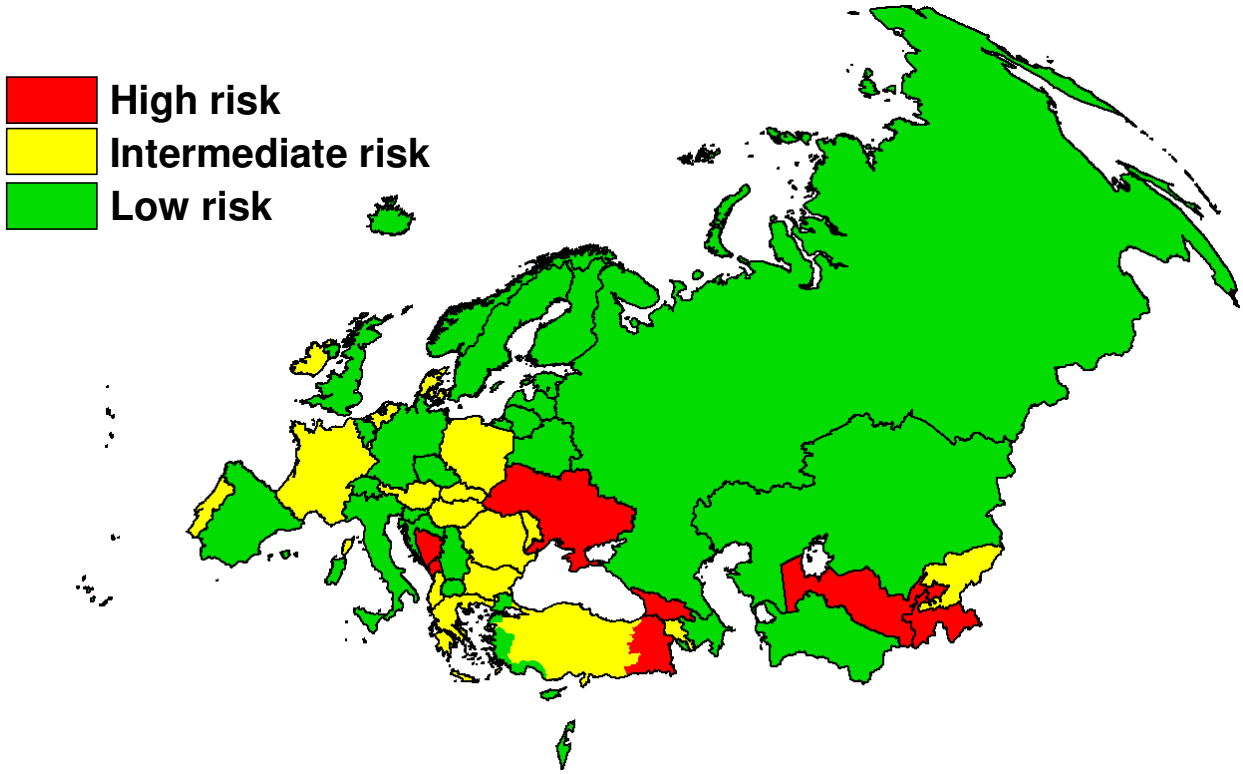
23 Member States of the European Region now report that 77 laboratories are storing wild poliovirus infectious materials. This represents a decrease from 25 countries with 111 laboratories in 2006. 29 Member States are now reporting that they have no laboratories storing wild poliovirus infectious materials. This represents an increase of 2 countries from 27 in 2006.

Conclusions and recommendations

Conclusions

1. The RCC recognizes that the European Region has reached a critical juncture. Because of the large outbreak of polio due to an imported, type 1 wild poliovirus in Tajikistan and the spread of that virus to at least one neighboring country, the polio-free status for the entire Region is in jeopardy. Other countries may already be infected. The gravity of the situation requires that all Member States reinforce their polio surveillance so that any spread will be detected rapidly and effective control measures instituted at the earliest possible moment. The RCC will be monitoring the situation closely. Failure to control polio within the European Region will jeopardize the global polio eradication initiative and will need to be reviewed by the Global Certification Commission for the Eradication of Poliomyelitis (GCC).
2. The RCC commends the Regional Director for her continuing commitment to keep the European Region free of polio. The RCC encourages her to work with Member States to maintain high immunization coverage and high-quality polio surveillance in all Member States. In addition, the RCC requests that she work with Member States, international organizations, international donors and voluntary organizations to secure the resources necessary to conduct these activities.
3. The current global situation calls for a strong political commitment by all Member States to stop poliovirus transmission and provide sustained financial support for the global polio eradication programme. Continuing financial support for both the global programme and the European Region by industrialized countries is crucial.
4. The risk categorization of each country according to the assessment of risk provided by the secretariat based on immunization coverage, surveillance quality, presence of risk groups, and health system quality adequately reflects national risks and is approved as in Fig. 2 and the table below.

Fig 2. Risk of transmission following importation of wild poliovirus, European Region, 2010.



High risk

Bosnia and Herzegovina
Georgia
Malta
Montenegro
Tajikistan
Turkey (southern and eastern areas only)
Ukraine
Uzbekistan

Intermediate risk

Albania
Andorra
Armenia
Austria
Bulgaria
Denmark
France
Greece
Hungary
Ireland
Kyrgyzstan
Luxemburg
Moldova
Monaco
Netherlands
Poland
Portugal
Romania
San Marino
Slovakia
Turkey (except the high-risk south and east and the low-risk western coast)
Turkmenistan

5. The RCC is greatly concerned that two of the cases related to the Tajikistan outbreak that were confirmed in the Russian Federation are Uzbek nationals. While they may have been infected elsewhere, Uzbekistan should present the highest quality epidemiological and laboratory data to the RCC to confirm that there are no polio cases occurring in that country.
6. The existing low levels of routine immunization coverage and lack of polio vaccine in Ukraine present a great risk for a large outbreak should poliovirus spread there. The RCC is greatly alarmed that it has received reports that there is no vaccine available and no steps have been taken to procure it.
7. The RCC is concerned about the falling quality of polio surveillance in many countries. Surveillance must be brought back to certification level quality if the Region is to return to its polio-free status and, eventually, be certified by the Global Certification Commission.
8. The RCC reminds countries that reporting of confirmed polio cases is immediate and mandatory under the International Health Regulations.
9. RCC is concerned that many NCC reports are not convincing and would be inadequate for the purposes of final certification. The occurrence of a major outbreak in Tajikistan despite reports of high immunization coverage and adequate AFP surveillance cast doubt of the validity of reports for that country and other countries in the Region.
10. RCC is generally concerned about reliability of denominators used by countries to calculate immunization coverage.
11. The RCC believes that data-based risk assessment is extremely useful for planning purposes. If risk assessment is to be a valid exercise, improved coverage and surveillance data are required. Countries should take actions to improve immunization coverage and surveillance based on these risk assessments.
12. National plans of action for responding to an imported or circulating poliovirus are incomplete for many countries and missing for some countries.
13. The laboratory network is central to maintaining the polio-free status of the Region. The RCC appreciates the response of the LabNet to the outbreak in Tajikistan. It notes the high burden imposed on the staff of the Moscow laboratory in particular and is grateful for their work. The RCC also notes the additional need for funding of the Regional LabNet and the Moscow laboratory in particular. The RCC supports their efforts to maintain a high level of biosecurity and to improve the efficiency of the network.
14. Laboratory containment of polioviruses is the final, essential step in polio eradication. The RCC concurs with the plan for inventorying laboratories with materials containing and potentially containing Sabin polioviruses in the Region, promote biosecurity and to create a definitive legal framework for containment.
15. Despite the shortcomings of the evidence presented by some NCCs, the RCC concludes that wild polioviruses were not circulating within the Region in 2009

Recommendations

1. Because of the potential for the European Region to lose its polio-free status, the RCC should conduct an extraordinary, formal review of the polio situation in the Region within 6 months to determine if the outbreak has ended and to determine if and how the polio-free

status of the Region can be maintained, The RCC will consult with the GCC on determining the status of the European Region.

2. The RCC strongly encourages the Secretariat to work with the Member States that have been designated as high risk to ensure that they rapidly and thoroughly address the deficiencies in their immunization coverage and/or AFP surveillance that have been identified.
3. In response to the outbreak in Tajikistan, the Secretariat should conduct in depth evaluations of neighboring and the highest risk countries - Bosnia and Herzegovina, Georgia, Kyrgyzstan, Kazakhstan, Russia, Turkey, Turkmenistan and Uzbekistan - as soon as possible to review AFP surveillance, polio immunization coverage and steps taken to prevent and respond to any importation of poliovirus.
4. The highest political authorities in Ukraine should take the necessary steps to reinstitute an effective immunization system to ensure high routine coverage and conduct catch-up immunization campaigns for children who have not been immunized in recent years.
5. In light of the current outbreak, Uzbekistan and WHO should work together to find ways that laboratory specimens can be shared to confirm that wild poliovirus has not spread into that country.
6. In light of the current outbreak of polio in the Region, the RCC urges all Member States to sensitize their surveillance systems to be aware of the possibilities of importation of polio from other countries within and outside the Region. Clinicians should be particularly alerted that polio cases may occur in travelers and immigrant populations of any age and reminded of the requirement to report suspect cases and collect the necessary specimens.
7. The RCC requests that all countries review the status of their polio surveillance and to take the steps necessary to bring surveillance up to the certification quality standards so that any importations will be detected and controlled rapidly.
8. The RCC requests that each NCC submit a thorough and accurate report every year. The report must convincingly prevent the evidence that no polio is present in the country. Reports should be concise, focused on updating information since the last report.
9. The Secretariat should modify the NCC data forms to improve the completeness of the information submitted.
10. Supplemental information that supports a country's reported immunization coverage data should be routinely submitted as part of the NCC report.
11. RCC recommends that WHO should seek methods to improve the timeliness of shipments of stools to the regional reference laboratories. WHO should seek funding to support transport of specimens within the network.
12. The RCC encourages WHO to include NCC chairs in a future meeting so that they can be updated on the current polio situation and be briefed on their responsibilities.
13. NCC reports should be submitted to the Secretariat 2 months in advance of the RCC meeting so that the reports can be reviewed and deficiencies addressed prior to the meeting.

Annex 1

Programme

Monday, 28 June 2010 (Conference room CH-1)

Plenary session 1: Progress towards global polio eradication and sustaining polio free Europe

08.30 – 09.00	Registration
09.00 – 09.30	**Opening** **Ms Zsuzsanna Jakab, the Regional Director**
09.30 – 10.15	**Progress towards global eradication WPV** **WHO Headquarters** ***Mr Chris Maher***
	Discussion
10.15 – 10.45	Coffee break
10.45 – 11.15	**Sustaining poliomyelitis-free status of the WHO Western-Pacific Region** ***Dr Sigi Roesel***
	Discussion
11.15 – 11.45	**Sustaining poliomyelitis-free status of the WHO European Region** ***Dr Rebecca Martin***
	Discussion

Monday, 28 June 2010 (Conference room CH-1) *(continued)*

Plenary Session 2: ***Sustainability of "polio-free" Europe: Review of national updated documents for 2010 by epidemiological zones (10 min. presentation and 10 min. discussion)***

11.45 – 12.00 **Introduction to sub-regional zones overview**

Dr George Oblapenko

12.00 – 12.20 **Sub-regional overview: Update information for 2009 in the Nordic/Baltic (8 countries) and Western (10 countries) epidemiological zones**

Dr Sergei Deshevoi

12.20 – 13.00 Lunch

10.00 – 13.20 **Sub-regional overview: Update information for 2009 in the Southern (10 countries) and Central-Eastern (8 countries) epidemiological zones**

Dr Dragan Jankovic

13.20 – 13.40 **Sub-regional overview: Update information for 2009 in the Central (7 countries) and MECACAR (10 countries) epidemiological zones**

Dr Adrian Stoika

Plenary Session 3: ***Assessment control measures implemented by Tajikistan and review actions needed to assure sustainability "polio-free status" in selected risk countries and within the Region.***

13.40 – 14.40 **Tajikistan: action taken to control outbreak due to imported wild poliovirus type 1 and future plan.**

Dr Jhabirov
Dr Eugene Gavrilin
Dr Donato Greco

Discussion

14.40 – 15.10 **Importation of wild poliovirus type 1 in Tajikistan: Risk Assessment**

Dr Josh Mott

Discussion

15.10 – 15.30	Coffee break
15.30 – 17.30	**Discussion of countries in high and medium risk of transmission following importation** ***(15 min. presentation and 15 min. discussion)***
15.30 – 16.00	**Armenia**
16.00 – 16.30	**Georgia**
16.30 - 17.00	**Turkey**
17.00 -17.30	**Poland**
17.30 –18.30	**Private meeting of the EUR/RCC**
18.30 – 19.30	*Reception on the occasion of the 23rd Meeting of the European Regional Certification Commission for Poliomyelitis Eradication*

Tuesday, 29 June 2010 (Conference room CH-1)

08.10 – 09.00	**Private meeting of the EUR/RCC (continued)**

Plenary Session 3: Discussion of countries in high and medium risk of transmission following importation ***(15 min. presentation and 15 min. discussion)*** **(continued)**

09.00 – 09.30	**Portugal**
09.30 – 10.00	**Ukraine**
10.00 – 10.30	**Uzbekistan**
10.30 – 11.00	Coffee break
11.00 – 11.30	**Feedback to countries**

Plenary Session 4: ***Review of European Polio Laboratory Network performance in 2009-2010, and containment activities in 2010-2011***

11.30 – 12.00	**Performance of the European Polio Laboratory Network in 2009-2010** ***Dr Eugene Gavrilin*** Discussion
12.00 – 12.30	**Containment activities in 2010-2011 in view of recent importation of wild poliovirus type 1: policy, strategies and actions** ***Dr Galina Lipskaya*** Discussion
12.30 – 13.30	Lunch
13.30 – 14.00	**Regional Plan of Action to sustain polio-free status in 2010 – 2011** ***Dr Rebecca Martin***

Plenary Session 5: ***Updates from global polio meetings and SAGE IPV Working Group and review of national plans of action***

14.o0 – 14.20	**Updates from global meetings** ***Mr L Weakland***
14.20 – 14.50	**Update on the WHO position paper on routine polio vaccination** ***Dr. E Miller*** Discussion
14.50 – 15.20	Coffee break
15.20 – 15.50	**Reviewing national plans of action: how to address challenges and who is responsible?** ***Dr S Deshevoi***

15.50 – 17.15	**Drafting of recommendations and general discussion on future format of updates**
17.15	Closing

Annex 2

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