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COORDINATION OF OPERATION MECACAR

Report on the Fourth WHO Coordination
Meeting

Rome, Italy
20-22 October 1997

TARGET 5

REDUCING COMMUNICABLE DISEASE

By the year 2000, there should be no indigenous cases of poliomyelitis, diphtheria, neonatal tetanus, measles, mumps and congenital rubella in the Region and there should be a sustained and continuing reduction in the incidence and adverse consequences of other communicable diseases, notably HIV infection.

ABSTRACT

Operation MECACAR is an intercountry coordination effort of the European and Eastern Mediterranean regions of WHO, organized to achieve and maintain interruption of wild poliovirus transmission in the currently and formerly endemic countries of the regions. The meeting was attended by representatives from the 18 countries participating in Operation MECACAR and other countries recently threatened with poliomyelitis, together with representatives of partner organizations. The meeting reviewed progress and planned the implementation of the poliomyelitis eradication strategies in 1998. The countries reported successful implementation of national immunization days (NIDs) during 1995–1997, and significant progress towards enhancing surveillance. The major recommendations of the meeting included continuation of collaboration under the designation "Operation MECACAR PLUS", determination of criteria for continuing NIDs and mopping-up activities, acceleration of the implementation of effective acute flaccid paralysis (AFP) surveillance, and planning for certification of poliomyelitis eradication.

Keywords

POLIOMYELITIS – prevention and control – transmission
IMMUNIZATION PROGRAMS – organization and administration
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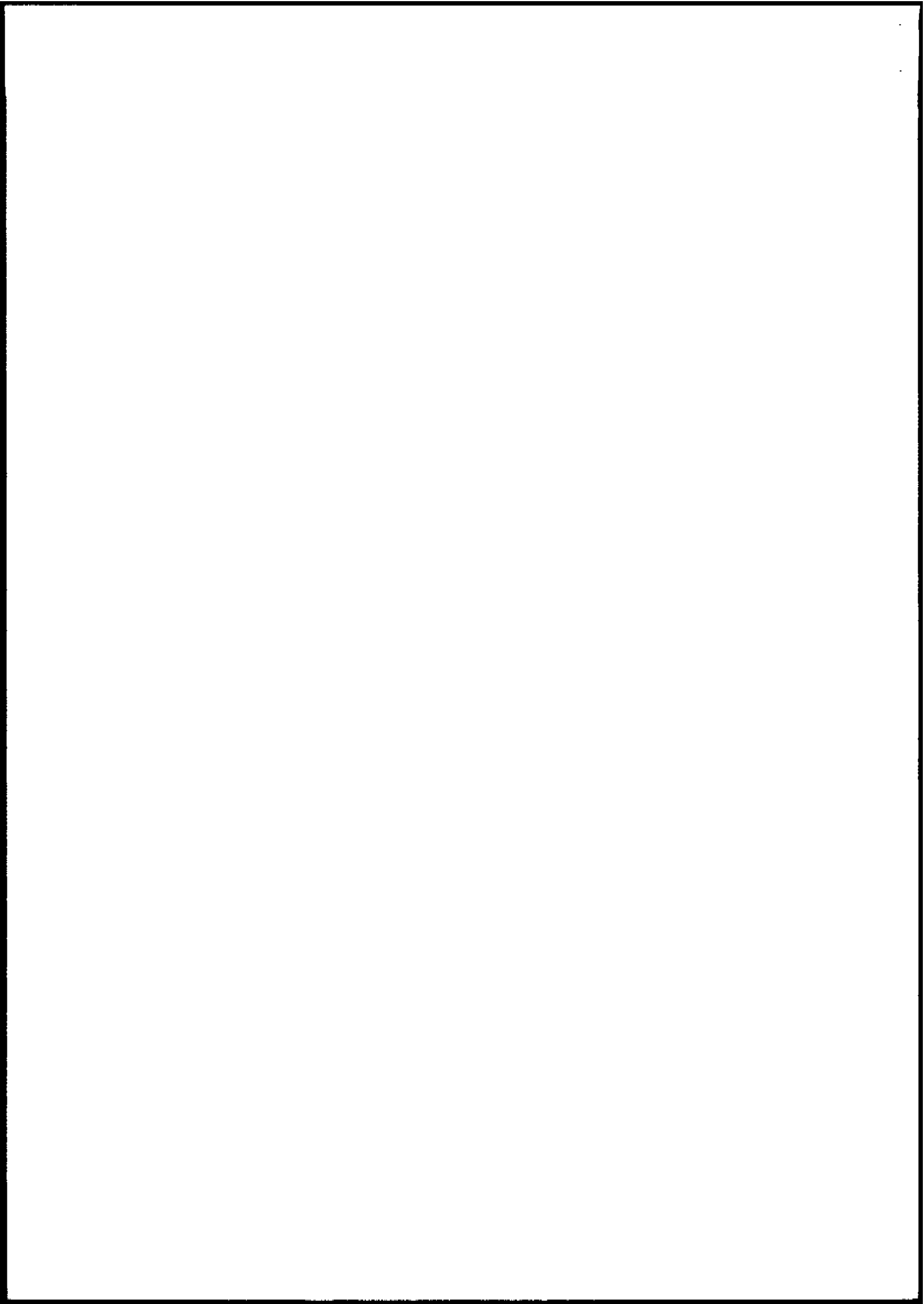
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INTRODUCTION

The fourth meeting on the coordination of Operation MECACAR took place in Rome, Italy from 20 to 22 October 1997. All 18 countries from the European and Eastern Mediterranean Regions of the World Health Organization (WHO) participating in Operation MECACAR were represented, as well as WHO and the United Nations Children's Fund (UNICEF), and the following organizations: Basic Support for Institutionalizing Child Survival (BASICS), Centers for Disease Control and Prevention (CDC), International Medical Corps (IMC), Rotary International, and United States Agency for International Development (USAID).

The meeting was opened by the Director, Programme Management, WHO Regional Office for Europe, Dr Sergei K. Litvinov, and Dr Rafi Aslanian brought greetings and a message from Dr Hussein A. Gezairy, Regional Director, WHO Regional Office for the Eastern Mediterranean. The meeting was chaired by Dr Donato Greco, Director, Laboratory of Epidemiology and Biostatistics, Istituto Superiore di Sanita. Drs. Hamid Jafari and Roland Sutter served as co-rapporteurs and Dr George Oblapenko and Dr Rafi Aslanian served as secretaries of the meeting. The programme of the meeting and the list of participants are attached as Annex 1 and Annex 2, respectively.

SCOPE AND PURPOSE

The main objectives of the meeting were:

- to evaluate and discuss the final results of Operation MECACAR 1997;
- to finalize the strategic plan for Operation MECACAR PLUS in 1998–2000;
- to assess the improvements in AFP surveillance and discuss future actions;
- to brief the main partners on the efficiency of collaboration and further strengthening and developments in Operation MECACAR;
- to coordinate the plan of action for polio eradication in EMRO and EURO member states in 1998, including dates for national immunization days (NIDs), sub-national immunization days NIDs (SNIDs) and mopping-up campaigns.

SITUATION ANALYSIS AND PROGRESS TOWARD POLIOMYELITIS ERADICATION

Global overview

The eradication of poliomyelitis is contingent on the implementation of the four WHO recommended strategies in all polio-endemic countries:

- 1) achieving and maintaining high routine coverage of all children by one year of age with at least three doses of oral poliovirus vaccine (OPV) through routine vaccination services;
- 2) providing supplemental OPV doses through NIDs¹ to interrupt widespread circulation of poliovirus;

¹ Mass campaigns over a short period (days to weeks) in which two doses of OPV are administered to all children in the target age group (usually those <5 years of age), regardless of previous vaccination history, with an interval of 4–6 weeks between doses.

- 3) establishing sensitive epidemiological and virological surveillance systems for acute flaccid paralysis (AFP) and poliovirus; and
- 4) conducting mopping-up operations² to eliminate the remaining foci of poliovirus transmission.

Routine coverage with three doses of OPV among 1-year-old children was 81% in 1996 (and has been relatively constant at 80–84% since 1990). An increasing number of polio-endemic countries are conducting NIDs, from 16 countries in 1988 to 82 countries in 1996. During 1996, approximately two thirds of the world's children <5 years of age have received supplemental doses of OPV administered during NIDs. A total of 27 sub-Saharan countries in WHO's African Region conducted NIDs for the first time ever; in addition, 4 countries conducted SNIDs. Use of both routine and supplemental vaccination efforts have led to substantial decreases in the number of reported cases of poliomyelitis globally from 35 251 in 1988 to 3997 in 1996, a decline of nearly 90%. Because reporting completeness is ~ 10%, the true burden of poliomyelitis could be 10-fold higher.

An increasing number of countries are also implementing AFP surveillance. In 1996, 148 countries conducted AFP surveillance, including 137 polio-endemic or recently polio-endemic countries and 11 non-polio-endemic countries. A series of performance indicators are used to monitor the quality of AFP surveillance, of which the most important are:

- the rate of non-polio AFP;
- the proportion of health facilities reporting regularly (i.e. weekly or monthly) the presence or absence of AFP cases; and
- the proportion of AFP cases with adequate stool specimens.

A rate of ≥ 1 non-polio AFP case per 100 000 population <15 years was achieved by two WHO regions (the Region of the Americas, and the Western Pacific Region). Globally, the rate of AFP increased from 0.4 in 1995 to 0.6 in 1996.

The global laboratory network for poliomyelitis eradication is gradually expanding and in 1997 consisted of 67 national laboratories, 14 regional reference laboratories and 6 specialized laboratories. Laboratory support for processing of stool specimens from AFP cases is available now to all polio-endemic countries. To ensure uniformly high quality as well as standardized procedures, all laboratories must undergo accreditation³ by WHO.

To facilitate the eventual certification of polio eradication, a Global Commission for the Certification of Polio Eradication was convened in 1995. Regional commissions have been formed in most WHO regions, and plans of action have been developed on a global and regional basis.

² Focal mass campaigns in high-risk areas over a short period (days to weeks) in which two doses of OPV are administered during house-to-house visits to all children in the target age group (usually those <5 years of age), regardless of previous vaccination history, with an interval of 4–6 weeks between doses.

³ Accreditation will be reviewed annually and will include the following elements: (1) score from on-site review using a standard WHO checklist; (2) passing scores of proficiency testing; (3) non-polio enterovirus isolation rate; (4) processing a minimum number of stool specimens per year; (5) proficiency of isolation and serotyping assessed by testing tissue cultures or stool samples submitted to regional laboratory for intratypic differentiation; and (6) percentage of test results reported on time.

Although much progress has been achieved in implementing the WHO recommended strategies, constraints on funding, lack of political commitment in some countries, internal strife or civil war, the need for further development of the laboratory network, and incomplete promotion and implementation of the proven strategies for eradicating poliomyelitis and poliovirus, continue to delay progress. Some countries must continue to conduct NIDs because the quality of AFP surveillance is inadequate. Improving the quality of AFP surveillance remains the most urgent priority of the polio eradication initiative.

European Region

The European Region reported marked improvements in routine coverage, continuation of NIDs, mopping-up operations, significant progress toward the establishment of effective AFP surveillance, progress toward accreditation of the laboratory network, and progress toward implementation of the certification of eradication.

Routine coverage with three doses of poliovirus vaccines among the 41 reporting countries has markedly improved to 92% (range: 77–100%) in 1996 (from 89% in 1995). Supplemental immunization activities in the form of synchronized NIDs were conducted by the 10 countries of the Region which participate in Operation MECACAR (Armenia, Azerbaijan, Georgia, Kazakhstan, Kyrgyzstan, Russian Federation, Tajikistan, Turkey, Turkmenistan and Uzbekistan). Several countries also conducted NIDS or SNIDs in 1996, including Albania, the Republic of Moldova, Romania (SNIDS), Ukraine, and the Federal Republic of Yugoslavia (SNIDS). Reported coverage with OPV administered during the NIDs and SNIDs remained high (>90% for each round), with a regional coverage of 95% reported in 1996 by the countries participating in Operation MECACAR.

AFP surveillance has been established in 33 countries, including all polio-endemic or recently endemic countries (n=17), as well as in 16 non-polio-endemic countries in western Europe. The annualized non-polio AFP rate increased from 0.7 in 1996 to 1.1 in 1997 (through September). The regional AFP rate masks substantial differences by individual country. For example, 4 countries reported an AFP rate of <0.5 in 1997 (Bosnia and Herzegovina, Croatia, Portugal, Slovakia, Slovenia, Tajikistan and Uzbekistan), and several countries are just beginning to establish AFP surveillance, including Malta and Spain (after October 1997). A total of 938 AFP cases were reported in the first 9 months of 1997 (compared with 827 in 1996) in the Region; 1 polio case was reported from Tajikistan in 1997 (compared with 193 in 1996; including 138 from Albania, 24 from the Federal Republic of Yugoslavia and 5 from Greece).⁴

The accreditation of the network laboratories is continuing and by the end of 1998 all participating laboratories should have been evaluated.

Several countries, including the Russian Federation and Uzbekistan, plan to carry out mopping-up operations in October or November 1998.

The certification process guided by the Regional Commission for the Certification of Polio Eradication is continuing and a plan of action has been developed, guidelines for data compilation have been designed, and training sessions with chairpersons of national committees

⁴ Subsequent to this meeting, a cluster of 6 virologically confirmed polio cases were reported from Turkey with onset between July and October 1997. Thus, the final number of confirmed polio cases in the European Region was 7 in 1997, representing a 96% decline compared with the 193 cases reported in 1996.

have been scheduled. 1998 marks the year when countries that have been free of polio for many years and decades will present the certification documentation to the Regional Commission.

The challenges for the European Region in 1998 and beyond include (1) to implement adequate surveillance for AFP; (2) to ensure that all stool samples from AFP cases are processed in WHO-accredited laboratories; and (3) to eliminate the last remaining chains of wild poliovirus transmission and (4) to ensure immunity to poliovirus is high in the Region to prevent re-establishment of indigenous transmission.

Eastern Mediterranean Region

The countries of the Eastern Mediterranean Region (EMR) reported significant progress in 1996 toward implementing NIDs, establishing AFP surveillance, and carrying out polio eradication activities in difficult countries and areas.

Routine coverage with at least 3 doses of OPV increased from 80% in 1995 to 85% in 1996. Of the 21 member countries reporting, 17 (73%) reported an OPV3 coverage of $\geq 90\%$.

The establishment of AFP surveillance is making rapid progress. During 1996, EMR countries reported 1776 cases of AFP, including 532 confirmed cases of poliomyelitis. The incidence of poliomyelitis in 1996 was 33% lower compared to the 789 cases reported in 1995. The rate of non-polio AFP increased from 0.7 in 1996 to 0.9 (first 6 months) in 1997. The proportion of AFP cases with 2 stool specimens (collected at an interval of 24 hours within 14 days after paralysis onset) remained relatively stable at 63%.

All member countries (apart from Afghanistan, Djibouti and Somalia) conducted NIDs in 1996; Afghanistan conducted NIDs for the first time in 1997. Most of the member countries achieved high NID vaccination (above 95%) in the target age group (children <5 years of age).

The laboratory network is maturing rapidly. In 1996, stool samples from 16 member countries were investigated in network laboratories.

Certification of polio eradication is progressing following the recommendations of the Regional Commission for the Certification of Polio Eradication. Many countries have convened national committees to compile the information and documentation needed for eradication.

Remaining problems include:

- low routine vaccination coverage in some countries, and within sub-populations;
- inadequate national commitment to polio eradication in some countries as evidenced by inadequate attention to surveillance, implementation of supplemental immunization, and inadequate funds for the purchase of OPV;
- war and civil unrest in several countries;
- inadequate coordination and exchange of information among countries to prevent and respond efficiently to cross border importation of wild polioviruses.

Reports from individual countries in the European Region

Armenia

Routine coverage with 3 doses of OPV among infants by 1 year of age was reported to be 97% in 1996 compared with 92% in 1993, 92% in 1994 and 93% in 1995. No cases of poliomyelitis were reported in 1996. The 1997 NIDs targeted children from 3 months to 3 years, and high coverage was reported for each round (99% and 96%, respectively). Twelve territories were also targeted for mopping-up operations in 1996; these were selected based on poliovirus isolation within the last 5 years and/or because of migration or returnees. Children 0-4 years of age were targeted and the reported coverage was 93%. AFP surveillance continues to improve, 8 AFP cases were reported in 1996, for a non-polio AFP rate of 0.75/100 000. Thirteen AFP cases were reported up to October 1997, for a non-polio AFP rate of 1.09/100 000. Challenges for 1998 include: (1) continuing with NIDs, (2) conducting mopping-up operations, and (3) maintaining high-quality AFP surveillance.

Azerbaijan

Routine coverage with 3 doses of OPV among infants by 1 year of age was reported to be 97% in 1996 compared with 94% in 1993, 95% in 1994 and 98% in 1995. No cases of poliomyelitis were reported in 1996. The 1997 NIDs targeted children <4 years of age and high coverage was reported for each round (99% and 99%, respectively). Four territories were also targeted for mopping-up operations in 1996; children 0-3 years of age were targeted and the reported coverage was 98%. AFP surveillance is being established, 12 AFP cases were reported in 1996, for a non-polio AFP rate of 0.15/100 000. Twelve AFP cases were reported up to October 1997 for a non-polio AFP rate of 0.15/100 000. Challenges for 1998 include: (1) improving AFP surveillance, (2) conducting mopping-up operations, and (3) continuing with NIDs.

Georgia

Routine coverage with 3 doses of OPV among infants by 1 year of age was reported to be 97% in 1996. No cases of poliomyelitis were reported in 1996. The 1997 NIDs targeted children <4 years of age, and high coverage was reported for each round (93% and 95%, respectively). AFP surveillance is slowly improving. Georgia reported a non-polio AFP rate of 0.69 for 1996 and 0.56 for 1997. Challenges for 1998 include: (1) improving AFP surveillance, (2) conducting mopping-up operations, and (3) continuation of NIDs.

Kazakhstan

Routine coverage with 3 doses of OPV among infants by 1 year of age was reported to be 98% in 1996 compared with 69% in 1993, 75% in 1994 and 94% in 1995. No cases of poliomyelitis were reported in 1996. The 1997 NIDs targeted children 0-4 years and high coverage was reported for each round (98% and 99%, respectively). AFP surveillance continues and is improving rapidly: 111 AFP cases were reported in 1996 for a non-polio AFP rate of 2.1/100 000. Eighty-nine AFP cases were reported up to October 1997. In some territories, facial paralysis cases are included in the AFP rate calculations. Challenges for 1998 include: (1) fine-tuning AFP surveillance, and (2) conducting mopping-up operations in high-risk areas.

Kyrgyzstan

Routine coverage with 3 doses of OPV among infants by 1 year of age was reported to be 94% in 1996 compared with 69% in 1993, 84% in 1994 and 96% in 1995. No cases of poliomyelitis were reported in 1996. The 1997 NIDs targeted children 0-4 years and high coverage was reported for each round (98% and 99%, respectively). AFP surveillance started in 1997 and is

improving rapidly: 30 AFP cases were reported in 1997 (up to October) for a non-polio AFP rate of 2.1/100 000. Challenges for 1998 include: (1) further improving AFP surveillance, and (2) conducting mopping-up operations in high-risk areas.

Russian Federation

Routine coverage with 3 doses of OPV among infants by 1 year of age was reported to be 97% in 1996 compared with 82% in 1993, 88% in 1994 and 92% in 1995. Three cases of poliomyelitis were reported in 1996. The 1997 NIDs targeted children 0–4 years and high coverage was reported for each round (99% and 99%, respectively). Mopping-up operations were conducted in high-risk areas (e.g. Chechnya) in 1996. AFP surveillance continues to improve; the rate of non-polio AFP was 1.04/100 000 children <15 years of age in 1996. A total of 467 AFP cases have been reported from January to September 1997, for a non-polio AFP rate of 2.87/100 000. Of these, 87% had two adequate stool samples collected. Challenges for 1998 include: (1) maintaining and further improving AFP surveillance, (2) establishing a national laboratory network for polio eradication, and (3) conducting mopping-up operations in high-risk areas.

Tajikistan

Routine coverage with 3 doses of OPV among infants by 1 year of age was reported to be 89% in 1996 compared with 77% in 1993, 92% in 1994 and 81% in 1995. No cases of poliomyelitis were reported in 1996. The 1997 NIDs targeted children from 3 months to 3 years, and high coverage was reported for each round (98% and 99%, respectively). Twenty-eight territories were also targeted for mopping-up operations in 1997; these were selected based on the following criteria: (a) refugee populations, (b) low coverage, (c) civil war or areas of unrest, (d) border areas with Afghanistan. No coverage data were available. AFP surveillance is being established: 5 AFP cases were reported for the first 8 months in 1997, for a non-polio AFP rate of 0.3/100 000. Challenges for 1998 include: (1) improving AFP surveillance, (2) continuing with NIDs, and (3) conducting mopping-up operations in high-risk areas.

Turkey

Routine coverage with 3 doses of OPV among infants by 1 year of age was reported to be 83% in 1996 compared with 76% in 1993, 81% in 1994 and 67% in 1995. A total of 19 cases of poliomyelitis were reported in 1996. The 1997 NIDs targeted children aged 0–59 months, and high coverage was reported for each round (95% and 97%, respectively). Twenty-nine provinces (target population: 2 million children) were also targeted for mopping-up operations in 1997; these provinces were selected based on (a) routine vaccination coverage <80%, (b) AFP rate of 0/100 000, and (c) wild poliovirus isolation. Children aged 0–4 years were targeted and reported coverage was 93%. AFP surveillance continues to improve; 87 AFP cases were reported in 1996 for a non-polio AFP rate of 0.25/100 000. A total of 111 AFP cases were reported up to October 1997, for a non-polio AFP rate of 0.45/100 000. Challenges for 1998 include: (1) continuing with NIDs, (2) conducting mopping-up operations in high-risk areas, and (3) further improving AFP surveillance.⁵

Turkmenistan

Routine coverage with 4 doses of OPV among infants by 1 year of age was reported to be 96% in 1996 compared with 92% in 1993, 94% in 1994 and 97% in 1995. Two cases of poliomyelitis

⁵ Subsequent to this meeting in Rome, Turkey reported a cluster of 6 virologically confirmed cases of poliomyelitis from Mardin Province in the south-eastern part of the country; these cases had onset of paralysis between July 23 and October 10, 1997. Mardin Province conducted two rounds of mopping-up operations as part of a previously planned activity in October and November 1998.

were reported in 1996. The 1997 NIDs targeted children aged 0–3 years, and high coverage was reported for each round (99% and 99%, respectively). Turkmenistan reported a non-polio AFP rate of 0.37/100 000 children <15 years in 1996; 6 AFP were reported for the first 9 months of 1997, for a non-polio AFP rate of 0.5/100 000. Challenges for 1998 include: (1) continuing with NIDs, (2) conducting mopping-up operations, and (3) improving AFP surveillance.

Uzbekistan

Routine coverage with 3 doses of OPV among infants by 1 year of age was reported to be 97% in 1996 compared with 45% in 1993, 79% in 1994 and 99% in 1995. No cases of poliomyelitis were reported in 1996. The 1997 NIDs targeted children aged 0–4 years, and high coverage was reported for each round (99% and 99%, respectively). Five territories were also targeted for mopping-up operations in 1996; 1.1 million children aged 0–4 years were targeted and the reported coverage was 99%. AFP surveillance is slowly improving; 7 AFP cases were reported in 1996, for a non-polio AFP rate of 0.08/100 000. In the first 8 months of 1997, 9 AFP cases were reported, for a non-polio AFP rate of 0.15/100 000. Challenges for 1998 include: (1) improving AFP surveillance, (2) continuing with NIDs, and (3) conducting mopping-up operations.

Reports from countries in the Eastern Mediterranean Region

Afghanistan

The estimated routine coverage of infants with 3 doses of OPV has remained at or below 30% for a number of years. No reports were received from 1992 up to the first half of 1997. NIDs were initiated as part of multi-antigen mass immunization campaigns that targeted approximately 70% of the total population during 1995 and 1996. In each of these rounds, 2.5–2.7 million children (55–60%) of the total 4.5 million children were immunized. In 1997, the first full scale OPV-only NIDs were conducted and achieved a coverage of more than 80% in each round. AFP surveillance was initiated during September in sentinel sites in capital cities of each of the eight regions and already several AFP cases have been reported and investigated. The challenges for 1998 include raising routine OPV3 coverage through improving vaccine delivery services and multi-antigen campaigns, continuing NIDs in difficult circumstances, additional immunization campaigns in border areas and strengthening AFP surveillance.

Iran

Routine coverage of infants with 3 OPV doses was consistently above 90% (94–99%) from 1992 to 1997. A total of 12 polio cases were virologically confirmed during 1996, and, as of October 1997, 17 polio cases have been reported. NIDs have been conducted annually since 1994 and in each of the 8 rounds reported coverage of the target population (all children under 5 years of age) was 99% or more. In addition to NIDs, which in 1994 and 1995 were conducted house-to-house, mopping-up campaigns were conducted in high-risk populations during 1996 and 1997. In each mopping-up round the target population exceeded 3 million children under 5 years of age. The AFP surveillance system is functioning at a very high level of performance. The reported non-polio AFP rate among children under 5 years has been above 1/100 000 since 1995. Two adequate stool specimens were collected from 72% of AFP cases up to October 1997, compared with 66% in 1996. Challenges for 1998 include continuation of NIDs and mopping-up in high risk and border areas to interrupt any indigenous virus transmission and to minimize impact of virus importation from neighbouring endemic countries.

Iraq

Routine immunization coverage of infants with 3 OPV doses had declined to 63% in 1991, but improved to 87% in 1994 and has been above 90% since 1995. During 1991, 186 confirmed polio cases were reported. This number declined to 32 in 1995 and 20 in 1996 (including both virologically and clinically confirmed polio). NIDs have been conducted annually in spring since 1995. The target population under 5 years of age is more than 3.3 million. The coverage in the two rounds of NIDs in 1997 was 94% and 96%, respectively, and in each of the four NID rounds in previous years the reported coverage was above 95%. Two rounds of mopping-up campaigns were conducted during May and June in six districts that had achieved less than 90% coverage during the second NID round in 1997. The quality of AFP surveillance improved rapidly during 1997. The annualized non-polio AFP rate was 1.66/100 000 children under 15 years. Two adequate stool specimens were collected from more than 70% of AFP cases. Problems with logistics and trained staff in the national poliovirus laboratory are the major impediment to efficient AFP surveillance. Challenges for 1998 include provision of logistic and training support to ensure accreditation of the national laboratory, high quality NIDs and mopping-up to interrupt the final chains of transmission, especially in the northern governorates.

Jordan

Routine immunization coverage of infants with 3 OPV doses has remained above 95% since 1994. Four polio cases were reported during 1994, and since then no confirmed polio cases have been reported. Annual NIDs were initiated in 1995 and in that year the coverage was 102% and 93% in the first and second round, respectively. In each NID round in 1996 and 1997 coverage was more than 100%. AFP surveillance is functioning at a high level and the non-polio AFP rate has remained at or above 1/100 000 among children under 15 years since 1994. Two adequate stool specimens have been collected from more than 80% of AFP cases during 1996 and 1997. Challenges for 1998 include continuation of high quality NIDs and maintaining the quality of AFP surveillance.

Lebanon

The representative from Lebanon was not able to participate in the meeting.

Pakistan

The reported routine immunization coverage of infants with 3 OPV doses declined to 55% during 1995, but has subsequently improved to 77% in 1996 and 74% in part of 1997. More than 500 polio cases were reported during 1994 and 1995; 375 polio cases were reported during 1996 and a similar number of cases were reported up to the end of August 1997. NIDs were initiated in 1994 and except for the two NID rounds in 1995, during which reported coverage was 97% and 99%, reported coverage has been above 100% in each round. Although mopping-up campaigns were not conducted, two rounds of a house-to-house immunization campaign that covered a target population of 413 000 were conducted following outbreaks in three districts. The quality of AFP surveillance improved rapidly during late 1996 and the first half of 1997. Compared with 561 AFP cases reported during the whole of 1996, a total of 874 AFP cases had been reported up to the end of August 1997. Despite the increase in the number of reported cases, two adequate stool specimens were collected from nearly half of all the cases. The challenges for 1998 include increasing routine immunization coverage and improving the quality of NIDs to localize the widespread transmission of wild poliovirus, and further improving the performance AFP surveillance.

Syrian Arab Republic

Routine immunization coverage among infants with 3 OPV doses has been above 90% since 1995. No cases of polio were reported during 1996 and 1997, 4 virologically confirmed cases were reported in 1995. Annual NIDs were initiated in 1993. Since 1995, the reported coverage in each NID round has been above 100%. During 1996 and 1997, mopping-up campaigns were conducted in four governorates selected based on low immunization coverage, incidence of polio within 3 preceding years, border areas, and transient population. The target population in each round was more than 110 000 children aged under 5 years. The quality of AFP surveillance has improved considerably since 1994. A non-polio AFP rate of 1 or more case per 100 000 children aged under 15 years has been achieved and maintained since 1995. Two adequate stool samples have been collected from more than 70% of cases each year since 1994. Challenges for 1998 include continuing NIDs and high-quality AFP surveillance and preventing importation and transmission of wild poliovirus from neighbouring countries.

Palestinian N.A.

Routine coverage of infants with 3 OPV doses has remained 90% or above since 1992. No cases of polio have been reported since 1988 to date. Annual NIDs were initiated in 1995 and coverage in each of the six rounds has ranged from 99% to more than 100%. Sub-national campaigns have been conducted each year since 1995 in several districts based on isolation of wild virus from sewage sampling. The quality of AFP surveillance improved rapidly during 1996; the non-polio AFP rate improved from 0.18 in 1995 to 0.73 and 0.82 per 100 000 children under 15 years during 1996 and 1997, respectively. Two adequate stool specimens were collected from 75% of cases in 1996 and more than 80% of cases in 1997. Challenges for 1998 include continuation of high-quality NIDs and maintaining the quality of AFP surveillance.

OPERATION MECACAR PLUS PLANNING FOR 1998

An informal consultation between the Regional Directors of the Eastern Mediterranean Region, the European Region and WHO headquarters was held on 16 January 1997 in Geneva on future cooperation between EMR and EUR in the field of polio eradication. It was recognized that effective coordination had been developed during the preparation and implementation of Operation MECACAR. It was underlined that the risk of ongoing, unrecognized cross-border transmission is a potential problem among certain population groups in two geographic areas: Iraq, Turkey, Syria and in Afghanistan, Tajikistan, Turkmenistan, Uzbekistan.

It was proposed to continue Operation MECACAR for another three years (1998–2000). A few other countries which had recently reported polio cases would also be part of the operation. The new operation will be named Operation MECACAR Plus, and means:

- to continue coordination efforts among recently endemic countries in order to approach certification by the year 2000;
- to continue coordination of mass vaccination campaigns where appropriate; and
- to take coordinated actions to improve AFP surveillance with particular focus on high risk areas.

All countries participating in Operation MECACAR will continue to coordinate supplemental immunization activities in 1998, as part of Operation MECACAR PLUS. Six of the 10 countries from the European Region (Armenia, Azerbaijan, Georgia, Tajikistan, Turkmenistan and

Uzbekistan) and 8 participating countries of the Eastern Mediterranean Region will conduct full NIDs (Table 1).

Table 1. National Immunization Days (NIDs)
conducted in the framework of Operation MECACAR Plus 1998

European Region (EURO)			Eastern Mediterranean Region (EMRO)		
Country	Date 1 st round	Date 2 nd round	Country	Date 1 st round	Date 2 nd round
Armenia	6-11/4	11-16/5	Afghanistan	6-9/5	6-9/6
Azerbaijan	9-13/3	6-10/5	Iran	5/3	13/4
Georgia	April	May	Iraq	14-16/3	14-16/4
Kazakhstan*	16-21/3	20-25/4	Jordan	14-18/3	18-22/4
Kyrgyzstan*	April	May	Lebanon	14-19/3	18-23/4
Russian Federation	2-6/3	6-10/4	Pakistan	Dec 1997	January
Tajikistan	10-14/3	13-17/4	Palestine	March	April
Turkey	21-27/4	21-27/4	Syrian Arab Republic	14-19/3	18-23/4
Turkmenistan	6-11/4	4-9/5			
Uzbekistan	14-16/4	19-21/5			
Albania	6-10/4	4-8/5			
Ukraine*	16-20/3	20-25/4			
Federal Republic of Yugoslavia	10-12/4	8-10/5			

* Subnational immunization days.

CONCLUSIONS AND RECOMMENDATIONS

Conclusions

1. Operation MECACAR, the unique collaboration of 18 contiguous countries in Europe, the Russian Federation, central and south Asia and the Middle East, in conducting coordinated NIDs to eradicate polio carried out over the last three years has been very successful and has served as a model for coordinated efforts in other WHO regions.
2. The principal aim of Operation MECACAR – the interruption of widespread circulation of wild poliovirus – appears to have been accomplished in the European Region (only 1 reported case for the first 9 months of 1997) and in many participating countries of the Eastern Mediterranean Region as a result of high-quality NIDs and improving routine vaccination coverage.
3. Although acute flaccid paralysis (AFP) surveillance has been established and has been improved significantly in many participating countries over the last three years, in several countries it has not reached the levels adequate for certification of polio eradication or for stopping NIDs. In addition, even in countries with adequate surveillance performance indicators, national aggregate data may hide differences between geopolitical subdivisions, and continued focal transmission of wild poliovirus in these high-risk areas cannot be ruled out. Mopping-up activities targeted at these high-risk areas can eliminate these last remaining potential reservoirs of wild poliovirus.

4. A laboratory network in support of polio eradication has been established in both Regions but few participating laboratories have obtained accreditation.
5. The progress toward polio eradication in Operation MECACAR has been largely possible because of collaboration among the participating countries, coordination by the regional offices, and support provided by an effective coalition of partners, including WHO, UNICEF, Rotary International, CDC and USAID.

Recommendations

6. Since coordinated polio eradication activities remain a high priority and because Operation MECACAR has been highly effective in achieving coordination between countries and regions, Operation MECACAR (designated Operation MECACAR Plus) should be continued to ensure polio eradication in the two regions.
7. Countries participating in Operation MECACAR Plus should continue to conduct NIDs or SNIDs in 1998 unless (1) the risk of wild poliovirus introduction and circulation is low (i.e. there is no common border or large population movements with polio-endemic or recently endemic countries [isolation of wild poliovirus during the previous 3 years]); (2) routine vaccination coverage is high (i.e. >90% with three doses of OPV by 11 months of age in each geopolitical division); and (3) surveillance is sufficiently sensitive to detect wild poliovirus importation and circulation (i.e. AFP rate is $\geq 1/100\ 000$ children <15 years of age and the proportion of AFP cases with 2 adequate stool samples is $\geq 80\%$). In addition, countries should continue NIDs for at least 3 years after isolation of the last wild poliovirus within a country.
8. Mopping-up⁶ activities in 1998 should be conducted in high-risk areas, selected on the basis of the following criteria: (1) wild poliovirus isolation during the previous 3–5 years; (2) low routine vaccination (<90%) or NIDs coverage (<90%); (3) bordering polio- or recently polio-endemic areas; (4) high-risk populations (refugees, internally displaced persons, border areas). The geographic unit of mopping-up activities should be no smaller than district/raion.
9. The quality of AFP surveillance must be rapidly improved in many countries for the reliable detection of wild poliovirus transmission. The Regional Certification Commission requires as one of its criteria for certification that no wild poliovirus be isolated in all countries in the Region for at least 3 years with adequate surveillance. To assist countries, WHO should facilitate surveillance assessments to be carried out in participating countries during 1998.
10. Because of an increasing need for timely and more sophisticated AFP surveillance data by the regional offices, weekly aggregate data and monthly line listings (case-based data) for all AFP cases should be introduced in the next few months in both regions. The exact format for data will be determined by each regional office. In addition, urgent efforts must be made to improve communication between epidemiologists, virologists and WHO by installing means of electronic communication (e-mail) in the respective ministries of health, laboratories, and regional offices.

⁶ Mopping-up activities are the house-to-house administration of two doses of oral poliovirus vaccine (OPV) separated by at least four weeks to all children <5 years of age regardless of prior immunization history.

11. An expert review committee needs to be constituted in all countries to review and classify AFP cases. Countries that have already formed such a committee should ensure that the committee is fully active and responsible for final AFP case classification. Particular attention must be given to monitoring polio-compatible cases in countries that are using a virological case classification scheme. Mapping of compatible cases (by place of residence at the time of paralysis onset) should be used to determine clustering of these cases in time and geographical area. Polio-compatible cases require full clinical and epidemiological investigation to rule out wild poliovirus circulation and need complete documentation. Such cases will be the main focus of scrutiny during the certification process.
12. Isolated facial palsy should not be considered as AFP for the purpose of AFP surveillance and should not, therefore, be included in the calculations for the non-polio AFP rates and other performance indicators for AFP surveillance.
13. Countries that have not met the target of adequate surveillance must establish or strengthen active surveillance for AFP. Active surveillance is defined as the regular weekly visit to selected health facilities to identify and investigate AFP cases that have been admitted.
14. Substantial efforts need to be undertaken to strengthen the network laboratories in both regions to meet the accreditation criteria. All national laboratories should have completed the accreditation review process by 1 April 1998. Subsequently, countries should ensure that stool specimens from AFP cases are processed in accredited network laboratories. In addition, a unique identification number to link epidemiological and laboratory information on AFP cases should be used in all countries.
15. Cross-border polio eradication activities should be coordinated in countries with known or suspected cross-border transmission. Particular attention should be given to the remaining wild poliovirus reservoirs of Afghanistan/Pakistan and northern Iraq/south-eastern Turkey. Both regional offices should facilitate this coordination, including carrying out meetings with concerned parties. In addition, urgent action should be taken to improve surveillance in politically and geographically isolated areas.
16. Special efforts and activities should be undertaken to immunize, identify cases of AFP, and prevent outbreaks of polio among highly mobile, culturally and/or politically isolated populations with limited access to health services.
17. In preparation for the eventual certification of polio eradication, all countries should establish national certification committees to assist in the preparation of the certification process.
18. Coordination of polio eradication activities between and within WHO regions, UN agencies and partner organizations should be further enhanced. Subregional meetings should be conducted where appropriate.
19. Partners should be made aware of the unique historical significance of wild poliovirus eradication and the immense benefit this achievement will entail. Appeals for substantial increases in contributions to Operation MECACAR Plus should be launched. To coordinate donor support within a country, countries should establish national immunization coordination committees.

20. To ensure continued progress, high-level political commitment for polio eradication must be maintained and strengthened within countries participating in Operation MECACAR PLUS, particularly in countries that remain endemic or at risk for the circulation of wild poliovirus.

Annex 1

PROGRAMME

Monday, 20 October 1997

- 8.30–9.00 Registration
- 9.00–10.00 Opening:
Minister of Health Italy – Ms Rosy Bindi
Istituto Superiore di Sanita, Director – Dr Giuseppe Benagiano
WHO/EURO – Dr Sergej Litvinov
WHO/EMRO – Dr Rafi Aslanjan
WHO/HQ – Dr Harry Hull
UNICEF/EURO – Dr Jane Zucker
CDC/USA – Dr Roland Sutter
Rotary International – Dr Mario Grassi
USAID – Dr Murray Trostle
- 10.00–10.30 Coffee break
- 10.30–10.45 Introduction:
• Election of chairperson
• Adoption of agenda
• Administrative matters
- 10.45–11.00 *Session 1:*
GLOBAL POLIO ERADICATION: THE GOAL IS VISIBLE
Poliomyelitis eradication: global vision (20 min), Dr H. Hull (WHO/HQ)
Discussion
- 11.00–11.30 *Session 2:*
OPERATION MECACAR 1995–1997: EVALUATION, RESULTS ACHIEVED
Vision from EMRO (10 min), Dr R. Aslanjan
Vision from EURO (10 min), Dr G. Oblapenko
- 11.30–12.30 Country experiences:
1. The areas of good progress
Russian Federation (10 min)
Discussion

Kazakhstan, Kyrgyzstan, (20 min)
Discussion

Jordan, Lebanon (20 min)
Discussion
- 12.30–14.00 Lunch break

- 14.00–15.30 Palestine, Syria (20 min)
Discussion
2. The Caucasian area
Armenia, Azerbaijan, Georgia (30 min)
Discussion
3. The area of last year's battle:
Albania, Yugoslavia, Greece (30 min)
Discussion
- 15.30–16.00 Coffee break
- 16.00–17.30 4. The area of potential problems
Tajikistan, Turkmenistan, Uzbekistan (30 min)
Discussion
5. The areas of the last endemic transmission:
Iraq, Turkey, (20 min)
Discussion
- Afghanistan, Pakistan, Iran (30 min)
Discussion

Tuesday, 21 October 1997

- 9.00.–10.30 *Session 3:*
IMPROVEMENT OF SURVEILLANCE – THE HIGHEST PRIORITY
Global overview (15 min), Dr B. Aylward
Situation and priorities in EMR (15 min), Dr H. Jafari
Situation and priorities in EUR (15 min), Dr S. Wassilak
Progress in Central Asia (10 min), Dr S. Deshevoi
Discussion
- 10.30–11.00 Coffee break
- 11.00–12.30 The role of genetic mapping in the last stage of poliomyelitis eradication (15 min), Dr O. Kew
Environmental surveillance (15 min), Dr T. Hovi
Discussion
Performance of the Regional LABNET in EMR
Quality Indicators and priorities (15 min), HO/EMRO
Discussion
Performance of the Regional LABNET in EUR
Quality Indicators and priorities (15 min), r G. Lipskaya
Discussion
- 12.30–14.00 Lunch

14.00–15.30 *Session 4:*

OPERATION MECACAR PLUS: 1998–2000

The objectives and plan of action in EMR (15 min), Mr R. Aslanjan

The objectives and plan of action in EUR (10 min), Dr G. Oblapenko

Surveillance in geographic areas with high risk population and limited access (15 min),

Dr B. Aylward

Discussion

Interruption of cross-border transmission through coordinated intercountry actions in 1998
(NIDs, sub-NIDs, mopping-up, active surveillance):

Tajikistan, Turkmenistan, Uzbekistan (20 min)

Discussion

15.30–16.00 Coffee break

16.00–17.30 Iraq, Iran, Turkey, Syria (30 min)

Discussion

Actions in countries yet having endemic polio:

Afghanistan, Iran, Pakistan (20 min)

Discussion

Actions in recently endemic countries:

Albania, Russian Federation, Ukraine, Yugoslavia (30 min)

Discussion

General Discussion

Wednesday, 22 October 1997

9.00–10.30 *Session 5:*

WELL-ESTABLISHED PARTNERSHIP IS THE BASIS FOR VICTORY

Introduction (10 min), Dr S. Litvinov

Rotary International – one of the key partners in the polio eradication initiative (10 min),

Dr M. Grassi

The role of UNICEF in Operation MECACAR and polio eradication efforts (10 min),

Dr J. Zucker

Experience from the Federal Republic of Yugoslavia, Dr B. Tolstopiatov

CDC support to Operation MECACAR PLUS and to polio eradication efforts in general
(10 min), Dr R. Sutter

Polio eradication as a priority for international cooperation (10 min), Dr M. Trostle

General Discussion

10.30–11.00 Coffee break

11.00–12.30 *Session 6:*

TOWARDS A POLIO-FREE WORLD

Recommendations of the Technical Consultation on Global Eradication of Poliomyelitis (10 min), WHO/HQ

Surveillance: new requirements in EMR (10 min), Dr H. Jafari

Surveillance: new requirements in EUR (10 min), Dr S. Wassilak

Discussion

Certification process, already initiated (10 min), Dr G. Oblapenko

Discussion

Preparatory work for the certification (10 min), Dr D. Salisbury

Discussion

General Discussion

12.30–14.00 Lunch

14.00–15.30 *Session 7:*

A POLIO-FREE WORLD! WE CAN DO IT!! LET US DO IT!!!

Regional polio eradication plan of action for 1998–1999:

Priorities and budget in EMR (10 min), Dr R. Aslanjan

Priorities and budget in EUR (10 min), Dr G. Oblapenko

Discussion

Recommendations of the meeting

Closure

Annex 2

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