Report on the

Fifteenth meeting of the Eastern Mediterranean Regional Commission for Certification of Poliomyelitis Eradication

Cairo, Egypt
4–6 April 2006

World Health Organization
Regional Office for the Eastern Mediterranean
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## CONTENTS

1. INTRODUCTION ........................................................................................................... 1

2. CURRENT SITUATION OF POLIOMYELITIS ERADICATION ............................... 2
   2.1 Eastern Mediterranean Region ........................................................................... 2
   2.2 African Region .................................................................................................... 4
   2.3 European Region ............................................................................................... 5
   2.4 South-East Asian Region ................................................................................... 6
   2.5 Global overview ............................................................................................... 7

3. REVIEW OF NATIONAL DOCUMENTS ..................................................................... 8

4. OTHER MATTERS ......................................................................................................... 9

5. CLOSING SESSION ..................................................................................................... 10

Annexes
   1. PROGRAMME ........................................................................................................ 11
   2. LIST OF PARTICIPANTS ....................................................................................... 12
1. INTRODUCTION

The Fifteenth Meeting of the Eastern Mediterranean Regional Commission for Certification of Poliomyelitis Eradication (RCC) was held in Cairo, Egypt, on 4–6 April 2006. The meeting was attended by members of the RCC, Chairmen of the National Certification Committees (NCCs) and national programme managers from Bahrain, Djibouti, Islamic Republic of Iran, Iraq, Jordan, Lebanon, Libyan Arab Jamahiriya, Morocco, Oman, Palestine, Qatar, Saudi Arabia, Syrian Arab Republic, Tunisia and United Arab Emirates. Other participants included representatives of Rotary International and staff from WHO headquarters and the WHO Regional Offices for Africa, Europe and the Eastern Mediterranean.

Dr Ali Jaffer Mohammad Sulaiman, Chairman, RCC, opened the meeting by welcoming all the participants. He thanked Dr Hussein A. Gezairy, WHO Regional Director for the Eastern Mediterranean for his continued support and guidance of polio eradication activities. He referred to the fruitful outcomes of Dr Gezairy’s frequent visits to endemic countries, notably to Pakistan.

Dr Hussein A. Gezairy, WHO Regional Director for the Eastern Mediterranean, in his opening remarks expressed his deep appreciation for the continued and vigorous support of the members of the Commission to the task of eradicating poliomyelitis from the Region and eventual certification. Dr Gezairy referred to the heavy burden placed on the programme during the past year as a result of the spillover from the epidemic in Sudan and the outbreaks in Somalia and Yemen. In this context he paid tribute to the large number of public health workers who worked with great dedication in rapidly controlling the epidemics and in limiting the spread of the virus in the remaining endemic areas. The programme had, however, continued to make some gains. It was a source of great satisfaction to the national health authorities in Egypt and to the Regional Office that no case of wild poliovirus had been reported from the country since May 2004. In March, a ceremony had been held in the Regional Office under the patronage of H.E. Mrs Suzanne Mubarak to celebrate Egypt being declared as polio-free. In Pakistan, a total of 28 cases were reported in 2005, as compared with 56 in 2004. The lack of security in areas of Afghanistan, Pakistan and Somalia continued to pose special problems for polio eradication activities.

Dr Gezairy closed by noting that the Region could be rightfully proud of the overall quality of AFP surveillance. The surveillance infrastructure and laboratory network established in support of polio eradication initiative would continue to be used for the control of other vaccine-preventable diseases. He also pointed out that the countries in the Region had been sensitized to the risk of importation and had updated their plans in this regard. He suggested that the Commission may start to assess systematically for each
polio-free country the potential risk of spread of poliovirus following an importation and suggest measures for reducing this risk.

The programme and list of participants are given in Annexes 1 and 2 respectively.

2. CURRENT SITUATION OF POLIOMYELITIS ERADICATION

2.1 Eastern Mediterranean Region

2.1.1 Overview

Dr Faten Kamel, Medical Officer, Polio Eradication, WHO/EMRO

The lowest number (113) of cases recorded in the Region so far was in 2003. During 2004 and 2005 there was continued progress in the endemic countries in the Region but there was a massive increase in the number of cases reported (187 in 2004 and 727 in 2005) due to epidemics in Sudan (2004), Yemen and Somalia (2005). In 2006, as of 26 March, a total of 21 cases have been reported, 4 from Afghanistan, 2 from Pakistan, 1 from Yemen and 14 from Somalia.

Considerable progress has been achieved in Pakistan where a decrease in the intensity of virus transmission and in diversity of viruses has been noted. The total number of cases of wild poliovirus was halved between 2003 and 2004 and 2005 (respectively 103, 53 and 28). No high season peak was noted in 2005. Seven rounds of supplementary immunization activities were conducted during 2005 and there has been substantial improvement in their quality with intensification in high risk areas. There appears to be clear axis of transmission extending from southern Afghanistan into Baluchistan and North Sind and lower Punjab. In the coming supplementary immunization activities, there will be an increased effort to access and vaccinate children along this axis.

In Afghanistan, the other endemic country, nine cases were reported during 2005 (4 P3 and 5 P1) from the southern region where there are considerable security problems. The focus of transmission in late 2005 and 2006 seems to be in Kandahar close to the border with Pakistan. Advocacy efforts are ongoing to ensure full engagement of local leaders in accessing and vaccinating all children as well recruitment of local staff.

In Somalia, the epidemic followed an importation of wild poliovirus from Yemen and was aggravated by the low coverage of routine immunization. Civil strife and emergency situation limited accessibility and rendered investigation and control difficult. Several supplementary immunization activities were conducted early in 2005 that have been instrumental in limiting the epidemic which is now on the decline. In 2005, 185 cases were reported (161 cases in Banadir and 21 in Lower Shabelle) and 14 in 2006. It is
planned to continue with campaigns until two rounds after the last case. The focus of the campaigns will be on quality and on refusals and nomads.

In Sudan, the epidemic that started in May 2004 with the virus imported from Nigeria through Chad to Darfur had spread all over the country and resulted in a total of 154 cases. The epidemic appears to have come to an end. The last case was in June 2005.

In Yemen, the other re-infected country in the region, the epidemic which followed an importation in February 2005 also appears to have been brought under control with seven rounds of properly planned house-to-house NIDs using monovalent OPV1 in some rounds. The penultimate case was reported on 17 November 2005 and, after a gap of nearly three months, a case was reported from Ibb on 2 February 2006.

In Egypt the last case was reported in May 2004 and there are clear indications that viral circulation has been interrupted. The last positive environmental sample was detected in January 2005. Supplementary immunization is continuing to keep the population immunity at a high level and the quality of AFP surveillance is being sustained, aided by strong political commitment.

At regional level, certification-standard AFP surveillance has been maintained since 2001 and is being used for surveillance of other EPI target diseases. The surveillance reviews conducted in several of the countries during the past 2 years have confirmed the sensitivity and reliability of the system. During 2005, the non-polio AFP rate was above 3 per 100 000 children under the age of 15 years in the priority countries. In all countries of the Region, except for Bahrain, Djibouti and Yemen, more than 80% of AFP cases had adequate stool specimens.

Technical support to countries is being provided by nearly 100 international and 900 national polio staff in addition to the team of experts and temporary advisers who are recruited to monitor campaigns. The Regional and National Technical Advisory Groups review the progress of the polio eradication initiative respectively at the regional and country level and advise on strategic directions. External financial support is being provided to Member States for vaccine, operational expenses, surveillance and for staff.

The top regional priority is to interrupt transmission in the remaining endemic and re-infected countries as soon as possible. To achieve this, the supplementary immunization activities will continue with the same intensity. Efforts will also continue to avoid large immunity gaps in polio-free countries and to maintain certification standard surveillance. Eradication activities will be coordinated between neighbouring countries in the Horn of Africa.
2.1.2 Polio laboratory network and progress in laboratory containment
Dr Humayun Asghar, Virologist, Polio Eradication, WHO/EMRO

Of the 12 network laboratories, including four regional reference laboratories, 11 were fully accredited during 2005 while one (the regional reference laboratory in Kuwait) was provisionally accredited. In view of the situation in Iraq, the possibility of waiving the onsite review of the national polio laboratory in favour of paper accreditation is under consideration. Overall, the performance indicators were maintained at high levels during 2005. The average time from stool collection to receipt in the laboratory and the times taken for primary culture and from primary culture to ITD was better in the endemic countries as compared with non-endemic countries (respectively 4 versus 15 days, 16 versus 19 days and 5 days versus 12 days).

Final data analyses are in progress to assess four protocols for reducing the time taken to report final results on stool samples. A decision to use one of the protocols will be taken by end May 2006. As a further step to upgrading the skills in the network laboratories, expertise for ITD will be introduced in three of the network laboratories (Morocco, Saudi Arabia, Syrian Arab Republic) by November 2006 and in one other (Sudan) in 2007.

Regarding progress in laboratory containment, 15 countries have completed their laboratory survey and 13 of them have also carried out quality assurance assessment. The survey is under way in three countries (Egypt, Palestine and Sudan), while it is in a planning stage in four others (Afghanistan, Pakistan, Somalia and Yemen). The reports from the 15 countries that have completed the survey and carried out a quality assurance assessment will be reviewed by an independent technical expert in consultation with WHO headquarters for accuracy and completeness. Following this review, a report will be presented to the RCC.

2.2 African Region
Dr Mbaye Salla, Medical Officer/Polio, WHO/AFRO

In 2005 a total of 848 cases of wild poliovirus had been reported from 8 countries of the African Region, including Angola and Eriteria, which had not reported cases during 2004. Six countries (Benin, Botswana, Burkina Faso, Central African Republic, Cote D’Ivoire and Guinea) that had reported cases as a result of being re-infected in 2004 were free of polio during 2005. During 2005, of the 21 infected states in Nigeria, 8 states accounted for 90% of the 788 cases reported in the country. The quality of AFP surveillance has improved in Nigeria with 89% of local governing areas reporting a non-polio AFP rate of more than 2 per 100,000 children under the age of 15 years. In 2006, as of 22 March, a total of 69 cases had been reported including 65 from Nigeria, 3 from Niger and one from Ethiopia.
In view of the low overall coverage in the region for routine immunization, the under-immunized children under the age of 3 years constitute a high-risk group. Several strategies are being adopted to improve the coverage, e.g. district-level microplanning to better define strategies and use of resources, outreach strategies and activities to immunize two-thirds of the target population, improved monitoring, better coordination between partners and agencies etc.

The certification process has progressed. Fourteen countries have presented national documents, of which 10 have been accepted and four have deferred on account of wild poliovirus importation (Cameroon and Guinea) and declining surveillance (Burundi and United Republic of Tanzania). Seven countries have been selected to present documentation in 2006. Regarding containment, 33 countries have established national task forces on containment and orientation on containment has been conducted for 17 countries. Seven countries have completed the survey and inventory and one has also carried out an assessment for quality assurance.

The priorities for 2006 continue to be interruption of transmission in Nigeria and in the re-infected countries (Angola, Chad and Ethiopia), sustaining polio-free status in the recently polio-free countries and mainstreaming the polio eradication infrastructure.

2.3 **European Region**

*Dr James Zingeser, Medical Officer, Vaccine-Preventable Diseases and Immunization, WHO/EURO*

The RCC for Europe, at its last meeting in 2005, expressed concern over several issues connected with sustaining the polio-free status. Foremost among them was the increased risk of importation of wild poliovirus in view of the continued transmission in some of the Member States in the African, Eastern Mediterranean and South-East Asia regions. The potential risk for poliovirus spread following an importation is low in vast majority of the countries in the region. However, there are a few areas and countries where the risk was considered as high: Bosnia and Herzegovina, Netherlands, Northern Caucasian Region of Russian Federation, Tajikistan and south-eastern Turkey. Some of the other issues were the declining political commitment for sustaining polio-free status and changing public health priorities. The funding for surveillance and for polio laboratory network has fallen below the critical minimal level of support.

During 2005, the non-polio AFP rate was above the certification level in only a fraction of the Member States. No data were available from several countries. All the countries in the region have completed Phase 1 of the laboratory containment including the laboratory survey and establishment of an inventory and have confirmed the quality of Phase 1 of containment activities. Twenty-seven countries in the region reported no infectious material and 25 decided to retain polioviruses. In the latter group of countries
there were 111 laboratories that stored wild poliovirus infectious and another 154 laboratories that stored potentially infectious material. Preparations are under way for implementing Phase 2 of laboratory containment including upgrading of laboratories holding infectious material to BSL3/polio.

2.4 South-East Asia Region

Dr N.K. Shah, Chairman, SEA IEAG/RCC

During 2005, India continued to be the only endemic country in the region; however, there was an outbreak of poliomyelitis in Indonesia and importations in Bangladesh and Nepal. The non-polio AFP rate in children under 15 years of age was at certification level or above in all 11 countries of the region. The situation in India has continued to improve with a total of 66 cases from 35 district reported during 2005 (62 of type 1 and 4 of type 3) as compared to 134 cases from 43 districts in 2004. In 2006, up to 20 March, a total of 16 cases of wild poliovirus have been reported from 10 districts in Bihar and Uttar Pradesh. The outbreak in Indonesia had started in mid March 2005 and a total of 349 polio cases (including 46 type VDPV cases) were reported from 47 districts during the year. The outbreak was immediately dealt with two mop-ups in the three initially infected provinces followed by two rounds of NIDs and another two rounds of SNIDs. In 2006, up to 20 March, only one case has been reported. The immune status of children between 6 months and 5 years of age has deteriorated, with 36% of polio cases having received no dose and 46% only 1–2 doses of OPV. The corresponding figures for the non-polio AFP cases were 9% and 20%.

In Nepal there were 4 cases of wild poliovirus reported from two districts across the border from Bihar province in India in September/October 2005 with the onset of the most recent case being 24 October 2005. Three rounds of mop-ups and two SNIDs were conducted in response to this importation. An imported case of wild poliovirus was also reported in Bangladesh from Chandpur district in Chittagong division in January 2006. The sequencing data showed sequence similarity to an isolate from district Baghpat, Uttar Pradesh province, India. For the past three years, the OPV coverage in Bangladesh has been satisfactory with around 98% of the non-AFP cases having received three or more doses.

The SEA RCC at its last session in June 2005 carried out a risk assessment of polio circulation following an introduction of wild poliovirus in the countries of the region and classified countries in to three categories, i.e. high-risk (India, Indonesia, Timor-Leste), medium risk (Bangladesh, Myanmar, Sri Lanka and Thailand) and low risk countries (Bhutan, Democratic Republic of Korea, Maldives and Nepal). The criteria used for this assessment included the immunity gap in children below 5 years of age, quality of AFP surveillance, whether supplementary immunization activities were recently carried out or
not, population distribution and density and movement across the country, travel links to polio-infected countries and effect of civil unrest and recent natural disaster(s).

2.5 Global overview

Dr Rudi Tangermann, Medical Officer Polio, WHO headquarters

As compared with the situation in 1988, when polio was endemic in around 123 countries, in 2006 it was endemic in 4 countries and 9 countries had been re-infected. Some of the major challenges during the preceding two years included international spread of polio to 22 countries; persistent polio transmission despite high OPV use in Egypt and India; serious gaps in AFP surveillance in high risk areas and 30%–50% of children in 6 states of Nigeria having received no doses of OPV. In response to the massive outbreak of polio in northern Nigeria in 2004 and subsequent importation of wild poliovirus to neighbouring countries, five synchronized campaigns were held between October 2004 and May 2005. As a result, since June 2005, 10 re-infected countries surrounding Nigeria are again polio-free and polio within Nigeria is restricted primarily to the northern states. Type 3 is on the verge of eradication and the strategic approach for 2006–2007 is to interrupt type 1 poliovirus transmission with sequential mOPV1 campaigns interspersing where needed with a single mOPV3 round.

Increasing attention is being paid to the importance of outbreak in polio-free areas leading to further spread. The Director-General of WHO, in consultation with the Advisory Committee for Polio Eradication, has decided to declare as a public health emergency of international importance the detection of wild poliovirus in a polio-free area with less than 90% routine coverage and with no supplementary immunization during the previous 12 months and any poliovirus outbreak continuing for more than 60 days after confirmation of the index case. The WHO Executive Board at its 117th session in January 2006 adopted new international standards for outbreak response. These include: plans to be established within 72 hours; implementation to start within 4 weeks and a population of 2–5 million children to be covered with 3–4 high-quality, house-to-house rounds with a monovalent OPV. The new International Health Regulations which will go into force from 2007 include circulating poliovirus (wild or cVDPV) as a notifiable disease. In view of the persistent gaps in AFP surveillance in some highest risk areas, the operational target for these areas has been set at 2 cases per 100 000 children under the age of 15 years.

From a global perspective, the major challenges for the coming 1–2 years are to sustain the current effort to stop transmission in India, access risk areas in the border areas between Afghanistan and Pakistan, reduce zero-dose children in the six Nigerian states, overcome access problems in Somalia and protect the highest risk areas. Dr Tangermann concluded by referring to the funding gap of US$ 150 million in 2006 and of US$ 425 million for 2007–2009.
3. REVIEW OF NATIONAL DOCUMENTS

3.1 Revised National Documentation of Palestine

The RCC provisionally accepted the National Documentation for Certification with a few minor changes. The RCC while appreciating the difficulties faced by the programme in implementing strategies and activities related to polio eradication felt that it was necessary to highlight the need to further upgrade the comprehensiveness and quality of AFP surveillance. The RCC requested the Secretariat to continue to closely monitor the PEI activities and continue to provide necessary support for the programme.

3.2 Final national documentation for Regional Certification

Final National Documentation for Regional Certification, with data up to the end of 2005, from Bahrain, Jordan, Islamic Republic of Iran, Oman, Qatar, Saudi Arabia and United Arab Emirates were reviewed. The RCC felt that the final National Documentation reports for Regional Certification submitted by these countries were on the whole well prepared and it was decided to accept them provisionally. However, the RCC made some minor comments on each of the reports. These comments will be communicated to the respective NCC Chairs in a letter from the RCC Chairman during the coming weeks. Countries that have detected VDPV should submit a brief report in this connection. The NCCs should be reminded to adhere to the regional guidelines and criteria for diagnosing cases of VAPP.

3.3 Annual Update Reports for 2005

The RCC considered the Annual Updates for 2005 of Djibouti, Iraq, Lebanon, Libyan Arab Jamahiriya, Morocco, Syrian Arab Republic and Tunisia. The RCC expressed disappointment that the NCC in Kuwait had failed to submit its revised Annual Update for 2004 and was the only country that did not submit the Annual Update for 2005. It found the reports of the above-mentioned countries satisfactory and decided to accept them provisionally. The RCC continues to be concerned at the low coverage of routine immunization and the rather poor quality of AFP surveillance in Djibouti. With regard to Lebanon, it was considered that the programme is still not sufficiently strong with persistent areas of low coverage with routine immunization and areas where AFP surveillance is borderline. Minor comments were made on all the above reports which will be communicated to the respective NCC Chairs in a letter from the RCC Chairman during the coming weeks. The formal acceptance of the reports will follow the receipt of revised reports that had been satisfactorily amended in light of RCC’s comments.
4. OTHER MATTERS

4.1 Other countries to submit the Final National Documentation for Regional Certification in April 2007

It was agreed that the NCCs of Lebanon, Libyan Arab Jamahiriya, Morocco, Syrian Arab Republic and Tunisia will be invited to submit their Final National Documentation for Regional Certification for RCC review at their 17th meeting in April 2007. Depending upon the quality of the Kuwait Annual Update for 2005, which it is hoped will be received in the coming months, the NCC may also be invited to submit the Final National Documentation for Regional Certification.

4.2 Outline of EMR RCC report on Regional Certification to GCC

The RCC considered a briefing paper prepared by the Secretariat on the above subject and decided that the report would contain a comprehensive regional review along the lines mentioned in the briefing paper and a standardized summary for each country in the region (including a minimum number of tables and graphs). The Secretariat will prepare a sample report of two or three countries and a more detailed outline of the regional report for RCC review at its next meeting in November 2006.

4.3 Date and venue of the 16th RCC Meeting

It was agreed that the next meeting will be held on 1–2 November 2006 in Kuwait.

4.4 Miscellaneous items

The RCC considered a suggestion made by the NCC Chairman of Saudi Arabia (Dr Ghazi Jamjoom), because the reports of the countries under review are not distributed to all the meeting participants it would be worthwhile to project the report under discussion on the screen so that the comments of the RCC members and subsequent discussions could be followed by everyone. The RCC agreed that this could be tried out at its next meeting.

In view of the increasing difficulty in classifying imported cases using the definition currently available in the Manual of Operations, especially when patients with suspected poliomyelitis from one country cross borders to seek treatment in adjoining countries before laboratory diagnosis, the RCC recommended that the secretariat seeks technical advice from the Polio Unit in WHO headquarters about the experience in other regions with classifying imported cases and their views about current operative definition of “imported cases”.
As the Eastern Mediterranean Region approaches the preliminary stages of certification, it was agreed that it is important to enhance coordination with RCCs in other regions so as to benefit from their experience with NCCs and national programmes in the period following certification.

It was decided that if no new cases are reported from Sudan in the coming months, the NCC could be invited to submit a fresh National Document for review by RCC at its next meeting later in 2006.

5. CLOSING SESSION

During the closing session, Dr Ali Jaffar Sulaiman, Chairman, RCC, thanked the participants for their contributions and noted that the quality of reports presented at the meeting was generally of high quality. He urged the Chairs of the NCCs to continue to remain fully engaged with polio eradication activities in their respective countries and to use their individual capacities to promote the maintenance of polio free status through the implementation of all the strategies for polio eradication.

Regarding the reports submitted by NCCs, Dr Ali Jaffar requested that they should be submitted by the due date, the executive summary should be more operationally oriented and signed by all the members of the NCC and the format of the report should be strictly followed. He had noted that over the years the membership of the NCC had been skewed in favour of paediatricians and microbiologists/virologists. It would be timely for other fields of specialization relevant to polio eradication, such as public health and epidemiology, to be also represented on the NCCs.

Dr Sulaiman reminded the participants to peruse the Poliofax regularly and carefully, as it contains the latest official information on the status of eradication activities in countries of the Region. He also reminded them to look for and carefully document cases of VDPV and to ensure that the diagnosis of cases of VAPP, which is an exclusion diagnosis, is made after a careful review of all the data and meets all the accepted criteria.

Dr M.H. Wahdan, Special Adviser (Polio), speaking on behalf of the Regional Director, thanked the participants for their continued efforts to rid the Region of poliomyelitis. He emphasized that as the goal of regional certification gets nearer there is a need to be specially vigilant and to ensure that AFP surveillance of certification standard is maintained specially in high-risk areas and that development of any immunity gap in young children is avoided. He too expressed appreciation for the quality of reports presented at the meeting and complimented the Chairs of NCC and programme managers for their efforts in this connection. He also reminded them to ensure that their annual reports to the RCC are submitted in time.
Annex 1

PROGRAMME

Tuesday, 4 April 2006

08:30–09:00  Registration
09:00–09:30  Opening Session
   Introductory Remarks by Dr Ali J. Sulaiman, Chairman of RCC
   Address by Dr Hussein A. Gezairy, Regional Director, WHO/EMRO
   Adoption of Agenda
09:30–10:30  Overview of the present situation of polio eradication
   EM Regional Overview, Dr F. Kamel, WHO/EMRO
   Update on Regional Polio Laboratory and Regional Containment Activities, Dr H.
   Asghar, WHO/EMRO
10:30–12:30 Regional Overviews
   AFR, Dr S. Mbaye, WHO/AFRO
   SEAR, Dr N.K. Shah, SEAR RCC
   EUR, Dr J. Zingeser, WHO/EURO
   Global Overview, Dr R. Tangermann, WHO/HQ
   Discussion
12:30–14:00  Review of the Revised National Documentation for Certification of Palestine
14:00–15:30  Review of Final National Documentation for Regional Certification of Bahrain, Islamic
   Republic of Iran and Jordan
15:30–17:30 Private meeting of the RCC

Wednesday, 5 April 2006

09:00–11:00  Review of Final National Documentation for Regional Certification of Oman, Qatar,
   Saudi Arabia and United Arab Emirates
11:00–13:00  Review of 2005 Annual Updates of Djibouti, Iraq and Lebanon
13:00–16:00  Review of 2005 Annual Updates of Libyan Arab Jamahiriya, Morocco, Syrian Arab
   Republic and Tunisia
16:00–17:00 Private meeting of the RCC

Thursday, 6 April 2006

09:00–10:30  Private Meeting of the EM / RCC
10:30–12:30 Closing Session and Concluding Remarks
Annex 2

LIST OF PARTICIPANTS

Members of the Committee

Dr Ali Jaffer Mohamed Sulaiman (Chairman)
Advisor Health Affairs
Supervisor – Directorate General Health Affairs
Ministry of Health
Muscat

Dr Magda Rakha
First Under-Secretary
Ministry of Health and Population
Cairo

Dr Hossein Malek Afzali
Undersecretary for Research Affairs
Ministry of Health and Medical Education
Teheran

Dr Yagoub Y. Al Mazrou
Assistant Deputy Minister for Curative Medicine
Ministry of Health
Riyadh

Professor Mushtaq Khan
Professor of Paediatrics
Medical Center
Islamabad

Dr Narayan Keshary Shah
Chairman
South-East Asia Regional Certification Commission
Kathmandu

Dr Abdullahi Deria
Former Regional Adviser, Communicable Diseases
London
Dr David Salisbury  
Director of Immunization  
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**Country Representatives**

**BAHRAIN**  
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Chairman, National Certification Committee  
**Manama**

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National EPI Manager  
Ministry of Health  
**Manama**

**DJIBOUTI**  
Dr Emma Acina  
Chairman, National Certification Committee  
Pediatrician and Private Physician  
**Djibouti**

Dr Salah Waberi  
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**ISLAMIC REPUBLIC OF IRAN**  
Dr Bijan Sadrizadeh  
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**Teheran**

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Professor Najim Al-din Al-Ruznamji
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National EPI Manager
Ministry of Public Health
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Dr Juma Bilal Fairouz
Director, Disease Control Department
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Dr Abdelmoniem Nour
Consultant/Adviser, Preventive Medicine Department
Ministry of Health
Abu Dhabi

Other organizations
Rotary International
Dr Diaa Seif El Din
Chairman, National PolioPlus Committee of Egypt
Cairo

Other WHO offices
Headquarters
Dr Rudi Tangermann, Medical Officer, Polio

Regional Office for Africa
Dr Mbaye Salla, Medical Officer, Polio

Regional Office for Europe
Dr James A. Zingeser, Medical Officer, Vaccine Preventable Diseases and Immunization Programme

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Dr Mohamed H. Wahdan, Special Adviser to the Regional Director for Poliomyelitis Eradication
Dr Faten Kamel, Medical Officer, Poliomyelitis Eradication
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Mr Adam Abou Bakr, Audio Assistant, Administrative Services Unit
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Mrs Rasha Naguib, Secretary, Poliomyelitis Eradication
Ms Mariam Adly, Secretary, Poliomyelitis Eradication