



Poliomyelitis Eradication in the Eastern Mediterranean Region

Progress Report 2010



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Foreword

This year's report is the ninth of a series of reports documenting efforts to eradicate poliomyelitis from the WHO Eastern Mediterranean Region. In 2010, despite the significant burden of problems and challenges faced by the regional poliomyelitis eradication programme and their negative impacts on eradication efforts, 20 of the 22 countries of the Region maintained their polio-free status. The security situation in Afghanistan and in the border areas between Pakistan and Afghanistan is the main reason for the continued endemicity of poliomyelitis in limited districts in the two countries. In addition, in central and southern Somalia almost one million children under 5 years of age have been deprived of vaccination for nearly two years, representing a serious challenge.



Several global and regional developments took place during 2010. Globally, the Centers for Disease Control and Prevention (CDC Atlanta) was designated to monitor regularly the indicators set in the global strategic plan 2010–2012, and an Independent Monitoring Board was established by the polio partners to review progress and advise endemic and re-infected countries on actions to be taken.

At the regional level, all countries of the Region maintained certification standard surveillance supported by a laboratory network whose excellent performance has been confirmed by full accreditation. All polio-free countries maintained their polio-free status through ensuring high routine immunization coverage with the addition of supplementary immunization activities as required. The Regional Office developed a risk assessment framework and methodology to enable these countries to assess their capability to reduce and manage the risk of transmission following wild poliovirus importation. Coordination with other WHO regions is being effectively maintained through several approaches, including regular exchange of information, coordination meetings and synchronization of activities.

The Government of Pakistan launched a national emergency action plan to interrupt wild poliovirus circulation by the end of 2011. Government commitment at federal and provincial levels is clearly evident and efforts are being made to ensure similar levels of commitment at delivery levels. In Afghanistan, in addition to the strong government commitment, special efforts are being made in security-compromised areas to ensure accessibility of children to vaccination.

The regional polio eradication programme continued providing children with post polio paralysis with the necessary support for their physical and social rehabilitation including education. This comprehensive support, which is ongoing in Pakistan, is being extended to polio affected children in Afghanistan.

Credit for the progress achieved goes to national authorities for their continued commitment and inputs in the implementation of regional polio eradication efforts. The support of the global partnership has been outstanding. I wish specifically to acknowledge the support of Rotary International, CDC Atlanta, UNICEF, Bill & Melinda Gates Foundation, the Governments of Canada, United Arab Emirates, Saudi Arabia, United States of America, Japan, Norway, Italy and France, the UK Department for International Development, the World Bank, GAVI Alliance and the European Community.

With these national and international efforts, I am sure our region will soon achieve polio eradication.

A handwritten signature in Arabic script, likely belonging to Hussein A. Gezairy, written in black ink on a light blue background.

Hussein A. Gezairy, MD, FRCS
Regional Director for the Eastern Mediterranean

1. Introduction

In 2008, the World Health Assembly called for a new plan to complete the polio eradication effort (WHA61.1). Consequently, a comprehensive independent evaluation of major barriers to interrupting poliovirus transmission was made for endemic countries and those with reestablished transmission. From the Eastern Mediterranean Region, Pakistan, Afghanistan and Sudan were evaluated. The evaluation findings and recommendations were reported to the Regional Committee and were submitted to the Sixty-third World Health Assembly in 2010, together with the new Global Polio Eradication Initiative Strategic Plan 2010–2012, with specific milestones to be achieved to reach the target of cessation of all poliovirus transmission by end of 2012. Progress in achieving these milestones is regularly monitored by the Independent Monitoring Board, against the major milestones and process indicators developed for this purpose.

2. Current situation in the Region

The Eastern Mediterranean Region of WHO continued to proceed towards achieving the polio eradication target. Nineteen Member States are maintaining their polio free-status, and Sudan successfully regained its polio-free status after an epidemic that occurred as a result of importation in 2008.

Wild polioviruses are circulating only in the two remaining endemic countries, Afghanistan and Pakistan, which are facing major challenges that negatively impact polio eradication efforts.

2.1 Pakistan

Pakistan has come a long way in its struggle to eradicate polio. In the early 1990s, the annual incidence of polio was estimated at more than 20 000 cases a year. By 2005, only 28 cases were confirmed. However, since then progress has been hampered by instability and war in border areas with Afghanistan, limiting safe access to children. The programme has also faced varied managerial problems in certain areas. Progress stagnated in 2006 and 2007 followed by an upsurge of cases from 2008 to the present. In 2010, Pakistan reported 144 cases (120 wild poliovirus type 1 and 24 wild poliovirus type 3) from 40 infected districts, representing the largest number of cases since 2000 (Figure 1). The majority of cases during the past 3 years were reported from the known transmission zones, namely:

- Federally Administered Tribal Areas (FATA) and associated areas of central Khyber Pakhtounkhwa (KP) province
- Quetta Block (Quetta, Pishin and Killa Abdulla)
- Karachi
- The central Pakistan zone of South Punjab, North Sindh and East Baluchistan.

The second half of 2010 witnessed significant spread of virus. The spread was exacerbated by the devastating floods that swept through Pakistan, resulting in significant population movement from transmission zones to other areas in Pakistan including main population centres in KP, Sindh and Punjab. In 2011 as of end June, 57 P1 cases were reported from the same transmission zones and one P3 case was reported after more than six months without P3 cases.

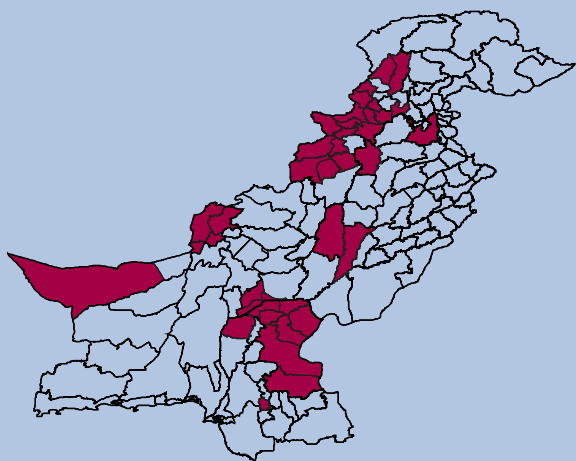


Figure 1 Infected districts in Pakistan 2010

To address this situation, significant efforts were made by the programme, particularly the introduction of bivalent oral poliovaccine (bOPV), enhancement of the Prime Minister's plan focusing on intersectoral collaboration in polio eradication, and the development of comprehensive district-specific plans. Improvements in the monitoring system included introduction of finger marking and independent monitoring, the introduction of lot quality assurance and use of new technology in rapid data transmission from the field, with quick analysis and feedback of results for immediate remedial measures in the field. At the same time, emphasis was made on maintaining a very comprehensive surveillance system supported by a well-functioning polio laboratory. Environmental surveillance is also being expanded to other parts of the country to determine the dynamics of the poliovirus circulation, and has highlighted the importance of vaccinating the migrant population.

In response to the epidemiological situation, the President of Pakistan directed the immediate development of a national emergency action plan for polio eradication

in Pakistan. The goal of the plan is to stop transmission of polio in Pakistan by the end of 2011 through consistent government oversight, ownership and accountability at each administrative level, ensuring consistent access to children in security-compromised areas, and ensuring that all children are consistently immunized in the areas and populations that are at highest risk of sustaining transmission of poliovirus. Oversight and accountability by the government functionaries has been introduced through the establishment of high level task forces and monitoring cells at the national and provincial levels to monitor progress.

District-specific plans are now being translated into Union Council plans to address local issues and devise local solutions, starting with those Union Councils with persistently low performance in vaccinating children. In this regard, the establishment of the Union Council level polio eradication team is a significant development. Monitoring of campaign performance is being tightened through lot quality assurance and the use of new technology in rapid data transmission from the field with rapid analysis and feedback of results for immediate remedial measures.

There are some early signs of positive epidemiological developments. No cases have been reported in Punjab (>50% of the total population) since November 2010, and only one WPV₃ isolate was detected from AFP and none from environmental samples since November 2010. As well, the number of viral lineages of WPV₁ is decreasing.

2.2 Afghanistan

In Afghanistan, the programme remained successful in keeping poliovirus circulation limited to the southern part of the country. The vast majority of the cases are reported from the 13 conflict-affected districts in the south, where security problems are the main reason for inaccessibility to children (Figure 2).

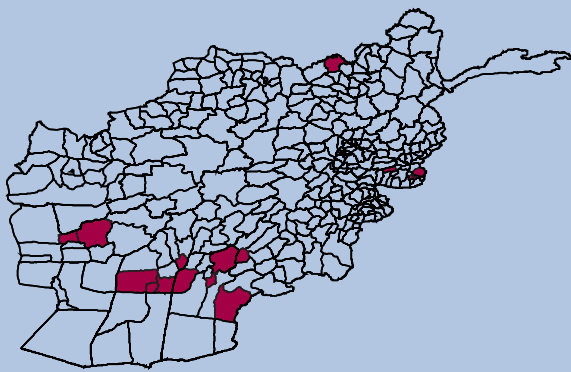


Figure 2 High risk districts in Afghanistan 2010

During 2010, Afghanistan reported 25 cases, representing a 34% reduction from 2009. Of these, 17 were due to WPV₁ and 8 due to P₃. The majority (84%) of these cases were from the southern transmission zone incorporating the southern region (19 cases) and the neighbouring Farah province of the western region (2 cases). Sporadic cases due to importations of wild poliovirus type 1 genetically related to virus circulating in Pakistan were reported in the north-east region (1 case in Kunduz province) and eastern region (3 cases in Nangarhar). These sporadic importations did not result in secondary cases. In addition, the programme took necessary preventive measures in anticipation of spread of virus from the large outbreak that occurred in 2010 in neighbouring Tajikistan.

During 2011, 8 type 1 cases were reported as of end June, all of them from the security compromised areas (Kandahar, Helmand and Farah) indicating that the active transmission zone remains in the southern region. There was a gap of three and half months between January and May with no cases.

In addition to wild poliovirus, a small outbreak of circulating vaccine-derived poliovirus (VDPV) type 2 was reported in Helmand province, with 5 cases reported in 2010 and one in 2011. All were from Nadeali, a district with poor immunization status due to persistent access problems caused by insecurity.

The political commitment of the Government of Afghanistan in support of the programme is clearly evident. A national working group meets every month under the chairmanship of the Minister of Public Health to monitor the situation and provide guidance on policy and strategic issues. In addition, a consultative group, chaired by the Director-General of Preventive Medicine, focuses on improving access and campaign quality in the 13 high-risk districts.

The national programme supported by partners introduced a wide range of innovative approaches to ensure accessibility in the conflict-affected areas. These efforts included requests to military groups to “de-conflict” the situation during the campaigns days, close coordination with the International Committee of the Red Cross to maintain the cooperation of anti-government elements and recruiting of local access negotiators to work with all parties in the conflict. While overall accessibility is showing gradual improvement, the quality of campaigns remains below the level required to interrupt viral circulation. In order to

improve campaign quality, district-specific plans are implemented since October 2010 with establishment of community based communication network and a district manager is assigned for each of the 13 high-risk districts. At the same time, efforts are continuing to sustain good coverage in all accessible areas.

Coordination between the polio eradication programmes of Pakistan and Afghanistan is exemplary. Mop-ups and vaccination of children crossing borders together with enhancing the surveillance sensitivity are done to address the increased risk of importation to Afghanistan, as a result of the recent ongoing intensified circulation in the bordering FATA/KP area of Pakistan.

2.3 Sudan

The outbreak that started in south Sudan in 2008 and spread to the rest of Sudan and neighbouring parts of Kenya and Uganda has ended, with the last case in June 2009, after successful efforts to immunize children everywhere in Sudan.

Surveillance for acute flaccid paralysis (AFP) was strengthened in south Sudan, including collection of samples from contacts of AFP cases and from community children in “silent” counties, i.e. those not reporting AFP cases. These activities led to marked improvement in surveillance sensitivity and a 50% increase in reported cases in 2010. The quality of information has improved as well, and final diagnosis was assigned to about 95% of cases compared to 20% in early 2010. Routine surveillance data, together with the desk review conducted in south Sudan in 2010 and a full-scale surveillance review by international experts in April 2011, concluded that the system is functioning reasonably well overall.

However, the isolation of wild poliovirus type 1 from a sewage sample collected from Aswan, Egypt, in December 2010 that is linked with 2008–2009 poliovirus circulation in Sudan raised doubts about possible surveillance gaps. In response to this observation, field investigation was conducted in both Egypt and Sudan, including rapid assessment of the AFP surveillance system, retrospective case search, sensitization sessions to increase health staff awareness about AFP, mapping population movement between Sudan and Aswan and OPV coverage assessment. Three rounds of national immunization day campaigns (NIDs) were conducted in northern Sudan between December 2010 and April 2011. The immunity profile has been maintained in northern Sudan at good level and the proportion of children under 60 months with more than 7 OPV doses was 81% in 2010.

In south Sudan, routine immunization coverage showed improvement in 2010, mainly due to acceleration activities. Training and micro-planning to implement all activities of the “reach every district” (RED) approach are ongoing. Supplementary immunization performance is still below the target of the Global Strategic Plan (<10% missed children in each supplementary immunization activity in 2010) and the immunity profile of non-polio AFP cases still shows that approximately 25% have not received an adequate number of doses. Efforts to achieve this goal are continuing under very challenging geographic and environmental circumstances.

2.4 Somalia

Somalia has been polio-free for almost 4 years since the WPV outbreak that started in 2005, with the last case in March 2007.

This success was achieved against great challenges and difficulties. Several factors contributed to the success, including high levels of community acceptance for polio vaccination, the support of religious leaders and clan elders, the dedication of local staff and volunteers and the provision of adequate and timely financial support. In 2010, over 800 000 children under the age of 5 years (40% of the national total) were inaccessible due to the refusal of anti-government elements to allow mass vaccination activities (NIDs and Child Health Days) in the central and southern areas. With the low routine immunization coverage in Somalia, supplementary immunization activities remain the major source of OPV for children under 5 years, hence a significant population immunity gap is developing in these zones. These same zones are also where VDPV have been repeatedly identified since 2008. Efforts are continuing to address the shrinking population access for both NIDs and Child Health Days, without success so far. In the meantime, every opportunity is used to improve routine immunization and ensure proper coverage in all accessible areas, including during population movements.

3. Implementation of polio eradication strategies

3.1 Routine immunization

Improving routine EPI services and coverage continues to be one of the cornerstone strategies for polio eradication. The important role of high routine coverage in consolidation of polio eradication achievements and in preventing the spread of poliovirus after importation has been clearly documented globally and in the Region. In settings with low routine coverage, importations

resulted in outbreaks. Field staff of the polio eradication programme continue to support routine immunization. As well, the capacities developed by the polio eradication programme in microplanning, campaign implementation, monitoring and evaluation have been very useful in strengthening routine immunization activities.

3.2 Supplementary immunization activities

Supplementary immunization is a crucial strategy to interrupt virus circulation in endemic and re-infected countries and to supplement routine immunization, especially in countries or areas with low routine coverage, in order to ensure optimal immunity among children under 5 years of age.

Pakistan and Afghanistan continue to implement an intensified plan of supplementary immunization. In 2010, Pakistan implemented 6 NIDs, 4 subnational campaigns (SNIDs) and 6 mop-ups, and Afghanistan carried out 4



Independent monitors verifying the campaign quality



OPV administration during supplementary immunization activities in Pakistan

NIDs, 4 SNIDs and 4 mop-ups. NIDs and SNIDs were implemented using either bivalent or trivalent OPV, but mop-ups were implemented using monovalent vaccines and in some occasions bivalent OPV.

Polio free status is maintained in other countries through ensuring high population immunity and avoiding immunity gaps through improvement of routine immunization and implementation of supplementary immunization activities. In 2010, south Sudan carried out 4 NIDs and

the rest of Sudan implemented 3 NIDs and one SNID; the Child Health Day campaign also included OPV. Somalia implemented 2 phased NIDs and OPV was given during 5 phased Child Health Days. Most of the vaccine used in Child Health Days was trivalent OPV. Seven other polio-free countries in the Region (Djibouti, Egypt, Islamic Republic of Iran, Iraq, Jordan, Saudi Arabia and Syrian Arab Republic) conducted supplementary immunization activities in 2010 with a focus on geographic



A marked finger following OPV administration is the only criteria to assess the OPV coverage

areas with high-risk populations and low routine immunization coverage in an effort to boost population immunity.

Supplementary immunization activities continued to be implemented from house to house, targeting all children under 5 years of age. Several key operational steps were taken to ensure the quality of activities, including development of updated micro-plans, engaging political and administrative leaders for oversight and accountability, strengthening communication efforts with focus on increasing public awareness and demand generation and independent monitoring of supplementary immunization activities.

In addition, several initiatives were introduced in the programme, namely use of the very effective bivalent OPV, use of the short interval additional dose (SIAD) strategy in areas having problems of inaccessibility and validation of independent monitoring using lot quality assurance. Supplementary immunization activities were coordinated between neighbouring countries and were used to provide other

health services such as delivering vitamin A and deworming tablets.

3.3 AFP surveillance and the regional laboratory network

Key AFP surveillance indicators (non-polio AFP rate and percentage of adequate stools) at national level are reaching international standards. All countries of the Region have maintained the expected non-polio AFP rate per 100 000 children under the age of 15 years (Figure 3). The percentage of AFP cases with adequate stool collection is above the target of 80% except in Morocco (Figure 4). However, subnational data analysis has highlighted certain gaps which are more significant for those countries having no evidence of transmission for the past five years. The data are being used to direct activities to improve operations in these countries.

All countries are providing AFP surveillance data every week to the Regional Office. The data are analysed, published in Poliofax and sent with feedback to countries on a weekly basis. In addition, independent assessment

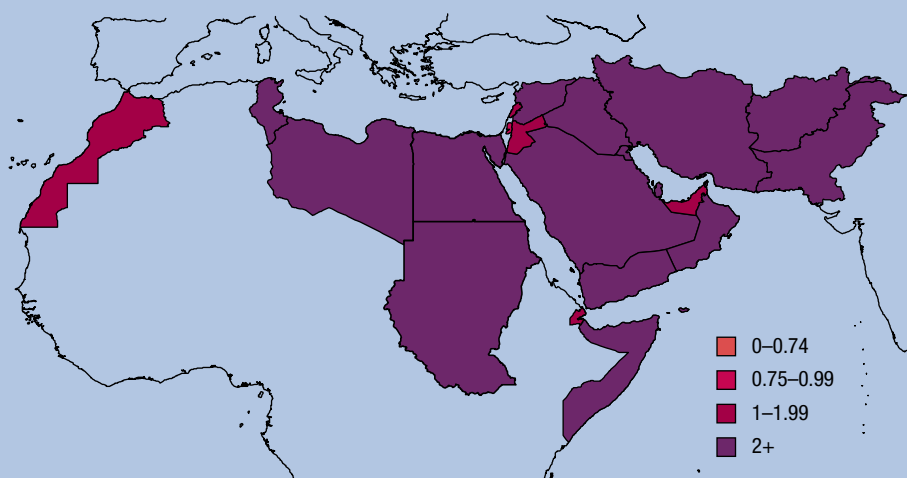


Figure 3 Non-polio AFP rate in countries of the Eastern Mediterranean Region 2010



Figure 4 Percentage of AFP cases with adequate samples in the Region, 2010

of surveillance systems, i.e surveillance reviews, are performed to assess the quality of surveillance.

In 2010, AFP surveillance reviews were conducted in 8 countries of the Region: Afghanistan, Egypt, Lebanon, south Sudan (desk), Somalia (desk), Morocco, Tunisia and Yemen. These reviews have shown that the systems are functioning well. Some recommendations highlighting further actions needed for the improvement of the systems were made and are being seriously considered by the national authorities and followed up for implementation by the Regional Office.

Circulating VDPV were identified in some areas in Afghanistan and Somalia, reflecting the challenges facing routine EPI coverage in these areas. Supplementary surveillance, namely environmental monitoring, continues to prove useful as an additional surveillance tool. It is continuing in Egypt and was expanded in Pakistan to cover important cities (Karachi, Lahore, Multan, Peshawar, Quetta and Rawalpindi).

The surveillance system in the Region is supported by a network of 12 laboratories

performing at high standard. All network laboratories passed the WHO proficiency panel tests for both poliovirus isolation and intratypic differentiation (ITD) testing and all laboratories are fully accredited.

The regional poliovirus network laboratories are maintaining certification standard performance indicators. The workload of the laboratory network is immense. During 2010, nearly 27 000 specimens from cases and contacts were processed, which is 4% more than in 2009. Overall, 94% of specimens had culture results within 14 days, 98% had ITD results within 7 days of virus culture positive and in 97% of AFP cases, the final laboratory testing results were provided within 45 days of paralysis onset. WPV and VDPV continue to be detected with speed and accuracy. The rRT-PCR methods for characterization of polioviruses have been implemented in ITD laboratories.

The regional reference laboratory in Tunis has been accredited as the second WHO polioviruses nucleotide sequencing laboratory, in the Region, in addition to the regional reference laboratory in Pakistan, which is providing good quality and

timely nucleotide sequencing results of all programmatically important polioviruses isolated from AFP and environmental samples. Bio-safety training modules were introduced in all regional network laboratories in 2010.

3.4 Risk assessment for wild poliovirus outbreak following importation

All polio free countries in the Region have developed and put in effect their national plans for preparedness for poliovirus importation. Several tools were used to assess preparedness including monitoring and analysing the immunization history of AFP cases as a proxy to population immunity, monitoring surveillance indicators and conducting surveillance reviews.

A risk assessment model was developed by the Regional Office to assess the risk for WPV outbreak following importation with the objective of timely alerting the countries, helping decision-making in prioritizing technical assistance and providing data for

advocacy and funding requests. The model is regularly used in reviewing the situation in the polio free countries of the Region. Recent risk reviews are highlighting Somalia and Yemen as high risk countries with an alarming number of unvaccinated children and large proportions of unprotected children (Figure 5).

3.5 Improving the quality of life of polio survivors

The regional polio eradication programme is continuing its efforts to improve the quality of life of children with polio-related disabilities. The specific objectives of these efforts are to enhance the mobility and dignity of children with disabilities resulting from polio and to facilitate their integration into society through the provision of the services needed for physical and social rehabilitation. These services include physiotherapy, provision of orthotics and of corrective devices and facilitating schooling, thus helping polio survivors to become independent and productive members of

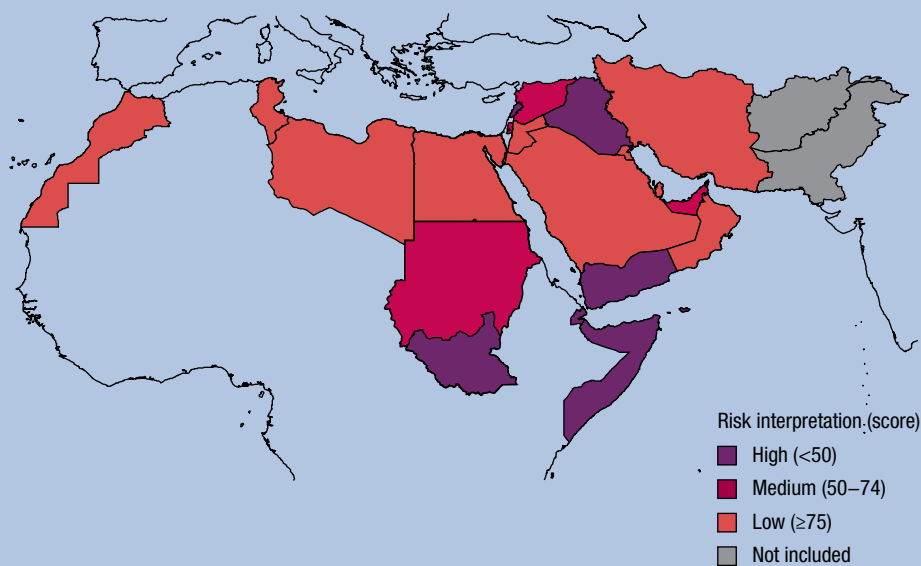


Figure 5 2010 regional risk assessment by programme



The programme is providing physical and social rehabilitation services to polio affected children

the community. After the success of this initiative in Pakistan, the Regional Office is now expanding similar services to polio-affected children in Afghanistan.

4. End game issues

4.1 Laboratory containment of wild poliovirus and potential infectious material

The main objective of this very important activity is to minimize the post-eradication risk of reintroducing wild polioviruses or Sabin strains from the laboratory to the community particularly after OPV use has been stopped. This is primarily done through destruction and prohibition of poliovirus material except in essential facilities in

a minimum number of countries. These countries make plans for the management of this risk at the essential facilities, through the primary safeguards of containment and secondary safeguards of location.

All countries of the Region, except Afghanistan, Pakistan and Somalia, have reported completion of Phase 1 laboratory survey and inventory activities of laboratory containment of polioviruses and potential infectious material. All 19 countries that have completed Phase 1 of containment activities except Lebanon have submitted documentation of the quality of the containment activities.

4.2 Certification of poliomyelitis eradication

The Regional Commission for Certification of Poliomyelitis Eradication (RCC) held two meetings in 2010. In its first meeting, 4–6 May, abridged annual updates for 2009 from Bahrain, Islamic Republic of Iran, Iraq, Jordan, Kuwait, Lebanon, Libyan Arab Jamahiriya, Morocco, Oman, Qatar, Saudi Arabia, Syrian Arab Republic, Tunisia and United Arab Emirates were discussed, along with final national certification documentation from Egypt and Palestine and annual updates for 2009 from Somalia and Yemen. All were accepted except the abridged annual update of Lebanon which was deferred until the national certification commission could provide evidence that surveillance has improved to the level required for certification.

In its second meeting, 19–20 October, basic national documentation from Sudan was discussed, along with the abridged annual update for 2009 of Djibouti and provisional national certification documentation submitted by Afghanistan

and Pakistan. The basic national document of Sudan was accepted with emphasis on the need to continue to maintain the performance of surveillance and to ensure high levels of immunity through improved routine immunization and supplementary immunization activities. Djibouti's abridged annual update for 2009 was deferred due to unsatisfactory performance of the AFP surveillance system. As for the provisional reports of Afghanistan and Pakistan, the RCC expressed appreciation for the efforts of the national certification committees and the fact that surveillance efforts have been generally maintained at the expected standard.

5. Technical and financial support to countries

In 2010, WHO Technical support to the regional polio eradication programme was maintained through the recruitment of 41 international staff supported by another 15 short-term (3 months) officers (STOP team) seconded from the Centers for Disease Control and Prevention (Atlanta), national professional officers and 248 national medical officers supported by 798 other national staff.

In addition, teams of experts constituting both regional and country technical advisory groups extend technical support to the national programs on strategic directions. All polio staff are extending support to the Expanded Programme of Immunization (EPI), as well as contributing to other priority and emergency health programmes at country level.

Most countries of the Region continued to provide much of the required resources for the eradication effort, particularly with respect

to routine immunization and surveillance. In addition, considerable external financial resources were secured to support national activities, especially operational expenses for supplementary immunization activities, technical support and the resources required to continue surveillance activities. External resources provided to support the planned activities through WHO for 2010–2011 is expected to exceed US\$ 120 million. The main contributors of these funds are Rotary International, the Governments of Canada, the United States of America and United Arab Emirates, Bill and Melinda Gates Foundation, Department for International Development (UK), and Governments of Italy, Norway, France, Australia, the Russian Federation and Germany.

6. Coordination with other regions

Coordination with other WHO regions, especially the African, South-East Asia and European regions, is continuing in a very satisfactory manner. Surveillance data and important epidemiological information are exchanged on a weekly basis. Efforts are also made to synchronize dates of supplementary immunization activities, or at least ensure cross-border coordination of such activities.

The Horn of Africa (HoA) Technical Advisory Group is an example of close coordination between countries of the African and Eastern Mediterranean Regions. As well, the laboratories in both regions are extending support to each other. Kenya Medical Research Institute (KEMRI) is supporting Somalia and south Sudan and the laboratory of Sudan is supporting Eritrea. The Regional Office is supporting Nigeria in the development of environmental monitoring.

The Tajikistan outbreak revived the coordination efforts between the Eastern Mediterranean and European regions and MECACAR collaboration. The Pakistan laboratory supported molecular sequencing analysis of Tajikistan viruses. The regular participation of representatives of other regions in regional meetings, such as those of the regional technical advisory group and RCC, ensures exchange of information on lessons learned and useful practices.

7. Regional commitment for polio eradication

The commitment of national authorities in both endemic and polio-free countries to the poliomyelitis eradication goal continues to be at its highest level. The Regional Committee receives annual progress reports and its resolutions set the strategic direction of the programme. The polio eradication programme is directly under the Regional Director, who personally participates in all important activities and also paid several visits to Pakistan, the high priority endemic country of the Region. Together with the Director-General, he met with His Excellency Asif Ali Zardari, President of Pakistan, who announced an emergency plan of action to interrupt transmission by the end of 2011. The prevailing political and security situation in a number of countries is creating a real challenge for the programme.

8. Challenges and future directions

- The main challenge facing the programme is the continued transmission of poliovirus in Pakistan and Afghanistan. In Afghanistan, insecurity and poor access in the southern areas represent the major obstacle. In Pakistan, the key risks to interrupting poliovirus circulation include the complex and unpredictable insecurity in FATA, weak management resulting in lack of uniformity in coverage at subdistrict level, inconsistent government ownership and oversight and the need for performance-based accountability. Interrupting poliovirus transmission in Pakistan and Afghanistan is the foremost priority of the Region. In Afghanistan, together with all partners, efforts will continue on various fronts to ensure safe access and vaccination of children in the southern region of the country, both for routine and supplementary doses. In Pakistan, efforts will continue to ensure full implementation of national emergency action plan.
- Maintaining polio-free status in polio-free countries is a challenge as well as an achievement. Sustaining the interest and commitment of national authorities at all levels in the midst of other priorities, prevailing political instability and insecurity in certain countries and low routine immunization poses a real challenge. Risk assessment analysis for polio-free countries will be regularly and judiciously used for the early identification of increased risk in any country and remedial measures taken to address the situation in a timely manner.

An example is the increased risk in Yemen, which has been exacerbated by the recent political unrest. As soon as there is an opportunity, supplementary immunization activities will be conducted. Refusal of anti-government elements in Somalia to allow the vaccination of almost 800 000 children under 5 is equivalent to a “ticking time bomb”. Efforts will continue and priority will be given to negotiating with these elements to allow vaccination of children.

- Maintaining certification-standard surveillance in all countries is one of the main challenges. WHO will continue to support national efforts in this regard. As well, WHO will support AFP surveillance reviews and will follow up implementation of their recommendations.
- The risk of circulating VDPV in countries with weak routine immunization, particularly in Afghanistan and Somalia, is a real concern.
- Optimizing collaboration with EPI to improve the routine EPI coverage will continue in all Member States. Sustaining population immunity will also ensure preventing the occurrence of VDPV.
- Coordination and collaboration must be maintained and further strengthened with other WHO regional offices and between neighbouring countries of the Region and other regions.
- Securing the financial resources required to implement the regional plan for eradication is an ongoing challenge.
- The potential impact of recent developments in some countries of the Region is a concern, particularly in the Libyan Arab Jamahiriya which borders Chad, where wild poliovirus circulation is continuing. In Yemen, the disruption of routine immunization and inability to conduct supplementary immunization activities is affecting the immunity profile.





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