

Communicable diseases

in the Eastern Mediterranean Region
Prevention and control 2012–2013



World Health
Organization

Regional Office for the Eastern Mediterranean

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Summary

Communicable diseases are among the major causes of mortality and morbidity in the World Health Organization (WHO) Eastern Mediterranean Region. The importance of communicable disease control has increased in recent years due to increased travel, trade, migration and the emergence of new infections. They are estimated to be responsible for around one third of all deaths and one third of all illnesses in the Region.

This report presents the six visions of the WHO Regional Office for the Eastern Mediterranean for controlling and preventing communicable diseases in the Region: elimination and eradication of specific diseases; expanding disease-free areas; providing a safe vaccine for every childhood disease for every child; curbing the HIV/AIDS epidemic; halving the burden of tuberculosis: working towards elimination; and containing new and re-emerging disease threats. It provides an overview of the progress made in the Region for each vision during the period 2012–2013, outlining key achievements, challenges and future directions.

During 2012–2013, WHO worked with country programmes to address the challenges of communicable disease prevention and control. Several countries are facing political instability, social unrest, ongoing conflict and insecurity, all of which have an impact on the control of communicable diseases. In addition, inadequate national capacity, the chronic challenges of weak health systems, and inadequate commitment and financing for communicable disease control have been key challenges.

Significant achievements have been made in the Region in the area of managing and controlling communicable diseases. On elimination of specific diseases, the lymphatic filariasis programmes in Egypt and Yemen have entered the post-elimination phase and guinea-worm disease cases in South Sudan

decreased by 90%, with 113 cases in 2013 compared to 1029 cases by the end of 2011. On the other hand, the burden of measles has continued to reduce and progress has been made towards elimination. Fourteen (14) countries have reached > 95% coverage with first dose of measles-containing vaccine (MCV) at the national level and in the majority of the districts, and 21 countries are providing a routine second dose of MCV.

Major achievements were recorded in elimination of falciparum malaria (the species that may lead to mortality) in two countries where both vivax and falciparum coexist. In 2013, the Islamic Republic of Iran reported only 94 local falciparum cases (a 94% reduction compared to 2005), and Afghanistan reported a 62% reduction compared to 2005. There has been progress towards schistosomiasis elimination and praziquantel (PZQ) distribution in the Region, with Yemen distributing approximately 40 million tablets of PZQ to around 13 million people.

Regional coverage of the third dose of diphtheria/tetanus/pertussis vaccines (DTP3) was 82% in 2013, with 15 countries achieving the target of 90% routine DTP3 vaccination coverage. Despite the situations in Egypt, Libya and Tunisia, immunization programmes have remained strong, with DTP3 vaccination coverage at around 95%. Introduction of new vaccines further progressed where *Haemophilus influenzae* type B vaccine (Hib), pneumococcal vaccine, rotavirus vaccine, and human papillomavirus vaccine were introduced in several countries in the Region.

The number of people living with HIV (PLHIV) receiving antiretroviral therapy (ART) has been increasing steadily while the regional coverage of ART remains close to 20%. The highest ART coverage rates reported are in Morocco (46%), Djibouti (40%) and Egypt (33%). Knowledge of HIV epidemics, though still limited in most countries, is improving, particularly among key populations at increased risk of HIV exposure.

A significant decline in both regional tuberculosis (TB) prevalence and mortality rates has been reported. The Region notifies 7% of TB cases worldwide, and during 2012–2013 around 850 000 TB cases were detected and around 540 000 of these were successfully treated. The treatment success rate for smear-positive TB was 88% for the 2012 cohort and has been sustained above the 85% target for the last five successive years. In 2012, of the 18 000 estimated multidrug-resistant TB (MDR-TB) cases, only around 2300 were detected and 1602 put on treatment. The treatment success rate of MDR-TB cases reached 56%.

The incidence of emerging and re-emerging infectious diseases continued to rise, posing a threat to regional health security. Among the outbreaks from infectious diseases that required substantial assistance from WHO during 2012–2013 in the areas of threat assessment, field investigation and response, were a hepatitis E virus outbreak in South Sudan, dengue fever in Pakistan, yellow fever in Sudan, Crimean-Congo haemorrhagic fever in Afghanistan and Pakistan, and Middle East respiratory syndrome coronavirus (MERS-CoV) in Jordan, Kuwait, Oman, Saudi Arabia, Tunisia, Qatar and the United Arab Emirates.

Introduction

Communicable diseases are among the major causes of mortality and morbidity in the World Health Organization (WHO) Eastern

Mediterranean Region. The importance of communicable disease control has increased in recent years due to increased travel, trade, migration and the emergence of new infections. They are estimated to be responsible for around one third of all deaths and one third of all illnesses in the Region.

Most deaths from communicable diseases in the Eastern Mediterranean Region are caused by no more than six deadly communicable diseases: pneumonia, tuberculosis (TB), diarrhoeal diseases, malaria, measles and more recently HIV/AIDS. In an age of vaccines, antibiotics and dramatic scientific progress, these diseases should have been brought under control. Yet, in most countries of the Region they continue to kill. In addition, the adverse impact of communicable diseases is most severe among the poorest people due to lack of resources and limited or no access to integrated health care, prevention tools and medications. In the Eastern Mediterranean Region, about 12% of the population is living on less than US\$ 1 per day.

This report presents the six visions of the WHO Regional Office for the Eastern Mediterranean for controlling and preventing communicable diseases in the Region, and provides an overview of the progress made in the Region for each vision during the period 2012–2013, outlining key achievements, challenges and future directions.

Vision 1 – Elimination and eradication of specific diseases

Vision 2 – Expanding disease-free areas

Vision 3 – Providing a safe vaccine for every childhood disease for every child

Vision 4 – Curbing the HIV/AIDS epidemic

Vision 5 – Halving the burden of tuberculosis: working towards elimination

Vision 6 – Containing new and re-emerging disease threats

Vision 1

Elimination and eradication of specific diseases



The vision for the Region encompasses the elimination of deadly and disfiguring diseases such as lymphatic filariasis, leprosy and diseases that can be prevented by childhood vaccination, such as measles, and maternal and neonatal tetanus. We also envision the eradication of dracunculiasis (guinea-worm disease) from the Region.

Achievements during 2012–2013

By the end of 2013, guinea-worm disease cases in South Sudan had decreased by 90%, with 113 cases in 2013 compared to 1029 cases by the end of 2011 and 13 137 in 2006. Only 79 villages remain guinea-worm disease endemic. The South Sudan guinea-worm eradication programme recorded two

consecutive zero cases during November and December 2013, thereby coming very close to elimination before moving from the Eastern Mediterranean Region to the African Region. In Sudan, three cases were identified in the south of Darfur State in 2013 after ten years of zero cases. Preliminary surveys suggest that the (water) source of their infections in 2012 was the reintroduction of the parasite due to a patient from South Sudan.

The lymphatic filariasis programmes in Egypt and Yemen have entered the post-elimination phase and have started transmission assesment surveys to verify elimination.

In the area of leprosy elimination, the Enhanced global strategy for further reducing the disease burden due to leprosy 2011–2015 and its operational guidelines were translated and implemented in most affected countries.

The burden of measles has continued to reduce and progress has been made towards elimination. Fourteen (14) countries have reached > 95% coverage with first dose of measles-containing vaccine (MCV1) at the national level and in the majority of the districts, and 21 countries are providing a routine second dose of MCV. A series of activities has been conducted to boost

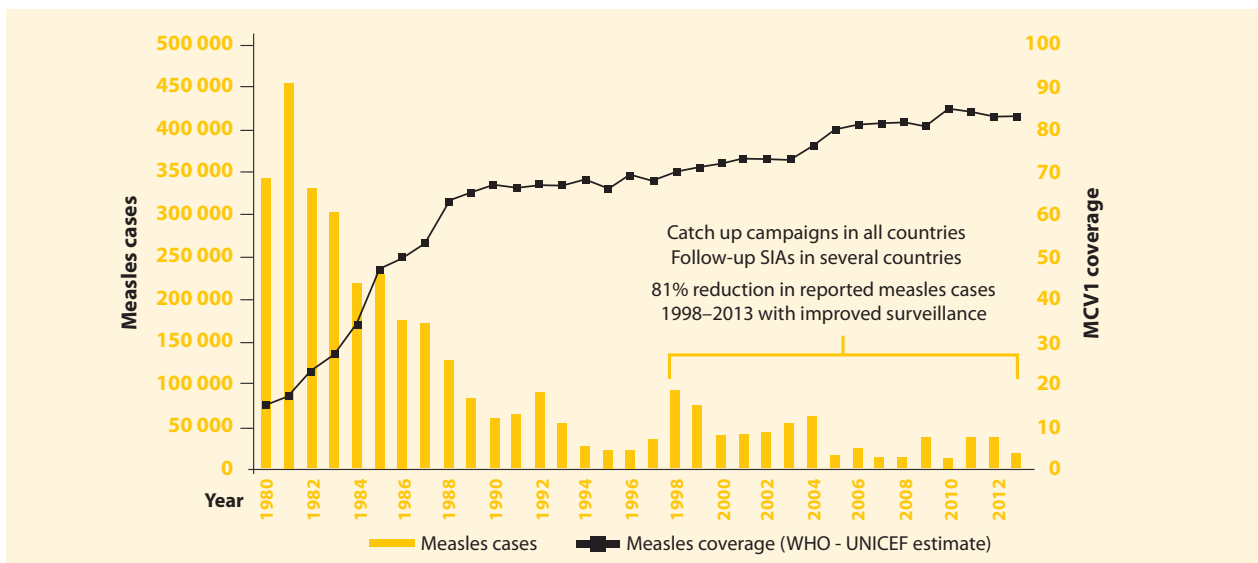


Fig. 1. Reported measles cases and MCV1 coverage in the Eastern Mediterranean Region 1980–2013

population immunity, including nationwide measles supplementary immunization activities (SIAs) targeting a wide age range in Iraq, Jordan, Lebanon, Morocco, Pakistan, Syrian Arab Republic, Sudan and Somalia. Measles nationwide case-based laboratory surveillance has been implemented in 20 countries. Measles case-based surveillance has not been established in Djibouti, while Somalia and South Sudan are implementing sentinel surveillance. The number of measles cases, reported through national case-based surveillance during 2012–2013, dropped by 52%, with an overall 81% drop since the elimination target was set and significant improvement in measles surveillance (Fig. 1). Seven countries are reporting very low incidence rates (< 5 cases/million population) and three countries continue to achieve zero incidence of endemic cases and are ready to verify elimination (Fig. 2). In line with consolidating efforts towards elimination, the theme of the third regional Vaccination Week in 2013 was “Stop measles now!”

With regards to elimination of maternal and neonatal tetanus (MNT), Iraq achieved elimination in 2013. Consolidated efforts are needed to achieve elimination in Afghanistan, Pakistan, Somalia, Sudan and Yemen.

In order to implement the regional strategy on measles and MNT elimination, WHO has focused on planning, implementation and evaluation of the follow-up SIAs.

Issues and challenges

The ongoing conflicts in some countries and a lack of resources and inadequate national capacity to address the different priorities continue to be the major challenges. The crisis in the Syrian Arab Republic has resulted in outbreaks of measles in the country itself, as well as in neighbouring countries including Iraq, Jordan (which had been free of measles for three years) and Lebanon. Lack of adequate resources resulted in delayed implementation of measles SIAs in Pakistan and Sudan, and delayed implementation of tetanus toxoid campaigns in countries that have not achieved MNT elimination.

There is an urgent need for sensitive monitoring and evaluation tools and indicators for assessing interruption of transmission of lymphatic filariasis. Some of these verification tools are either not validated yet or have not yet been endorsed by WHO. The introduction of new tools will be challenging as it requires the involvement of the research sector.

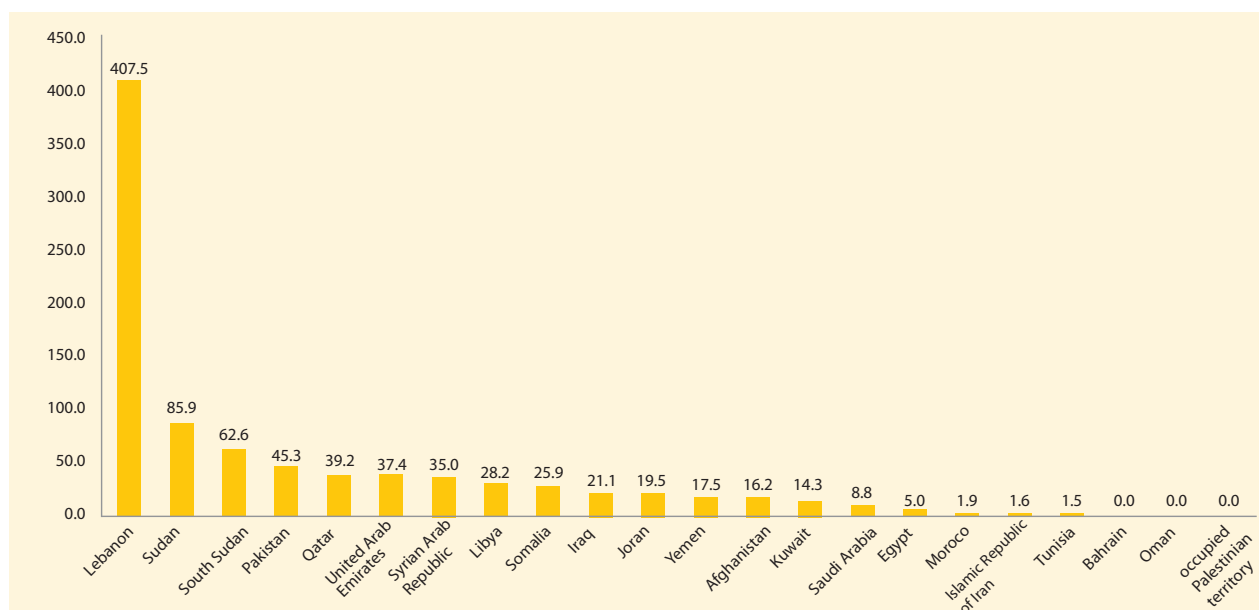


Fig. 2. Progress of Eastern Mediterranean Region countries towards measles elimination: measles incidence rate/million, 2013

Mobilizing politicians and sustaining political commitment to attain elimination of transmission and allocate funding for it will be needed.

With the move of South Sudan to the African Region, some programmes (such as guinea-worm disease) have become less important due to the decrease in the regional burden.

Future directions

WHO will continue to support the implementation of the regional strategy for measles and MNT elimination, including implementation of follow-up SIAs and strengthening measles case-based surveillance. Support includes verification of measles elimination and documentation of MNT elimination, as well as the further strengthening of regional and national committees for measles elimination (the regional verification commission, national verification committees and expert review committee) and conducting a measles surveillance system review. WHO will also continue mobilizing resources for the implementation of the required tetanus toxoid campaigns.

WHO will continue to support national programmes in the implementation of the leprosy elimination strategy where needed. The process of verification of lymphatic filariasis elimination of transmission will be carried out in 2014–2015 in Egypt and Yemen. In Sudan, mapping activities are still ongoing and mass drug administration (MDA) campaigns are being conducted in a few pilot districts.

Vision 2

Expanding disease-free areas



Our vision is to expand areas that are free of malaria, schistosomiasis and leishmaniasis, and achieve a region free of onchocerciasis and trypanosomiasis. This will release large numbers of people and whole communities in the Region from painful and often fatal diseases that can now be prevented.

Achievements during 2012–2013

Major achievements were recorded in the elimination of falciparum malaria (the species that may lead to mortality) in two countries where both vivax and falciparum coexist. In 2013, the Islamic Republic of Iran reported only 94 local falciparum cases, a 94% reduction compared to 2005, while Afghanistan reported a 62% reduction compared to 2005. This is a good achievement, given the spread of resistance to artemisinin drugs in the Greater Mekong subregion.

WHO continued to support the six malaria-endemic countries in the Region (Afghanistan, Djibouti, Islamic Republic of Iran, Pakistan, Sudan and Yemen). In 2013, the countries conducted an in-depth evaluation of their national control programmes to further improve evidence-based, effective and efficient programme management.

Tracking every malaria case, as part of the WHO “T3: Test. Treat. Track.” initiative, is very important and highlights the importance of strengthening malaria surveillance in

countries. To this end, WHO has continued to support surveillance focal points in strengthening malaria surveillance and information in malaria control settings, and national programme managers in ensuring universal access to effective diagnosis and treatment. Sudan and Yemen were supported to conduct malaria indicator surveys during 2012–2013.

To strengthen public health pesticide management, WHO supported countries including Islamic Republic of Iran, Lebanon, Pakistan and Tunisia to: develop pesticide specifications (Islamic Republic of Iran); identify priority activities through the elaboration of a new pesticides law and to strengthen collaboration with other stakeholders (Lebanon); carry out a situational analysis of public health pesticide management to meet the increasing burden of vector-borne diseases and ensure effective and efficient use of pesticides in a manner that contributes to sustainable improvement of public health and the environment (Pakistan); and formulate an action plan (Tunisia).

To demonstrate sustainable alternatives to DDT and strengthen national capacity for vector control, WHO has been collaborating with the Global Environment Facility and the United Nations Environment Programme since 2009. In 2013, WHO conducted a midterm review for project progress evaluation which showed substantial progress and success in the rolling-out of interventions, sound systems of epidemiological and entomological surveillance in place in several countries, and promising preliminary data on cost-effectiveness. It is expected that these studies will make an important contribution to the evidence-base for alternatives to DDT, showing the effect of alternatives on disease prevalence and will provide countries with evidence, lacking prior to project implementation, for decision-making on alternative products and methods of vector control, thus reducing the tendency to revert to use of DDT.

The progress at the policy and institutional level, achieved with co-funding support, is promising because it signals national commitment to the concepts of integrated vector management and/or pesticide management. The project is well on its way towards disposal of 120 tonnes of persistent organic pollutant pesticides and waste in three countries. Sudan has been supported to develop an updated integrated vector management strategy through a situational analysis.

Major achievements have been made in schistosomiasis elimination programmes and praziquantel (PZQ) distribution in the Region, which has increased more than 12-fold compared to the previous biennium. In 2013, the schistosomiasis control programme in Yemen became the largest programme currently operating worldwide, succeeding in record-breaking interventions that distributed approximately 40 million PZQ tablets to around 13 million people in that year. An impact evaluation assessment has shown that infection levels have fallen by more than half since the beginning of the initiative; an accomplishment which has been certified. These impressive results are due to the commitment of all the partners, and the initiative provides a good model of cooperation for other developing countries.

The largest endemic focus of onchocerciasis in Sudan was declared eliminated in 2012 and this has been confirmed. Post-treatment surveillance for confirmation of elimination will continue until 2014. Biannual ivermectin MDAs are planned to continue until 2015 in the two remaining foci of the disease in the country. In Yemen, the onchocerciasis programme is based on morbidity control and has not yet shifted to elimination of transmission.

WHO continues to provide free diagnostic and treatment to all leishmaniasis-affected countries upon request. Rapid diagnostic field tests for visceral leishmaniasis donated



by WHO are generally available and used. The WHO Regional Health Observatory has made leishmaniasis data for the last 15 years available through interactive maps and graphs.

Issues and challenges

The Region spans three different eco-epidemiological zones and includes countries with wide variation in socioeconomic development status. In addition, the unstable political situation is causing many challenges in access to services. The diversity of environments influences the malaria situation and is a major determinant of success in malaria control, even within countries. To address these variations, the regional malaria programme has categorized the countries of the Region into two groups: elimination and control.

In countries aspiring to elimination such as the Islamic Republic of Iran and Saudi Arabia, the major challenges have been: competition to priority with other communicable and noncommunicable diseases, gaining cooperation with malaria-endemic countries in border areas, weak microscopy diagnosis and weak routine health information systems.

On the other hand, in countries aiming at malaria control, the main setbacks have been: weak malaria surveillance systems due to a lack of trained staff and high staff turnover and therefore weak data management, a lack of quality control for microscopy, weak malaria diagnosis and case management, insecticide stock-outs due to lack of logistical support, a lack of data on malaria vector resistance to insecticides, a lack of collaboration with metrological services for malaria outbreak forecasting, a lack of cross-border collaboration, transitions in health systems such as the integration of vector-borne diseases in Sudan and devolution in Pakistan, and a reliance on single donors.

Meeting the need for new sensitive monitoring and evaluation tools for assessing interruption of transmission of neglected tropical diseases, and introducing these new tools, will be challenging as this requires the involvement of the research sector. There is a need to mobilize politicians for sustaining political commitment and funding for these programmes until full elimination of transmission of these diseases.

Future directions

WHO will continue to support countries to achieve global and regional targets related to malaria. Technical support will be provided to implement national strategies. Efforts will focus on promoting the infrastructure for surveillance and strengthening capacity at governorate and district levels, including introduction of immediate notification of malaria deaths and severe malaria cases, and the establishment of malaria information systems at national and subnational levels. Support will focus on increasing coverage of rapid diagnostic tests, scaling-up the use of quality antimalarials and establishing legislation to ban the use of non-recommended ones.

In vector control, support will be provided to develop a geo-referenced atlas of malaria vectors for an insecticide resistance management strategy and enhancing the entomological surveillance system. Finally, efforts will also focus on community-based programmes to scale-up access to diagnosis and treatment in rural areas and enhancing public-private partnerships.

For schistosomiasis, onchocerciasis and soil-transmitted helminth infections, the introduction of sensitive techniques to allow certification of the interruption of transmission will continue.

Vision 3

Providing a safe vaccine for every childhood disease for every child



Our vision is to ensure that every child will receive a safe and effective vaccine for each childhood vaccine-preventable disease. To achieve this, every child will receive a safe and effective vaccine for each childhood vaccine-preventable disease. New and improved vaccines of regional importance will be added to the vaccination schedule as soon as they become available.

Achievements during 2012–2013

Despite the internal challenges and security situations that several countries are experiencing, immunization programmes have remained on track. Regional coverage of the third dose of diphtheria/tetanus/pertussis vaccines (DTP3) was 82% in 2013, with 15 countries achieving the target of 90% routine DTP3 vaccination coverage. Despite the situations in Egypt, Libya and Tunisia, immunization programmes have remained strong, with DTP3 vaccination coverage at around 95%. Yemen has been able to catch-up after a drop in 2011 and 2012, with coverage of DTP3 reaching 88% in 2013 as it comes close to achieving the target.

Introduction of new vaccines further progressed in 2012 and 2013. *Haemophilus influenzae* type B vaccine (Hib) has been introduced in Iraq and Somalia, and Egypt is introducing it 2014. Pneumococcal vaccine was introduced in Afghanistan, Djibouti, Pakistan and Sudan, and rotavirus vaccine

introduced in Iraq, Saudi Arabia and Yemen. Great achievements in the introduction of new vaccines have occurred in Libya where pneumococcal, rotavirus and human papillomavirus vaccines were introduced in October 2013. A meningococcal A conjugate vaccine campaign, targeting people aged 1–29 years, was successfully implemented in Sudan during 2012–2013 with vaccination coverage > 95%. By the end of 2013, of the 22 countries of the Region, Hib vaccine was in use in 20, pneumococcal vaccine in 14 and rotavirus vaccine in eight.

WHO has been working hard to further enhance the introduction of new vaccines through advocacy, the establishment of a regional pooled vaccine procurement system, and the strengthening of evidence-based decision-making through supporting and strengthening regional surveillance networks for diseases preventable by the new vaccines and strengthening national immunization technical advisory groups (NITAGs).

In 2012–2013, WHO's technical support focused on advocacy, improving planning, building national capacity and mobilizing resources to implement planned activities. Training workshops on planning and implementation of the Reach Every District (RED) approach, effective vaccine management, improving surveillance of vaccine-preventable diseases, monitoring and evaluation, and cost-effectiveness analysis on new vaccines introduction, were conducted for staff in many countries.

Programme reviews, effective vaccine management assessments, data quality assessments, measles elimination reviews and surveillance reviews were undertaken in Afghanistan, Bahrain, Djibouti, Morocco, Oman, Pakistan, Qatar, Saudi Arabia, Somalia, Sudan and Yemen. The review and updating of comprehensive multi-year plans was supported in Pakistan, Somalia, South Sudan and Sudan. Cost-effectiveness analysis on the

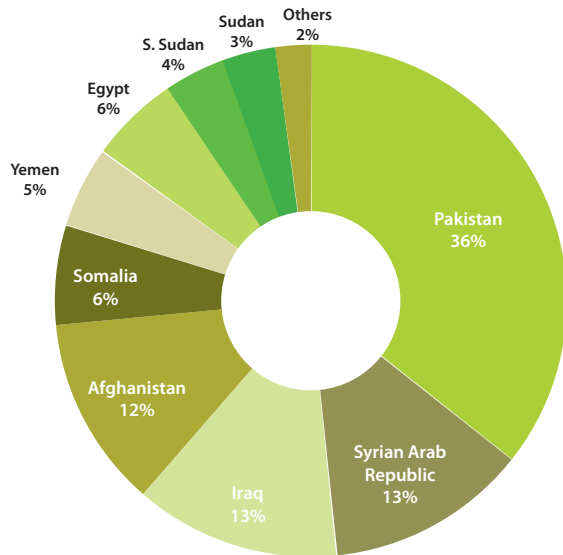


Fig. 3. Distribution of DTP3 to unvaccinated children in the Eastern Mediterranean Region, 2012, based on WHO-UNICEF estimates

introduction of rotavirus and pneumococcal vaccines was supported in Egypt and the Islamic Republic of Iran.

Issues and challenges

Ongoing emergencies, uneven technical and managerial capacity, weak health systems, competing priorities, insufficient government financial allocations and low community awareness of vaccines all continue to be obstacles to achieving immunization targets. The crisis in the Syrian Arab Republic has resulted in outbreaks of measles in the country itself as well as in neighbouring countries including Iraq, Lebanon and Jordan. Lack of adequate resources resulted in delayed implementation of measles SIAs in Pakistan and Sudan, and delayed implementation of tetanus toxoid campaigns in countries that have not achieved MNT elimination.

More than three million infants, mainly in seven countries were not reached with their DTP3 vaccine (Fig. 3). Lower middle-income countries continue to be lagging in new vaccines introduction.

Future directions

WHO will continue supporting immunization programmes to implement regional strategies and national plans within the context of the Global Vaccine Action Plan. Improving routine vaccination coverage, especially in countries with a national DTP3 coverage < 90% and/or district coverage of < 80%, will continue to be the top priority.

WHO will focus on improving national managerial capacity, building human resources capacity, empowering decision-making, developing national comprehensive multi-year strategic plans and supporting countries to reach unreached populations through implementation of the RED approach. Improving immunization data quality and using the data for action will be among the top priority activities. More support will be dedicated to strengthening capacity in all provinces and areas of Pakistan for implementing provincial comprehensive multi-year strategic plans.

WHO will also continue to advocate for implementation of the regional strategy for achieving the hepatitis B control goal, especially implementation of the hepatitis B birth dose. Support will also focus on conducting a hepatitis serosurvey to document progress towards achieving the control target.

All possible support will be provided to countries introducing new vaccines in 2014–2015. The focus will be on enhancing national capacity for informed decision-making through advocacy, strengthening NITAGs, further strengthening regional surveillance networks for burden of disease assessment and establishing a regional pooled vaccine procurement system.

Vision 4

Curbing the HIV/AIDS epidemic



Our vision is to curb the epidemic by adopting the comprehensive package of antiretroviral therapy coupled with prevention and care for HIV/AIDS in all countries of the Region.

Achievements during 2012–2013

The HIV epidemic in the Region has continued growing at a fast pace. By the end of 2013, the estimated number of people living with HIV (PLHIV) in the Region reached 277 000, with fewer than 40 000 new infections occurring in that year. Of these, 2700 occurred among children. Furthermore, 16 000 people died of AIDS in 2013.

Knowledge of HIV epidemics, though still limited in most countries, is improving, particularly among key populations at increased risk of HIV exposure.

Several countries of the Region are experiencing concentrated HIV epidemics among key populations at increased risk. Such epidemics among people who inject drugs are confirmed in Afghanistan (infection rates of 0.3–13.3% in various cities), Egypt (6.5% and 6.8% in Alexandria and Cairo, respectively), Islamic Republic of Iran (a national prevalence of 15%), Libya (87% in Tripoli), Morocco (25% in Nador) and Pakistan (a national prevalence of 27%). HIV epidemics have also been observed among men who have sex with men in Egypt (6.9% in Alexandria), Sudan (0–6.3% in various

cities) and Tunisia (5%). In Pakistan, HIV prevalence among male sex workers ranges between zero and 5.9% and among *hijra* (a traditional transgender subpopulation group) sex workers between zero and 14.9%. Similarly, concentrated HIV epidemics among female sex workers have been registered in Djibouti (a national prevalence of 15.4%), Morocco (5.1% in Agadir) and Sudan (0–7.7% in various cities).

The number of PLHIV receiving antiretroviral therapy (ART) has been increasing steadily. However, the regional coverage of ART remains close to 20%. Available data from eight low- and middle-income countries of the Region show that the highest ART coverage rates are reported in Morocco (46%), Djibouti (40%) and Egypt (33%). All the remaining countries report ART coverage below 30% (Fig. 4). It is worth noting that 90% of the PLHIV eligible for ART in the Region are in just five countries: the Islamic Republic of Iran, Morocco, Pakistan, Somalia and Sudan.

WHO has continued to provide technical support and capacity-building for HIV surveillance through Kerman University of Medical Sciences, a WHO Collaborating Centre in the Islamic Republic of Iran. Regional surveillance reports that summarize country achievements, needs and future perspectives in surveillance are developed and shared with countries annually. WHO also continued its support to governments and civil society organizations in collecting and analysing strategic information, developing national

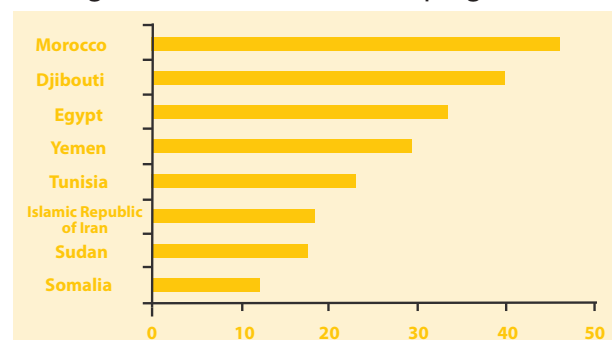


Fig. 4. ART coverage in low- and middle-income countries in the Eastern Mediterranean Region (%), 2013

strategic plans and implementing effective evidence-based approaches.

In 2012, WHO, in collaboration with the Joint United Nations Programme on HIV/AIDS (UNAIDS), United Nations Population Fund (UNFPA) and UNICEF, launched a regional framework for the elimination of mother-to-child transmission of HIV (eMTCT) at a side event of the Fifty-ninth Regional Committee for the Eastern Mediterranean.

In 2013, WHO launched the regional initiative to End the HIV Treatment Crisis. Its immediate objective is to mobilize urgent action to accelerate treatment access. For this purpose, WHO has developed a guide and tools, known as HIV test-treat-retain (TTR) cascade analysis, to assist countries in analysing gaps, lost opportunities and potential remedial actions along the continuum of prevention, testing, care and treatment. So far five countries have carried out the TTR cascade analysis.

WHO and UNAIDS have developed a joint advocacy report for treatment acceleration. The report was presented to the ministers of health at the Sixtieth Regional Committee for the Eastern Mediterranean. The ministers issued a resolution urging Member States to set ambitious annual HIV testing and treatment targets and to take urgent action to accelerate treatment access, and requesting the support of WHO in this (EM/RC60/R.1).

Furthermore, WHO disseminated the updated WHO consolidated ART guidelines to countries at a regional dissemination workshop. Fifteen countries of the Region have updated or are in the process of updating their HIV treatment guidelines accordingly. In addition, WHO has developed basic HIV training and stigma reduction in health care settings modules which were piloted in two countries.

The twenty-first intercountry meeting of national AIDS programme managers, held in Morocco in September 2013, discussed

progress and needed actions for the scale-up of ART and eMTCT. World AIDS Day advocacy material was disseminated to encourage people to seek or accept HIV testing when offered (2012) and encourage decision-makers to improve access to ART (2013).

Issues and challenges

Although the overall prevalence of HIV in the Region is low, the HIV epidemic has been steadily increasing. National responses have been challenged by the nature of the epidemic which is concentrated in key populations at increased risk of HIV exposure. The biggest obstacle is that the majority of PLHIV do not know their HIV status. There is limited experience in countries, including among civil society organizations, in implementing the most efficient approaches to increasing demand and providing services for HIV testing among those most likely to be HIV positive. Ensuring the continued engagement of PLHIV with health services along the continuum of care is another challenge. An overarching concern remains the high levels of stigma and discrimination against PLHIV, particularly in health care settings.

The sustainability of gains made in national HIV responses is also challenged by the fact that, in most low-income countries of the Region, the HIV response is largely dependent on external donor funding. This is a reflection of the limited political commitment and low priority given to HIV in countries.

Future directions

The vision of the regional initiative to End the HIV Treatment Crisis is reaching universal ART coverage by 2020. In the short term, the initiative aims at accelerating HIV treatment, in line with the regional strategy for the health sector which aims at achieving regional ART coverage of at least 50% by 2015. To achieve this, WHO will continue to advocate to governments and their partners for commitment and investment

to end the HIV treatment crisis. It will support countries in collecting and analysing strategic information, optimizing policies, strategies and service delivery approaches, planning for accelerated treatment scale-up, and strengthening and expanding the involvement of civil society organizations in scaling-up HIV diagnosis and treatment.

Vision 5

Halving the burden of tuberculosis: working towards elimination



Our immediate vision is to sustain the decline in tuberculosis incidence and halve the prevalence and deaths from tuberculosis in the Region by 2015 compared to the baseline in 1990. In the long term, we will strive to eliminate tuberculosis in the lifetime of the first child born in this millennium.

Achievements during 2012–2013

The Region notifies 7% of tuberculosis (TB) cases worldwide. During 2012–2013, around 850 000 TB cases were detected and around 540 000 of these were successfully treated. The treatment success rate for smear-positive TB was 88% for the 2012 cohort and has been sustained above the 85% target for the last five successive years.

A significant decline in both regional prevalence and mortality rates has been reported. In 2013, the Region maintained the halving of TB mortality compared to 1990. While there has been a considerable reduction in the prevalence since 1990, based

on statistical forecasting it is expected that the Region will not halve the TB prevalence rate. The incidence of TB stagnated during 2012–2013, after a slow decline of less than 1% per year during 1990–2010. However, 12 out of 22 countries in the Region achieved or exceeded the 70% target for case detection, and 13 out of 22 countries reached or exceeded the global target of an 85% treatment success rate.

The challenge of multidrug-resistant TB (MDR-TB) calls for further scale-up. Of the 18 000 estimated MDR-TB cases, only around 2300 were detected in 2012 and 1602 put on treatment. The treatment success rate of MDR-TB cases reached 56%. Weak health systems and financial constraints are preventing wider scale-up.

WHO has continued its support to countries to ensure the provision of quality TB care. The main focus has been on building the capacity of countries to develop national strategic plans through quality situation analysis. As a result, 14 countries developed, or updated, their multi-year national strategic plans for post-2015. In addition, several countries updated or developed their TB, MDR-TB and public-private mix guidelines (Afghanistan, Djibouti, Morocco, Oman, Pakistan, Somalia, Sudan, Syrian Arab Republic and Yemen).

Monitoring and technical support missions and training on monitoring and evaluation, and surveillance, were undertaken in several countries including Afghanistan, Djibouti, Egypt, Iran (Islamic Republic of), Iraq, Libya, Morocco, Oman, Pakistan, Qatar, Saudi Arabia and Tunisia. In addition, ongoing online technical support was provided during 2012–2013.

TB medicines were secured through the Global Drug Facility in 17 countries in the Region and a database (the e-warning system) was developed in 2013 to follow up on the stock situation at country level. Countries were supported to address their medicine needs and stock-outs.

Within the context of the current security situation in the Region, the regional Stop TB programme was requested by the Global Strategic and Technical Advisory Group for TB in 2011 to lead the process of updating WHO guidance on TB management in complex emergencies. The first meeting was held in 2012 to review country experience and literature, and to develop a draft contingency work plan and framework. However, due to various factors, the second meeting to finalize the package of TB management in complex emergencies was postponed to 2014.

The interest of countries in operational research has increased, along with an improvement in their capacity, in coordination with academia. Proposal development workshops were organized for three countries and 12 protocols were developed. Technical support was provided to Pakistan, occupied Palestinian territory and Somalia to develop their Capture TB survey protocols and revise their estimated TB burden along with related monitoring missions.

The Regional Green Light Committee was established at the end of 2012 and held two meetings during 2012–2013 to develop a regional workplan and revise 15 MDR-TB mission monitoring reports to help countries plan for proper MDR-TB management. Ten countries in the Region have developed plans for ambulatory MDR-TB care and Afghanistan, Iraq, Somalia and Yemen have started treating patients.

Access to new diagnostics increased in Afghanistan, Egypt, Islamic Republic of Iran, Pakistan, and Sudan, and access to first and second line culture and drug-susceptibility testing (DST) is improving slowly, with nine countries having at least one DST facility per five million population and 13 countries having at least one culture facility per five million population. Five countries finalized the TB drug resistance survey during 2012 and four more were supported in 2013 to develop a protocol to conduct it.

Screening for HIV among TB cases is still limited, with 58 498 TB cases being tested for HIV. The same is true for HIV cases, with 15 012 HIV-positive cases being screened for TB. HIV was identified in 2020 TB cases; 1010 of these were placed on co-trimoxazole preventive therapy and 881 on ART, while 243 HIV-positive cases were put on isoniazid preventive therapy. Finally, despite the increase in TB financing, domestic funds did not exceed 32%, leaving a financial gap of 16% in 2013.

Issues and challenges

The security situation in the Region is increasingly affecting TB achievements, with the resulting population movements creating overburden due to management of TB among migrants. This population movement may contribute to a change in the regional epidemiology of TB.

Universal access to TB care is the main challenge for TB control in the Region. The regional case detection rate which was 63% (56–71%) in 2012 is still far from the target of universal access by 2015. Underlying factors include insufficient identification of suspected TB cases, weak laboratory capacity, limited active case finding among high-risk groups, and limited TB notification by private and public providers not affiliated to the national TB programme leading to questionable TB incidence estimates in some countries that require careful revision.

Access to diagnosis and proper treatment, with follow-up, remains limited for MDR-TB. As a result, MDR-TB case detection is very low (6%) and enrolment on MDR-TB treatment is still lower.

The local capacity for data analysis is still limited in many countries and the current infrastructure is not able to accommodate the increasing need for computerization at lower levels and real time networking.

Future directions

WHO will continue to support countries to reach missed TB cases through updating TB legislation, involving all related stakeholders, improving TB detection among vulnerable groups (including for TB/HIV cases), improving TB surveillance and data analysis capacity, and ensuring rapid uptake of new innovations. WHO will work with national programmes to ensure that every MDR-TB patient has access to quality diagnosis, treatment with a sustained and sufficient supply of medicines and follow-up. Efforts will be focused on revitalizing TB elimination and pre-elimination initiatives through sustainable cost-effective national strategies and by mobilizing resources from donors and partners to close resource gaps and focusing on the utilization of local resources that reflects the high political commitment given to TB.

Vision 6

Containing new and re-emerging disease threats



With the extension of global air travel, any newly emerging or re-emerging disease threats can quickly spread and become global health emergencies. The Region must be prepared to respond rapidly to any emerging or re-emerging acute disease threats. The earlier a disease threat is identified, the easier it is to contain.

Achievements during 2012–2013

During 2012–2013, the incidence of emerging and re-emerging infectious diseases continued to rise, posing a threat to regional health security.

Outbreaks from infectious diseases that required substantial assistance from WHO during 2012–2013 in the areas of threat assessment, field investigation and response, included a hepatitis E virus outbreak in South Sudan, a hepatitis A virus outbreak in Jordan and northern Iraq, dengue fever in Pakistan, meningococcal meningitis in South Sudan, yellow fever in Sudan, a severe influenza outbreak in Palestine, Crimean-Congo haemorrhagic fever in Afghanistan and Pakistan, and the Middle East respiratory syndrome coronavirus (MERS-CoV) in Jordan, Kuwait, Qatar, Oman, Saudi Arabia, Tunisia and the United Arab Emirates. The international outbreak response was coordinated successfully by WHO to contain the outbreaks and prevent the risk of international spread.

WHO assisted five countries (Egypt, Islamic Republic of Iran, Jordan, Oman and Pakistan) in the Region to estimate the burden of influenza in the general population using routine surveillance data. Burden estimates were presented at the annual meeting of the Eastern Mediterranean Acute Respiratory Infection Surveillance (EMARIS) network. In 2012, a regional training course was organized for front-line health care workers on early recognition, detection and response to influenza and other acute respiratory infection outbreaks in the community. Similar national level training courses were supported in Djibouti, Jordan, South Sudan, Sudan and Yemen.

To improve preparedness for pandemic influenza, a five-year plan has been developed for increased use of seasonal influenza vaccines. The plan aims to stimulate seasonal influenza vaccine uptake and drive long-term demand for vaccines. This may eventually help to increase the demand for pandemic influenza vaccines in the Region.

Tools were developed for the surveillance of health care-associated infections and guidelines produced for the prevention of infections associated with health care for acute viral haemorrhagic fever.

WHO supported the health authorities of the Saudi Arabia to improve public health preparedness measures for the Hajj in 1433/2012 and 1434/2013 in order to prevent the risk of international spread of diseases associated with the pilgrimage. In South Sudan, an epidemic risk assessment of meningitis was conducted to identify the hotspots for potential epidemics in order to target the local population with a preventive vaccination campaign.

In view of the persistent threats from MERS-CoV, the sentinel surveillance system for severe acute respiratory tract infections (SARI) was expanded in a number of countries in the Region in 2013, to enhance the capacity to detect, diagnose, and respond to outbreaks caused by any novel influenza or respiratory viruses. A training course on data management for countries with a functional surveillance system for influenza and SARI was organized in 2013 to build capacities for early detection, diagnosis and response to influenza and other respiratory disease outbreaks.

To improve public health preparedness to prevent MERS-CoV from evolving into an international public health emergency, a series of meetings was held during 2013 to collect information on the origin and transmission of the virus, and to put in place a collective response plan to improve vigilance and detection, strengthen global preparedness and responses to this global threat, and identify the source of human infection and routes of transmission.

As the source of human infection and routes of transmission of MERS-CoV have remain unknown to the world's scientific communities since the virus emerged in 2012, WHO has worked with the affected countries to identify the public health research agenda. In collaboration with the affected countries in the Region, WHO, the Food and Agriculture Organization of the United Nations (FAO) and the World Organisation for Animal Health (OIE) have developed a research plan to trace the routes of transmission/exposure responsible

for the sporadic introduction of MERS-CoV in human populations.

A vaccination campaign, supported by WHO, using oral cholera vaccine (OCV) was undertaken at a refugee camp in South Sudan to prevent cholera amongst an estimated 160 000 refugees who had fled to the country due to the ongoing conflict in the region. This was the first ever preventive campaign done on a large scale using a newly WHO pre-qualified OCV.

Due to the humanitarian emergency in the Syrian Arab Republic and its neighbouring countries, WHO has continued to support the national health authorities to scale-up epidemic preparedness. Risk assessments were conducted in Egypt, Iraq, Jordan and Lebanon, and training courses on the management of outbreaks for front-line health care workers were held in Iraq, Jordan and the Syrian Arab Republic. Early warning surveillance systems for detecting outbreaks were established and rapidly scaled-up in Iraq, Jordan, Lebanon and the Syrian Arab Republic, while country capacities for diagnosis and detection of infectious diseases were enhanced in all the countries affected by the Syrian conflict.

Pakistan was supported to build a strategic plan for control of dengue fever drawing on the lessons learnt during the worst outbreak in the history of Pakistan that took place in 2011.

As Somalia faces the recurrent threat of cholera epidemics, WHO, in collaboration with the Centers for Disease Control and Prevention (CDC), Atlanta, UNICEF and USAID, organized a technical consultation to develop recommendations for sustainable solutions for control of cholera in the face of the decades-long acute humanitarian emergency in the country through the development of a regional strategic framework for prevention and control of cholera.

Issues and challenges

Containing public health threats from epidemic-prone diseases requires developing, strengthening and sustaining adequate surveillance and response capacities of countries for the identification, detection, assessment, prevention and control of these emerging health threats. Capacity-building activities therefore remained at the core of the programme's activities during 2012–2013. Preventing outbreaks amongst the conflict-affected populations of the Syrian Arab Republic has been a formidable challenge as the escalation of the conflict has resulted in a large number of displaced populations in the Region with an aggravated risk of the spread of epidemic diseases amongst these vulnerable populations. Combating the rapidly progressing and potentially catastrophic threat from antimicrobial resistance is another enormous challenge.

Future directions

WHO will continue to enhance the capacities of countries to prevent, detect and respond to outbreaks of infectious diseases and to make the Region safe and secure from the health threats posed by the emergence of any dangerous pathogen. The emergence of MERS-CoV is a stark reminder that novel viruses are of global concern. They will continue to emerge and to challenge global health resilience and the capacity to prevent and contain these threats. Therefore, developing sustainable capacities in countries for preparedness, surveillance and response for the containment and control of health threats from epidemic and pandemic-prone diseases will remain central to the work of WHO in the Region.

International Health Regulations (2005)



In order to implement the International Health Regulations (IHR) 2005, a time frame has been set out within which States Parties are to develop, strengthen and maintain national core capacities. According to the provisions of Articles 5 and 13, and Annex 1, of the IHR (2005), State Parties should have met their IHR (2005) obligations by June 2012 and institutionalized mechanisms to maintain them after that date. In the Eastern Mediterranean Region, only the Islamic Republic of Iran has implemented its plan of action for meeting these obligations. The other 20 State Parties obtained a two-year extension until June 2014, except for Somalia which has not submitted a request for extension.

Data collected in 2013 through the self-assessment IHR monitoring tool, with a 100% response rate, revealed an average score across the capacities of 70% as compared to 64% in 2012. The majority of requirements for legislation, national IHR focal point (IHR NFP) functions and operations, indicator-based surveillance that includes an early warning function for the early detection of a public health event, public health emergency response mechanisms, infection prevention and control, laboratory services for testing for priority health threats and surveillance, and response to zoonoses have been met by State Parties in the Region.

WHO organized two IHR (2005) stakeholder meetings in Morocco and Jordan in 2012 and 2013, respectively, to identify national priorities and strengths, and to develop regional and subregional strategies to fill the existing gaps. The main challenges identified by the countries in the Region were for establishing a comprehensive legal framework, enhancing multisectoral cooperation and coordination, empowering IHR NFPs, establishing event-based surveillance, mapping potential hazards and developing all-hazard contingency plans, strengthening core capacities at points of entry, as well as core capacities to handle chemical and radiation emergencies, developing and implementing national risk communication policies, strengthening laboratory biorisk management capacities, and developing the capacity of human resources for all core capacities.

WHO continues to support Member States to meet the challenges through the provision of technical support and conducting regional and subregional meetings and training workshops to strengthen national capacities, particularly in the areas of: coordination among the different IHR (2005) stakeholders at national levels, field epidemiology, laboratory quality management systems, national influenza centres, surveillance and response at points of entry, and ship inspection and issuance of ship sanitation certificates.

In-country missions and table top exercises were carried out in Bahrain, Egypt, Islamic Republic of Iran, Jordan, Morocco, Oman, Pakistan, South Sudan, Sudan, Tunisia, United Arab Emirates and Yemen. Furthermore, the WHO Regional Office for the Eastern Mediterranean is collaborating with the WHO Regional Office for Europe to support neighbouring countries in the two Regions to build their capacities to meet the requirements for joint points of entry.

WHO will continue to strengthen its collaboration with international organizations and agencies at the global and regional

levels to gear up the implementation of the regulations. WHO is monitoring the implementation of IHR (2005) and reporting the progress and challenges to the World Health Assembly and the Regional Committee for the Eastern Mediterranean.

Technical support for Global Fund-related activities

The Global Fund to Fight AIDS, Tuberculosis and Malaria is a major financing institution founded in 2002 to scale-up the global response to HIV/AIDS, TB and malaria. Up to 2014, the Global Fund has approved 1114 proposals worth US\$ 30.4 billion through 10 application rounds. Of these, 100 proposals worth US\$1.7 billion have been approved for 14 eligible countries in the Eastern Mediterranean Region: Afghanistan, Djibouti, Egypt, Iran (Islamic Republic of), Iraq, Jordan, Morocco, Pakistan, occupied Palestinian territory, Somalia, South Sudan, Sudan, Syrian Arab Republic, Tunisia and Yemen. Among the approved grants for the Region, 31 were for HIV/AIDS, 40 for TB and 26 for malaria. Two countries in the Region are also benefitting from the Global Fund through its health systems strengthening component.

WHO plays a key role in supporting countries in Global Fund-related activities through overall grant management activities and facilitating proposal development. It also provides secretariat support to the Eastern Mediterranean Region constituency of the Global Fund Board. In 2012–2013, this logistical and technical support ensured the participation of representatives from 14 countries of the Region in Board proceedings and governance processes.

Communicable diseases are among the major causes of mortality and morbidity in the WHO Eastern Mediterranean Region and pose major impediments to social and economic well-being. This report provides an overview of the status of communicable diseases in the Region and progress in disease prevention and control during 2012–2013 through six visions.

For further information

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