

Communicable diseases

in the Eastern Mediterranean Region
Prevention and control 2010–2011



World Health
Organization

Regional Office for the Eastern Mediterranean

WHO Library Cataloguing in Publication Data

World Health Organization. Regional Office for the Eastern Mediterranean

Communicable Diseases in Eastern Mediterranean Region: Prevention and Control 2010-2011 report / World Health Organization. Regional Office for the Eastern Mediterranean

p.

WHO-EM/DCD/008/E

1. Communicable Diseases - Eastern Mediterranean Region 2. Communicable Disease Control – Eastern Mediterranean Region 3. HIV - prevention and control 4. Acquired Immunodeficiency Syndrome - prevention and control 5. Tuberculosis - prevention and control 6. Vaccines 7. Safety Management I. Title II. Regional Office for the Eastern Mediterranean

(NLM Classification: WA 110)

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Design and layout by YAT Communication

Printed by the WHO Regional Office for the Eastern Mediterranean

Document WHO-EM/DCD/008/E

Summary

Communicable diseases are among the major causes of mortality and morbidity in the Eastern Mediterranean Region. Among the challenges to controlling these diseases, foremost is the inadequate structure, technical and managerial capacity of the immunization programmes in some countries, resulting in the inability to meet control, elimination and eradication targets. In terms of malaria control, challenges include low coverage of malaria diagnostic facilities, weak malaria surveillance and limited capacity for monitoring, prevention and management of insecticide resistance and for the sound management of public health pesticides. For tuberculosis control, identifying missed cases, improving case detection rates, strengthening national reference laboratories and treatment of multidrug-resistant tuberculosis and tuberculosis–HIV co-infection are challenges. Insufficient or unreliable information, low national commitment and domestic investment in HIV programmes and inadequate delivery of prevention, care and treatment services are challenges faced by programmes working on HIV/AIDS in the Region.

Future directions for communicable disease control in the Region include strengthening national surveillance and response capabilities, legislation and bio-risk and quality management in laboratories in line with requirements of the International Health Regulations. Strengthening the regional surveillance networks in order to generate data necessary on new vaccines introduction is another important step. Tuberculosis notification and case detection rates can be improved through scaling up related collaboration between the public and private sectors, conducting active case finding among high-risk groups including people living with HIV/AIDS, strengthening the laboratory network and implementing new diagnostics. Policies need to be revised for HIV testing and service delivery models developed.

Introduction

According to estimates, around one third of all deaths and an equal proportion of all illnesses in the Eastern Mediterranean Region are caused by communicable diseases. Vector-borne diseases, tuberculosis, HIV/AIDS and other sexually transmitted infections, diarrhoeal diseases, pneumonia, measles and other vaccine-preventable diseases are among the most important contributors to morbidity and mortality.

Poverty is a principal challenge to the control of communicable diseases. It is well known that the impact of communicable disease is greater among the poorer segments of communities. Currently an estimated 12% of people in the Region are living on less than US\$ 1 per day, i.e. about 71 million people. As well, health spending in the Region is low. In 2009, average per capita total health expenditure and government expenditure on health in the Region were US\$ 162 and US\$ 85, respectively. Both figures were significantly lower than the global averages of US\$ 845 and US\$ 517.

The Region also faces major challenges in the form of political instability, social unrest, ongoing conflict and insecurity. Some countries in particular are experiencing complex emergencies that have negatively impacted health. Not only are the countries themselves affected, but these emergencies place additional pressure on resources in neighbouring countries as people seek shelter, safety and employment. The challenges posed by communicable diseases are exacerbated by widespread travel, trade and migration in the Region.

The WHO Regional Office for the Eastern Mediterranean works with country programmes to address the challenges of communicable disease. The Regional Office has articulated six visions for controlling communicable diseases in the Region. This report provides an overview of the progress made in the Region for each vision during the period 2010–2011.

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 2010–2011

In the Region, dracunculiasis (guinea-worm disease) is present only in South Sudan. The guinea-worm eradication programme continued to make progress during 2010–2011 as the number of cases reported in South Sudan dropped from 2733 in 2009 to 1797 and 1028 in 2010 and 2011, respectively (Figure 1). The disease is now limited to 6 of the 80 counties of South Sudan, with a containment rate of up to 76% in 2009–2010. About 76% of new cases are reported from only one state, Eastern Equatoria. In Sudan, improvement is still needed in programme activities, including surveillance and reporting.

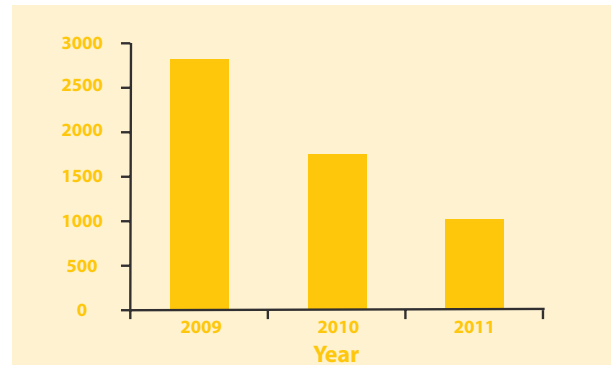


Figure 1. Dracunculiasis cases in South Sudan, 2009–2011

The Region contributes the lowest burden of leprosy worldwide. All countries except one have eliminated leprosy, i.e. achieved prevalence of 1 per 10 000 population or less. In South Sudan the incidence of new cases was 4029 in 2009. South Sudan recently (2007) improved its reporting system and needs to be reassessed. In 2010 the Nippon Foundation pledged to support leprosy programmes in the Region, and the Sasakawa Memorial Health Foundation pledged to support the leprosy programme in Somalia. Training workshops were held for countries with low leprosy endemicity in the Eastern Mediterranean and African Regions in December 2011.

In 2009, the Region was contributing only 1% of the global burden of lymphatic filariasis, and it has since taken further strides towards the elimination of this disease. Egypt and Yemen have succeeded in elimination. Egypt completed the 10th round of mass drug administration (MDA), achieved coverage of 75% of the target population

with at least three MDA rounds, and initiated the use of sensitive tools for verification and confirmation of elimination during 2010–2011. Sudan started correctly re-mapping lymphatic filariasis distribution in eight states in order to implement an MDA control programme.

The Region continued to reduce the burden of measles and make progress towards achieving measles elimination. The number of confirmed measles cases decreased from about 88 000 in 1998 to 10 517 in 2010. All countries have implemented nationwide measles catch-up campaigns. The regional average of measles-containing vaccine coverage, based on reported data, increased from 79% in 2000 to 88% in 2010. Approximately 400 million people in the Region have been vaccinated through supplementary immunization activities since the elimination target was established. All countries have moved to case-based measles surveillance with laboratory confirmation and 19 countries are implementing nationwide surveillance. Djibouti, Pakistan, Somalia and South Sudan are implementing sentinel surveillance. Eight countries are in the process of validating measles elimination.

Issues and challenges

Most of the issues and challenges arise from the ongoing conflicts in some countries and from lack of resources and capacity. The areas with dracunculiasis shrank during 2010–2011; however, the challenge is to sustain adequate surveillance and verification activities in these areas. Leprosy programmes remain weak in countries such as Somalia and Sudan that are facing complex emergencies. In countries that succeeded in eliminating lymphatic filariasis, such as Egypt and Yemen, more efforts are needed in lymphoedema management and disability alleviation.

Future directions

Interventions against dracunculiasis will be intensified in the remaining endemic areas to achieve the eradication target on time. A dracunculiasis surveillance programme will be implemented in the border areas between Sudan and South Sudan to prevent cross-border introduction of cases. National leprosy programmes will continue implementing the enhanced global strategy for further reducing the disease burden due to leprosy. WHO will continue supporting leprosy programmes in need. Sudan requires continued support to finalize the mapping of lymphatic filariasis in order to initiate an MDA programme in the affected areas. Post-MDA surveillance activities need to be extended in Egypt and initiated in Yemen.

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 2010–2011

Malaria remains a major public health problem in six countries (Afghanistan, Pakistan, Sudan, South Sudan, Somalia and Yemen). Between

2000 and 2010, the number of confirmed cases in Afghanistan decreased by more than 50%. In the other five countries large numbers of cases were reported during this period with no discernible downward trend. At present, 13 countries of the Region are malaria-free, 3 are targeting elimination and 6 are targeting malaria control (Figure 2). During 2010–2011, significant improvement was seen in countries targeting malaria elimination including the Islamic Republic of Iran, Iraq and Saudi Arabia, which achieved over 80% coverage of main malaria elimination interventions.

To ensure supply of quality and effective malaria diagnosis and treatment, WHO supported procurement of long-lasting insecticidal nets, insecticides, spraying equipment, artemisinin-based combination therapy and rapid diagnostic tests for Afghanistan, Islamic Republic of Iran, Morocco, Pakistan, Somalia and Yemen using resources from WHO, Global Fund, Gulf Cooperation Council, USAID and Kuwait Patient's Helping Fund. The Regional Office is securing a regional stock of artemether-lumefantrine, which is distributed to malaria-free countries free of charge, in order to treat imported falciparum cases.

In terms of policy guidelines, all nine malaria endemic countries have medium-term plans for malaria control and elimination. Afghanistan, Somalia, Sudan and Yemen updated their national malaria control strategy for 2011–2015. Djibouti initiated a programme review in 2011 to develop a pre-elimination strategy based on new eco-epidemiological evidence.

Afghanistan developed and endorsed a national strategy for community-based management of malaria. Iraq finalized the in-depth programme assessment and used the information to guide the development of a national strategy for prevention of reintroduction 2011–2015.

The Regional Office supported national capacity-building through several regional malaria training courses including the 13th international diploma course on the planning and management of malaria control programmes (Islamic Republic of Iran), the fourth regional course on advanced malaria microscopy and quality assurance (Oman), and training on methods of antimalarial therapeutic efficacy testing and malaria microscopy (Sudan).

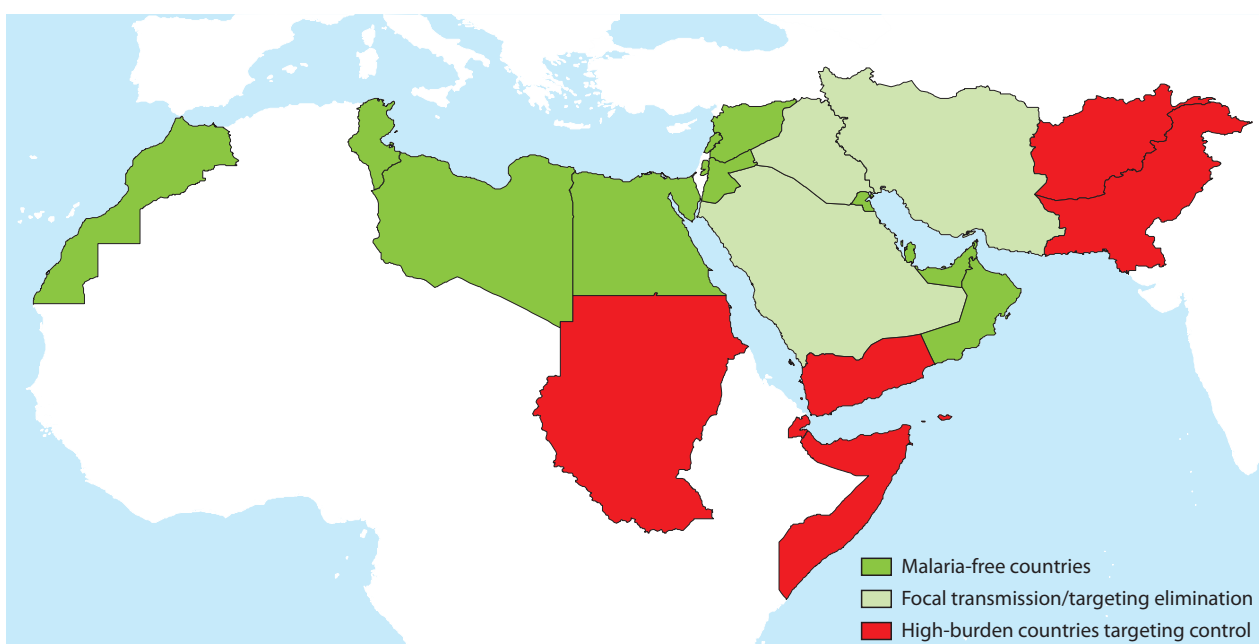


Figure 2. Burden of malaria in countries of the Region, 2011

To strengthen malaria surveillance, the regional malaria database was developed and made available on the internet. Technical support and training was provided to Sudan and Yemen for development of country level databases. Afghanistan was supported to conduct a malaria indicator survey. As part of global surveillance on antimalarial drug resistance, the Regional Office supported Afghanistan, Pakistan, Somalia, Sudan and Yemen to conduct drug efficacy monitoring studies in 2010–2011.

Several countries were provided with test kits and training to conduct field bioassays for monitoring of insecticide resistance. The Regional Office contributed to the development of the World Malaria Reports, 2010 and 2011.

The Regional Office supported countries in developing proposals for the Global Fund Round 10; proposals from five countries were successful. Funds were also secured from the Kuwait Patients' Helping Fund for Somalia and from the United States Agency for International Development for Pakistan and Afghanistan.

In recent years many countries have been successful in reducing mortality and morbidity due to schistosomiasis, including Egypt, Iraq, Jordan, Libya, Morocco, Oman, Saudi Arabia and the Syrian Arab Republic. Morocco recorded the interruption of transmission of urinary schistosomiasis during 2010. Egypt reported a prevalence of below 1% for both urinary and intestinal schistosomiasis, with only a few hotspots remaining in the Delta and Upper Egypt. In Yemen, 1.68 million people were treated despite the civil unrest, while the Somalia programme achieved an increase in drug coverage in schistosomiasis-affected areas during 2010.

WHO supported human African trypanosomiasis centres by providing specific medicines and reagents for screening, diagnosis

and treatment of the disease in South Sudan, where it is endemic. The use of the eflornithine–nifurtimox combination therapy was introduced in 2010 and is being monitored. The new treatment protocol has proved effective with no major adverse effects. However, coverage remained low in 2011, at 0.4% of the population at risk, with 5232 people passively screened and 445 people actively screened. Only 156 new cases were diagnosed and treated in 2010.

Different leishmaniasis entities are prevalent in the Region, each requiring a specific and distinct strategic approach for control. In response to the ongoing outbreak in South Sudan (Figure 3), WHO introduced a combination therapy, sodium stibogluconate plus paromomycin, as first-line treatment. More than 18 000 cases were treated since October 2009, with an average of 1000 cases per month in 2011. WHO provided diagnostic tests and specific medicines, including logistic support to access very remote areas. For cutaneous leishmaniasis, progress was made in standardizing the surveillance system among countries of the Region. A group of experts was appointed by the Regional Office to support countries on cutaneous leishmaniasis. The first regional strategic plan (2012–2016) was developed and regional guidelines for case management on cutaneous leishmaniasis were drafted.

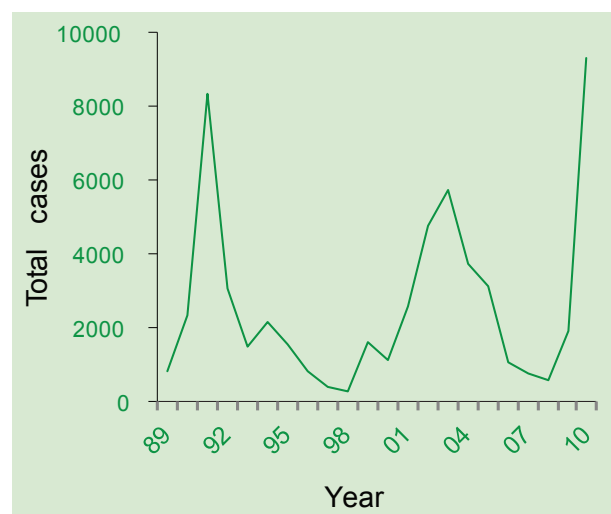


Figure 3. Visceral leishmaniasis cases in South Sudan, 1989–2010

Issues and challenges

Low quality of diagnostic facilities and limited access to confirmation of suspected malaria fevers are the main challenges. Poor compliance with national treatment guidelines, lack of or weak community-based programmes, unregulated private sector, weak leadership and limited programme management capacity, particularly at the district and lower levels, coupled with high staff turnover exacerbate these challenges. The key health system challenges are inefficient procurement and supply management systems and weak malaria surveillance, monitoring and evaluation systems. Collaboration with partners, particularly the Global Fund to Fight AIDS, Tuberculosis and Malaria, has improved financial and technical support for countries, yet the sustainability of this support is not guaranteed.

The main issues and challenges in relation to vector control are limited national capacities to effectively plan and monitor vector control interventions in priority countries, low coverage of key interventions (long-lasting insecticidal nets, indoor residual spraying), spread of vector resistance to insecticides, poor pesticide management, and poor coordination and lack of intersectoral collaboration.

In countries that have eliminated schistosomiasis or reached low endemicity, verification is still needed by sensitive tools requiring expertise and funds that are not always available. Trypanosomiasis in South Sudan remains a major public health problem because disease control activities and surveillance are not implemented at the appropriate level (only 0.3% of the 1.8 million people living in the endemic area were screened for this disease in 2010). In some foci, the disease is already re-emerging. The movement of large non-immune populations into South Sudan constitutes an important

risk for the occurrence of more outbreaks of visceral leishmaniasis if the populations settle in transmission areas.

Future directions

The Regional Office will continue to support countries to achieve global and regional targets related to malaria. Technical support will be provided to implement national plans and donor-funded projects. Efforts will be made to strengthen capacity for epidemiological and entomological surveillance. Target countries will be supported to conduct comprehensive malaria programme review and update their national strategies. The Regional Office will continue improving the capacity of the programmes at all level in various malaria areas through regional training courses.

In 2012–2013, support will focus on scaling up vector control interventions for universal access, implementing studies on alternative vector control methods, strengthening capacity to monitor and manage vector resistance to insecticides, updating vector mapping with insecticide resistance in priority countries, finalizing and publishing the regional framework plan for management of public health pesticides and mobilizing resources for its implementation.

For schistosomiasis, the introduction of sensitive techniques to allow certification of the interruption of transmission will continue in Egypt, Islamic Republic of Iran, Jordan, Saudi Arabia and if the security situation allows, in Libya and the Syrian Arab Republic. With trypanosomiasis re-emerging some foci in South Sudan, disease control activities and surveillance need to be scaled up to prevent an outbreak. With regard to leishmaniasis, there is a need to implement the new standardized approach on case management, focusing on prompt diagnosis and treatment for both the cutaneous and visceral forms.



Vision 3

Providing a safe vaccine for every childhood disease for every child



Our vision is that every child will receive a safe 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. This is the gateway for our ultimate goal: “No child will die from a vaccine preventable disease in our Region”.

Achievements during 2010–2011

Countries achieved remarkable improvement in their immunization programmes during the past two years. DTP3 coverage is now close to or higher than 90% in the majority of countries and substantial improvement in routine immunization coverage was observed in Somalia and South Sudan. Based on reported national data, the regional coverage of DTP3 reached 91% in 2010 (Figure 4). The measles mortality reduction target was achieved 3 years before the target date while several countries are close to achieving the measles elimination target. Moreover, laboratory-based measles surveillance is being continuously strengthened.

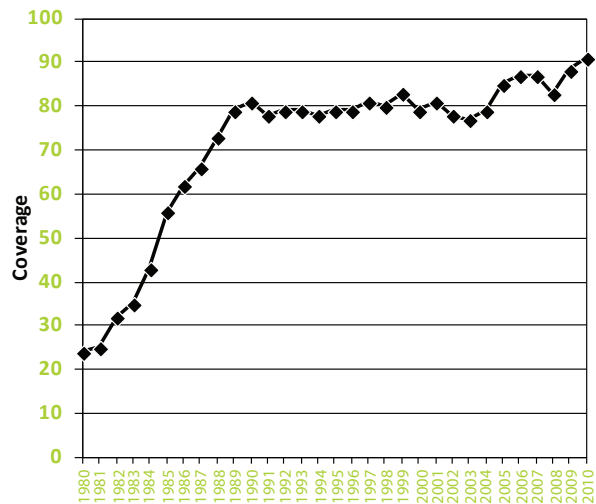


Figure 4. Routine DTP3 coverage in the Region, 1980–2010

Sixteen countries achieved 90% routine DTP3 coverage during 2010. Three more, Djibouti, Pakistan and Yemen, are close to achieving this target. The security situation in several countries has contributed significantly to delays in achieving the target. Fourteen countries achieved greater than 95% MCV1 coverage at national level as well as in the majority of the districts. In 2011, nine countries, Bahrain, Egypt, Islamic Republic of Iran, Iraq, Jordan, Oman, occupied Palestinian territory, Syrian Arab Republic and Tunisia, reported measles incidence close to or <1 per million in the presence of a sensitive and well-functioning surveillance system. Several countries are close to achieving measles elimination. However, the measles elimination target was moved to 2015 as it could not be achieved in 2010.

Measles outbreaks continued in Afghanistan, Pakistan, Somalia and Sudan in 2010 and 2011. The outbreaks were addressed by immunizing 16 million children during 2011 through follow-up measles supplementary immunization activities, child health days and emergency campaigns. The Regional Office facilitated measles case-based laboratory

surveillance in all countries. Nineteen countries perform nationwide measles case-based surveillance, while Djibouti, Pakistan, Somalia and South Sudan are conducting sentinel surveillance. 19 countries have identified the circulating measles virus.

H1N1 pandemic influenza cases were reported in all countries of the Region during 2009 and 2010 with at least 1059 reported deaths. Most countries have developed national pandemic influenza vaccine deployment plans. High-income countries had access to the pandemic influenza vaccine soon after its production. Other countries had access to the vaccine later in 2009 and early 2010 through national procurement or through donation. Iraq and Djibouti had no access to the vaccine. The regional utilization rate of the accessed H1N1 pandemic influenza vaccine during 2009 and 2010 was 14.1%.

New vaccines continued to be introduced successfully in an increasing number of countries. The total numbers of countries that have introduced Hib, pneumococcal and rotavirus vaccines in the Region are 19, 9 and 5, respectively. In addition, Djibouti and Pakistan are preparing for introduction of pneumococcal vaccine in 2012.

To enhance new vaccines introduction, especially in the middle-income countries, the Regional Office is working on establishing a regional pooled vaccine procurement system and raising the awareness of decision-makers on the cost-effectiveness of new life-saving vaccines and their role in achieving MDG4. Countries are currently working on strengthening national immunization technical advisory groups and surveillance for vaccine preventable diseases. Currently, 22 countries have established national immunization technical advisory groups (NITAGs). The majority of countries are currently monitoring district-level EPI data.

In 2011, the Region also focused on advocacy, improving planning, building national capacity and mobilizing resources to implement planned activities. Training workshops on developing country multi-year plans were conducted for concerned staff of several countries. Extensive support continued to be provided to the priority countries, especially Somalia and South Sudan, in order to reach unreached populations through approaches such as the RED (Reach Every District) approach, child health days, periodic intensification of routine immunization and acceleration campaigns and other child survival interventions in Somalia.

A regional vaccination week campaign was initiated in 2010 with the participation of all countries. The campaign focused on advocacy, education and communication to raise awareness of the benefits of immunization. Despite internal unrest in many parts of the Region in 2011, the vast majority of countries participated in the second regional vaccination week in 2011. In-depth programme reviews were undertaken in Punjab (Pakistan), Egypt, Syrian Arab Republic and Qatar to analyse the national immunization programme and suggest remedial actions if needed.

Issues and challenges

Measles outbreaks continued in Afghanistan, Pakistan, Somalia and Sudan in 2011. The situation is further aggravated with the stock-out of measles vaccine in. An estimated 1.5 million infants, mainly in eight countries (seven GAVI-eligible countries plus Iraq), were not reached with their third dose of DTP vaccine. Lower middle income countries continue to be lagging in new vaccines introduction.



Ongoing emergencies, uneven technical and managerial capacity, weak health systems, competing, and insufficient government financial allocations and low community awareness of vaccine continued to be the main hindrances in achieving the immunization targets.

Access to H1N1 pandemic influenza vaccine was a major challenge at the beginning of the pandemic due to the limited global production capacity and lack of regional production of influenza vaccine, combined with inadequate information on the burden of influenza in the Region.

Future directions

Strengthening routine vaccination coverage (especially in countries with national DPT3 coverage <90% and/or district coverage of <80%) will continue to be the top priority. The Region will focus on improving national managerial capacity and building human resource capacity, empowering decision-making, developing cMYP and supporting the countries to reach unreached populations through implementing the RED approach, supplemented by other approaches suitable to local situations. Strengthening monitoring and evaluation systems to use data for action will be among top priority activities. The third regional vaccination week in April 2012, with the theme of “reaching every community”, will be used as an opportunity to further improve vaccination coverage.

More support will be dedicated to strengthening capacity in all provinces and areas of Pakistan for better performance. Implementation of the provincial plans, developed towards the end of 2011 with the support of the Regional Office, will be followed closely and the necessary technical support will be provided.

Regional efforts to accelerate measles elimination will focus on establishing and strengthening the regional and national committees for measles elimination (regional validation commission, national validation committee and expert review committee), conducting measles surveillance system review and validating measles elimination in countries reporting zero cases.

The Regional Office will continue advocating for implementing the regional strategy for achieving hepatitis B control goal, especially implementation of hepatitis B birth dose. All possible support will be provided to countries introducing new vaccines in 2012 or preparing for introduction in 2013. Focus will be placed on enhancing national capacity for informed decision-making through advocacy, strengthening NITAGs, further strengthening the regional surveillance networks for burden of disease assessment and establishing the regional pooled vaccine procurement system. The Regional Office will also focus on strengthening national capacities to better respond to future influenza pandemics. Technical support will be provided to countries to expand the use of the seasonal influenza vaccine and enhance influenza research activities, and regional production of influenza vaccines will continue to be promoted.

The Regional Office will support the establishment of sentinel surveillance systems for influenza and influenza-like illnesses in all countries of the Region and will facilitate the establishment of three more national influenza centres (Jordan, Saudi Arabia and Yemen) in the Region with the acquired capacity for virological surveillance of influenza.

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 2010–2011

The HIV epidemic in the Region has expanded over the past decade, with most countries having evidence to confirm concentrated epidemics in one or more high-risk populations. In 2010, the estimated number of people living with HIV was 560 000. Although the overall HIV prevalence in the Region is still low (0.2%), new infections reached 82 000 (including 7400 children) in 2010.

Concentrated HIV epidemics exist among injecting drug users in Afghanistan (7%), Egypt (6.7%), Islamic Republic of Iran (13%), Libya (22%) and Pakistan (21%). Sexual transmission of HIV is also a major driver of the epidemic in the Region. HIV epidemics are observed among men who have sex with men in Egypt (6%) and Tunisia (5%), while female sex workers have elevated HIV prevalence in Djibouti, Morocco and Somalia.

Major gaps still exist in the knowledge of local HIV epidemics in most countries. The Regional Office continues to support the development of local capacity in HIV epidemiology. In collaboration with UNAIDS and the World

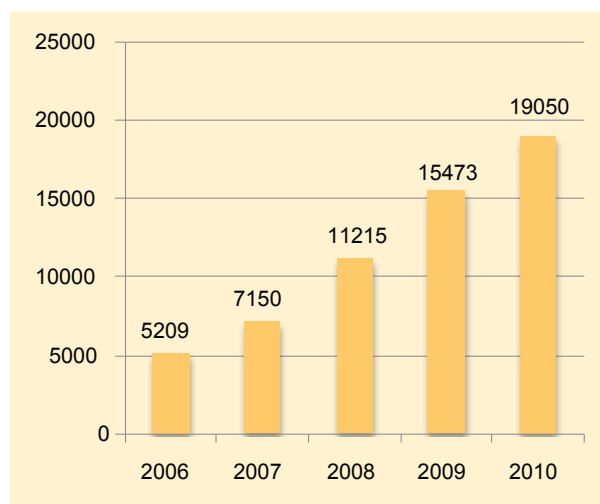


Figure 5. Number of people living with HIV/AIDS on ART, 2006–2010

Bank, a regional resource group of around 15 HIV surveillance experts has been convened, furnished with updates on epidemiological methods and involved in technical support missions to countries. Moreover, the Regional Knowledge Hub for HIV surveillance continues to disseminate technical guidance and to provide training courses for more than 30 national surveillance experts annually. In 2010, a special supplement of the journal *AIDS* was published that focused on the HIV epidemic in the Middle East and North Africa. Antiretroviral therapy (ART) remains the mainstay of treatment, and coverage increased from 15 473 in 2010 to 19 050 in 2011 (Figure 5). However, the overall estimated regional coverage remains low at 10%. Oman has the best estimated coverage with 45% of adults and children living with HIV receiving treatment by the end of 2010, followed by Lebanon (37%) and Morocco (30%). Four countries in the Region contribute 85% of the number of people eligible for antiretroviral therapy: Sudan (93 000), Somalia (25 000), Islamic Republic of Iran (26 000) and Pakistan (22 000).

All countries were introduced to updated WHO HIV treatment guidelines and the Regional Office provided technical support to strengthening of HIV care and treatment programs and service delivery to Afghanistan, Pakistan, Somalia, South Sudan, Sudan and

Yemen. In Pakistan, a continuum-of-care model is being developed in collaboration with UNICEF. In an effort to promote meaningful integration of HIV programmes and services in existing health systems, the Regional Office is developing a methodology for rapid assessment of interactions between HIV programmes and existing health systems and effects on quality, coverage and sustainability of HIV services. The methodology was piloted successfully in Egypt and expanded to include hepatitis.

The 20th national AIDS programme managers meeting discussed priorities for action to accelerate the achievement of targets of the regional strategy for health sector response to HIV, 2011–2015. National AIDS programme managers and partner agencies agreed that the focus for 2012–2013 will be on HIV prevention services for most-at-risk populations.

In collaboration with World Bank and UNAIDS, the Regional Office provided technical assistance to Jordan, Iraq and South Sudan to develop national strategic plans. Countries were supported to secure political commitment, access increased financial resources allocated to HIV and sexually transmitted infections programmes and involve the private sector, civil society organizations and affected people.

In 2011, the World AIDS Campaign in the Region tackled the issue of stigma and discrimination against people living with HIV in health care settings. In this context the film “Asmaa” was awarded a WHO/regional film award in recognition of pioneer work in promoting human rights in health.

Issues and challenges

Although the overall prevalence in the Region is still low, the HIV epidemic has been on the rise since 2001 with annual estimated

new infections among adults and children substantially increasing in the past decade. Approximately 560 000 people are living with HIV in the Region, among them 42 000 children aged 0–14 years. It is estimated that 82 000 adults and 7400 children have been newly infected. AIDS-related deaths have almost doubled in the past decade among both adults and children in the Region, reaching a total of 38 000 in 2010 including 4100 children.

Most people living with HIV do not know their HIV status and are not known to the health care system. Approaches to increasing coverage of HIV testing are not targeting people most at risk and do not contribute sufficiently to the diagnosis of new cases. Civil unrest in several countries of the Region has deferred attention from health in general and from HIV programmes in particular. Lastly, decreased donor funding for HIV programmes and inadequate allocation of domestic resources is threatening the sustainability of HIV services.

Future directions

In line with new global strategies, the regional strategy aims at achieving targets including enrolment of at least 80% of known PLHIV in HIV care and Region-wide coverage of at least 50% of the estimated number of people living with HIV in need with ART by 2015. It promotes strategies for accelerating access for the people at increased risk of HIV, who often belong to marginalized and stigmatized populations, with the aim of reaching at least 20% of them with prevention interventions. The components of the regional strategy include: strengthening health information systems for HIV; fostering political support; broad participation, coordination and adequate and sustained financing; providing quality HIV prevention, care and treatment services and enhancing their utilization; strengthening the capacity of health systems for effective integration of HIV services; and promoting an enabling policy environment.

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 baselines 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 2010–2011

The incidence of tuberculosis has been declining at a rate of less than 1% per year during the period 1990–2010. A significant decline in the regional prevalence and mortality rates has also been reported. In 2010, the Region achieved the global targets of halving tuberculosis mortality as compared to 1990. Reductions in prevalence have been considerable since 1990, and appear to have been accelerated since 2000. Nonetheless, current forecasts suggest that the 2015 target of halving prevalence compared to 1990 will not be reached.

The treatment success rate of smear positive tuberculosis was 88% for the 2009 cohort and has been sustained above the 85% target for four successive years.

The Regional Office continued its focus on building the capacity of national tuberculosis programmes in the field of strategic planning, quality-assured laboratory diagnosis,

monitoring and evaluation, management of multidrug resistant tuberculosis, drug management, infection control, advocacy, communication and social mobilization, revision of estimates and measuring tuberculosis impact. Additionally the Regional Office has supported countries in developing proposals for the Global Fund.

The laboratory network has expanded with an external quality assurance system. The Agha Khan University (Pakistan) laboratory was designated a supranational reference laboratory in 2011. The national reference laboratories in Oman and Islamic Republic of Iran are under assessment for possible designation as well. National laboratories were linked to supranational reference laboratories in the Islamic Republic of Iran, Iraq, Jordan, Lebanon, Morocco, Oman, Sudan, Syrian Arab Republic and Tunisia.

Review missions of programme performance were carried out for Afghanistan, Islamic Republic of Iran, Pakistan and United Arab Emirates, in addition to several technical assistance missions for the practical approach for lung health, drug management, management of multidrug resistance, drug resistance surveys and infection control. The Global Drug Facility continued to support countries in procuring anti-tuberculosis medicines as grants for paediatrics (16 countries) or as direct procurement for adults (16 countries). Several countries were able to limit the sale of anti-tuberculosis medicines to prescriptions, such as Egypt and the Islamic Republic of Iran.

The revised recording and reporting system is now used in all countries, with local adaptations. Countries are regularly submitting quarterly reports online to which the Regional Office provides feedback reports. The electronic nominal recording and reporting system is used nationwide in Egypt, Iraq, Jordan, Somalia and Syrian Arab

Republic. A similar system is used in the Islamic Republic of Iran. A web-based version was developed and has been introduced in Iraq, occupied Palestinian territory, Tunisia and United Arab Emirates. Training on monitoring and evaluation including the web-based system was carried out for Djibouti, Iraq, occupied Palestinian territory, South Sudan, Tunisia and United Arab Emirates.

To assess the burden of tuberculosis, a disease prevalence survey was launched in Pakistan, a capture-recapture study (CAPTURE TB) was conducted in Yemen and Iraq, and training was conducted in Iraq, Jordan, Pakistan and the occupied Palestinian territory. Tuberculosis care among contacts, refugees, prisoners, patients with TB/HIV co-infection and children has also been addressed. Five countries received grants from the TB REACH mechanism to increase case detection. Countries developed advocacy, communication and social mobilization plans and national partnerships. The Regional Office provided technical support to operational research through the Global Fund in countries. Management of multidrug resistance was expanded in Egypt, Jordan, Lebanon, Syrian Arab Republic and Tunisia. Proposals to the Green Light Committee (GLC) were approved for Iraq, Morocco and Somalia. The Regional Office supported a GLC proposal to manage cases of multidrug-resistant tuberculosis in countries of the Gulf Cooperation Council (GCC) through the GCC mechanism.

These achievements were the result of mainly the implementation of the Stop TB strategy with concentration on country needs. The financial support of donors, mainly the Global Fund, increased the quality of implementation. However, the need remains to ensure sustainable financing and improve government allocations to support tuberculosis control.

Issues and challenges

The main challenge for tuberculosis control in the Region is to ensure universal access to tuberculosis care. The case detection rate is still far from the target of universal access by 2015, i.e. 63% (56%–71%) in 2010. Underlying factors include insufficient identification of tuberculosis suspects at all levels, weak laboratory capacity, limited active case finding among high-risk groups and limited notification of tuberculosis cases by private and public providers not affiliated with the national tuberculosis programme. Finally, tuberculosis incidence estimates are questionable in some countries and need careful revision.

Future directions

The Regional Office will continue providing support to the countries to meet the global targets for tuberculosis with concentration on increasing case notification. Actions will focus on strengthening surveillance systems and the laboratory network, involving related sectors (e.g. public–private mix), active case finding among high risk groups and developing packages to improve tuberculosis management among non-nationals (immigrants and cross borders) and in complex emergency situations (refugees, internally displaced populations).

Attention will be given to scaling up management of multidrug resistance through strengthening diagnostic and management capacity, and establishing a regional GLC mechanism. The tuberculosis elimination initiative will be revitalized at the elimination and pre-elimination stages, and support will be given to developing sustainable cost-effective national strategies to avoid reliance on donor support in achieving targets.

Vision 6

Containing new and re-emerging disease threats



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

Achievements during 2010–2011

As a centre for international travel related to trade, tourism and religion, the Region remains at high risk of introduction of emerging and other infectious diseases.

The Regional Office supported countries in developing and maintaining the capacity to detect, assess and notify public health events of national and international concern. Capacity-building in the Region was supported for outbreak and pandemic preparedness and mitigation in refugee and displaced settings, standard infection control practices for health care facilities, preparedness for outbreak-prone infections and pandemic influenza, and development of guidelines, protocols and standards on sentinel surveillance for influenza.

During 2010–2011, 31 out of 38 rumours of disease outbreaks from 16 countries were confirmed after follow-up and verification.

There were five major outbreaks: chikungunya and dengue in Yemen; acute watery diarrhoea and cholera in Somalia; viral conjunctivitis in Sudan and Lebanon; and dengue in Pakistan. Most of these were small outbreaks that were detected early and contained rapidly by the countries, with support from WHO country offices.

Countries, in general, are now better prepared for outbreak response and effective control of epidemic-prone diseases. However, the large dengue outbreak in Pakistan required the support from WHO Global Alert and Response Network (GOARN). The Regional Office and the United States Naval Research Unit-3 (NAMRU-3) collaborating centre also responded to a request for technical support for a concurrent outbreak of chikungunya and dengue earlier in the year.

Technical support was extended to the health authorities of Saudi Arabia during the Hajj 2010 for strengthening field surveillance for influenza and other epidemic-prone respiratory infections during the mass gatherings. WHO worked closely with a team deployed from the Centers for Disease Control and Prevention (CDC, Atlanta) to integrate the Field Adapted Surveillance Toolkit (FAST), implemented during the Hajj, with the enhanced routine disease surveillance system in the country.

Pakistan was supported during the floods in 2010 to address threat of resulting outbreaks. The Regional Office initiated weekly epidemic reports, carried out epidemic investigation and risk assessment for dengue and assisted in the deployment of three different teams from GOARN that were instrumental in reducing outbreaks of cholera, dengue and Crimean–Congo haemorrhagic fever in the flood-affected parts of that country.

Issues and challenges

The main challenges are weak surveillance systems for early detection of outbreaks and insufficient human, technical and financial resources for response in most of the countries.

The wide variability in the surveillance capacities of countries requires sustained and continuous technical support from the Regional Office.

Disruption of the health system due to complex emergencies and political instability in some countries poses ongoing challenges for early detection of diseases with epidemic and pandemic potentials.

The distribution of dengue fever continued to expand to new geographic areas in 2010–2011. Dengue, the most widespread mosquito-borne infection in humans, is an emerging public health problem in the Region. Since 1998, epidemics of dengue fever and dengue haemorrhagic fever have been reported with increasing frequency and expanding geographic distribution of both the viruses and mosquito vectors.

Factors contributing to spread include unplanned urbanization, climate change and population movement. In 2009 and the first half of 2010, outbreaks of dengue fever and dengue haemorrhagic fever were reported from Saudi Arabia, Sudan and Yemen, concentrated in the cities and urban areas along the Red Sea coasts, and in Pakistan. Weak surveillance systems for dengue disease and its vector, lack of reporting and poor preparedness, including inappropriate vector control response, are the main challenges hindering dengue prevention and control.

The magnitude of the problem and the worsening epidemiological trends urgently require coordinated intensive efforts for prevention and control. Judicious use and

sound management of insecticides is crucial to sustainable control of the disease.

Future directions

The Regional Office will continue to support the strengthening of national surveillance systems for communicable diseases and to promote syndromic surveillance and the integrated disease surveillance approach, with a strong early warning mechanism for early detection and timely response in case of outbreaks. The Regional Office will work closely with countries to identify and address gaps.

The Regional Office will also work with regional institutions and academia to develop a network for supporting countries during outbreaks and other disasters. Support will continue to be provided in assessing and monitoring the core capacities required for implementation of the International Health Regulations. Translation and distribution of the necessary guidelines, standard operating procedures and guidance documents will facilitate implementation at country level.

Technical support for Global Fund-related activities



The Global Fund to Fight AIDS, Tuberculosis and Malaria is the largest international donor for HIV/AIDS, tuberculosis and malaria care in the Region. By the end of 2011, the Global Fund approved 79 grants worth US\$ 2.1 billion for the 15 eligible countries of the Region. Twenty-five of these grants were focused on HIV/AIDS prevention and care, 32 on tuberculosis control and 22 on malaria care. The grants for 4 countries also included specific financing for the additional component of health systems strengthening.

The Regional Office plays a key role in supporting countries and WHO country offices for Global Fund-related activities through overall grant management activities, facilitating proposal development including organization of proposal development and peer review workshops, and supporting grant negotiations and implementation. In 2010–2011, proposal development workshops were organized to assist countries in developing quality financing applications and build capacity in monitoring and evaluation, procurement and supply management, and grant negotiations and effective implementation. In Round 10, the Eastern Mediterranean was the most successful among all WHO regions in terms of number of proposals approved by the technical review panel of Global Fund.

The Region provides secretarial support to Eastern Mediterranean constituency of the Global Fund Board. The support ensures the participation of representatives of 15 countries of the Region in Board proceedings and governance processes. In 2010–2011, meetings of the Board and its committees were attended by delegates from the Region with logistical and technical assistance provided by the Regional Office.

International Health Regulations (2005)



Country core capacities required for implementation of the International Health Regulations (IHR) have improved following WHO support in the form of advocacy, assessment and monitoring missions. In 2011 such missions were conducted to Djibouti, Egypt, Islamic Republic of Iran, Kuwait, Lebanon, Pakistan, Saudi Arabia and Syrian Arab Republic. The Regional Office supported all countries that have assessed their capacities to develop national plans of action to meet all technical requirements for implementation by 15 June 2012.

However, there are still gaps in event-based surveillance, peripheral response capacities, bio-risk management and laboratory security, risk communication strategies, coordination with other sectors and stakeholders, points of entry and human resources.

Strengthening the implementation of the International Health Regulations requires a clear infrastructure as well as a solid foundation. This can be achieved by empowering the role of national focal points in all aspects related to the Regulations and by setting appropriate communication mechanisms for better coordination among all stakeholders involved in implementation. Maintaining high levels of transparency and sharing timely information during events that might

be of national, regional and international concern, maintaining surveillance and response capacities as per Annex 1A of the Regulations and strengthening the capacities at points of entry to be in line with Annex 1B all remain challenges at national, regional and global levels. Monitoring and sustaining the core capacities, before and after 15 June 2012, to detect, verify, notify and respond to events and other potential hazards within the context of the International Health Regulation require additional national efforts supported by WHO at all levels.

The Regional Office will continue providing support in monitoring the core capacities required for implementation according to the existing Health Assembly resolutions and the recommendations of the International Health Regulations Review Committee. Provision, translation and distribution of the necessary guidelines, standard operating procedures and guidance documents by the Regional Office will facilitate the implementation of related activities at country level.

Operational research

The small grants scheme research programme supported 16 projects in 2010. Those that informed policy and strategy evaluated: the quality of immunization services and effectiveness of measles, mumps, rubella vaccine; impact of training facility managers and vaccinators and engaging the private sector on immunization services; the adherence of the travellers to the International Health Regulations, risk of transmission of arboviral diseases; molecular tools for diagnosis of leishmaniasis; vectors of sandfly fever; and the role of occult hepatitis in transmission of the disease during blood transfusion.

Of the 16 projects, eight addressed tuberculosis, HIV and malaria. The projects on HIV/AIDS addressed the applicability of provider-initiated testing and counselling; the outcome of ART for children; barriers to adherence to treatment; and bio-behavioural surveillance among street children (4 projects in Sudan). The projects on malaria explored the private sector's contribution to case management; evaluation of a new rapid diagnostic test for malaria; impact of testing for G6PD for administration of anti-relapse therapy for radical cure of vivax malaria; impact of training schoolteachers on malaria control; and studies on insecticide and drug resistance. The projects on tuberculosis addressed the burden of HIV and pathway to HIV care among tuberculosis patients; molecular epidemiology of tuberculosis strains; barriers to DOTS; cost of relapsing from treatment; and rapid diagnostic test for multidrug-resistant tuberculosis.

The disease reference group ZOOM-IN was hosted by the Regional Office. Technical support was provided to countries from proposal development to publication of research results, and including the incorporation of operational research activities in proposals to global initiatives. A task force on influenza research was also developed in the Regional Office.

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 2010–2011 through six visions.

For further information

Division of Communicable Disease Control
World Health Organization
Regional Office for the Eastern Mediterranean
Abdul Razzak Al Sanhoury St
PO Box 11371 Cairo, Egypt
www.emro.who.int