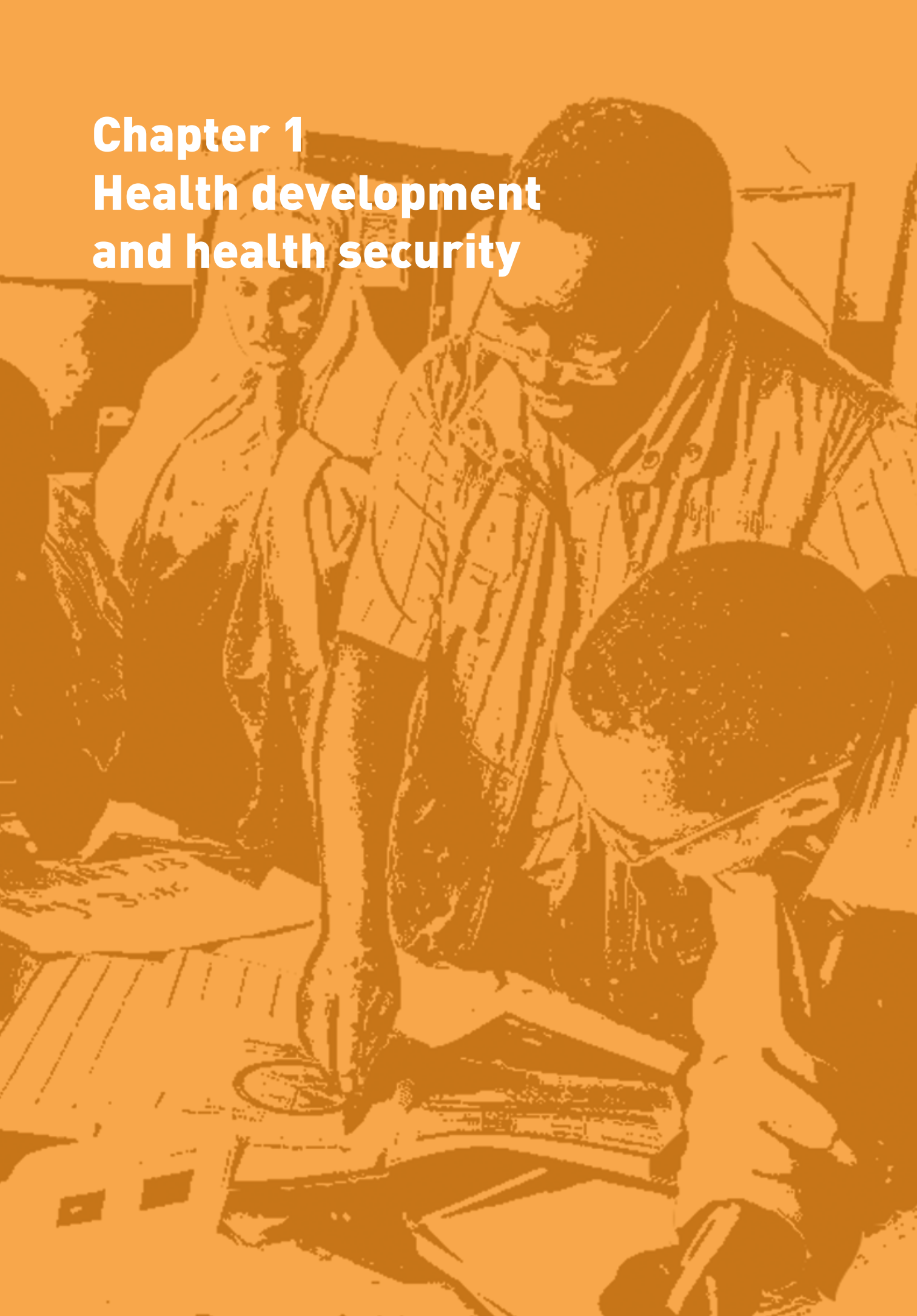
Chapter 1
Health development and health security



1. Health development and health security

Strategic objective 1: To reduce the health, social and economic burden of communicable diseases

Issues and challenges

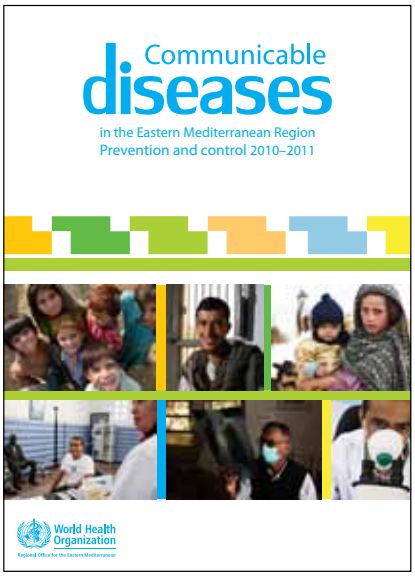
Expansion of dengue fever to new geographic areas was confirmed in 2011 and the most widespread mosquito-borne infection in humans is now an emerging public health problem in the Region, with an increasing number of outbreaks reported in recent years. Factors in this expansion include unplanned urbanization, climatic change and population movement. Increased focus is needed on surveillance for dengue disease and its vector, reporting and preparedness, including appropriate vector control response. The magnitude of this public health problem and the worsening epidemiological trends urgently require coordinated intensive efforts for prevention and control. Noting the resistance of *Aedes aegypti* to common insecticides, judicious use and sound management of insecticides is crucial to sustainable control of the disease.

2011 confirmed the remarkable improvement in immunization programmes achieved during the past few years. DTP3 coverage is now close to or higher than 90% in the majority of the countries and substantial improvement in routine immunization coverage was observed in Somalia and South Sudan. The regional average for DTP3 coverage, based on national reported data, reached 88% in 2010. The measles mortality reduction target was achieved 3 years before the target date, several countries are close to achieving the measles elimination target and laboratory-based measles surveillance is being continuously strengthened. Introduction of new vaccines was highly successful, especially in the low-income countries. However, around 1.8 million infants were not reached with their third dose of DTP vaccine, around 90% of whom are in seven countries (Afghanistan, Iraq, Pakistan, Somalia, Sudan, South Sudan, Yemen). The regional measles elimination goal was not achieved on time and the Region witnessed an increase in the number of measles cases in 2010. Lower middle-income countries continue to be behind in introducing new vaccines. The existing and emerging emergency situations around the Region, varying technical and managerial capacity, varying strength of the health systems, competing priorities, insufficient government financial allocation and low community awareness continued to be the main hindrances to reaching the target populations.

In 2011, Afghanistan and Pakistan were the only two countries of the Region that reported polio cases. The situation of poliomyelitis in Pakistan is serious and complex. The reasons for continued circulation include insecurity in certain areas and issues of governance and management, particularly in the infected high-risk areas. In Afghanistan, cases in 2011 were not limited to the southern region, but spilled over to several other provinces. Political commitment at the higher level is definite but still needs to be translated into action at the implementation level. Some countries of the Region are at a particularly high risk of occurrence of cases following importation, mainly because of lower immunity levels among children.

This is particularly the case in Somalia where target children have now been without vaccination for 2 years due to Al-Shabab's refusal to allow access. Maintaining highly sensitive AFP surveillance systems in endemic, as well as in polio-free countries, is critical. Securing adequate financing for supplementary immunization activities, and managing continuous political commitment in both polio-endemic and polio-free countries are challenges for the programme.

In the area of control of tropical diseases, although the incidence of cases of dracunculiasis (guinea-worm disease) continued to fall, the challenge was to ensure continuous and complete reporting and adequate verification of rumours and documentation in the areas that became free of the disease. These areas are continually being extended and some remain insecure. Most countries in the Region have very low endemicity for leprosy. Egypt, Morocco and Yemen, have reached the elimination target at country level but still have districts where this target might not be achieved. Leprosy programmes in Afghanistan, Somalia, South Sudan and Sudan are affected by the complex



Medical supplies are delivered to South Sudan to support the leishmaniasis control programme

emergency and security situations and need strengthening. In addition to stigma related to leprosy, an important challenge is the decrease in national capacity due to rarity of leprosy cases in most countries. This situation can lead to delay in case detection and increase the possibility of occurrence of disabilities. In countries that have succeeded in eliminating lymphatic filariasis (Egypt and Yemen) and those that have eliminated schistosomiasis or reached low endemicity (Egypt, Islamic Republic of Iran, Libya, Saudi Arabia and Syrian Arab Republic), there is a need to build capacity and skills in order to introduce new sensitive tools to verify and certify elimination for both diseases. The overall situation of sleeping sickness in South Sudan remains a major concern since most implementing partners have pulled out of the programme or scaled down control activities without being replaced by nationals. The ongoing outbreak of visceral leishmaniasis in South Sudan represents an enormous challenge due to the large number of returnees in the transmission areas and insecurity, which is hampering implementation of control activities.

Emerging and re-emerging diseases constitute a major threat to public health security and disruption of social and economic development. In the past 20 years, the Region has witnessed a marked increase in the number of outbreaks and pandemics caused by emerging and re-emerging diseases, such as alkhurma, chikungunya, cholera, dengue, ebola, influenza A/H5N1, pandemic A/H1N1 2009 and Rift Valley fever. This situation has been exacerbated by acute and chronic humanitarian crisis in many countries. The Regional Office continued to support countries to strengthen their capacity to detect early and respond adequately to threats of outbreaks and pandemics, in addition to coordinating regional and international response to such outbreaks.

Following entry into force of the International Health Regulations 2005 on 15 June 2007, countries were given 5 years to assess and build core capacities to reach full implementation by 15 June 2012. Maintaining high levels of transparency and sharing information on a timely basis during events that might be of national, regional and international concern have been a main concern of WHO. For this purpose, countries were given access to the Event Information Site (EIS), to share and keep track of all events occurring globally. Strengthening the infrastructure of the Regulations requires a strong foundation. This can be achieved by empowering the national focal points and by setting appropriate communication mechanisms for better coordination among all stakeholders involved in implementation of the Regulations. Maintaining surveillance and response capacities and strengthening capacity at points of entry remain a major challenge at national, regional and global level. 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 Regulations will require huge national efforts, supported by WHO at all levels.

Vector biology and control continued to be challenged by the limited national capacity to effectively coordinate and scale up vector control interventions to ensure sound management of pesticides and to control spread of insecticide resistance, especially for pyrethroids.

Achievements towards performance indicator targets in each expected result

In the area of *vaccine preventable diseases and immunization*, the level of 90% routine DTP3 coverage was achieved in 16 countries. In addition, Djibouti and Pakistan are close to this level. The deteriorating security situation in several countries contributed significantly to the delay in achieving the target. The Regional Office focused support on improving planning, national capacity-building, advocacy and mobilizing necessary resources to implement planned activities. Capacity-building and updating of national comprehensive multiyear plans were undertaken in several countries. Extensive support was provided to the priority countries, especially Somalia and South Sudan, in order to reach all children through suitable approaches, including the Reach Every District (RED) approach, child health days and acceleration campaigns that entail multi-antigen vaccination campaigns and other child survival interventions. Extensive support was also provided to Yemen for the integrated child health intervention, and to Pakistan to strengthen routine immunization and provincial capacity to respond to the needs of the immunization programme following devolution. In-depth programme review was conducted in Qatar. Capacity-building in vaccine management was supported and vaccine store management assessment was conducted in three countries. The second regional vaccination week was conducted in April 2011 with participation of 19 countries, despite the political situation in several countries.

A child is vaccinated against measles at a health facility in Somalia

Although the measles elimination target was not achieved in 2010 and the target date was moved to 2015, several countries are close to validating measles elimination. Fourteen countries achieved above 95% MCV1 coverage at national level and in the majority of the districts. Nine countries have reported measles incidence of below 1 case per million persons in the presence of a sensitive and well-functioning surveillance system (Bahrain, Egypt, Iraq, Islamic Republic of Iran, Jordan, Oman, occupied Palestinian territory, Syrian Arab Republic and Tunisia).

Measles outbreaks occurred in Afghanistan, Pakistan, Sudan and Yemen. The situation was aggravated by a stock-out of measles vaccine in Pakistan, for which the Regional Office provided 3 million doses. Across the Region, 16 million children were vaccinated through follow-up measles supplementary immunization activities, child health days and emergency campaigns. Considerable resources were mobilized for these campaigns, as well as technical support, to ensure high quality.

Measles case-based laboratory surveillance has been implemented in all countries. Nineteen countries perform nationwide surveillance and Pakistan is close to doing so, while Djibouti, Somalia and South Sudan are conducting sentinel surveillance. Countries have made remarkable progress

in identifying circulating measles virus as a result of the increased capacity of the laboratory network for virus detection and genotyping. Twenty countries have identified local measles genotypes. Regional Office support was a key factor in these achievements.

New vaccines introduction witnessed unprecedented success, especially in low-income countries. Pneumococcal conjugate vaccine (PCV) was introduced in Yemen and rotavirus vaccine in Sudan. Several countries obtained approval of the GAVI Alliance for new vaccines introduction: Djibouti for both PCV and rotavirus vaccines, Afghanistan for PCV, Yemen for rotavirus vaccine, Somalia for pentavalent vaccine and Sudan for a campaign for meningococcal conjugate vaccine. With regard to the middle-income countries, Hib vaccination was resumed in Tunisia. The total number of countries that have introduced Hib, pneumococcal and rotavirus vaccines is now 18, 8 and 4, respectively. In addition, Iraq undertook the necessary preparation to introduce Hib and rotavirus vaccines in January 2012. Pakistan is preparing for introduction of pneumococcal vaccine in 2012. Introduction of rotavirus and PCV vaccine in Libya was postponed due to the political situation and is now expected in 2012. The financial support offered by the GAVI Alliance, together with the national commitment to co-financing by the low-income countries and the financial allocations by middle-income countries, were the direct factors that resulted in this achievement. In addition, extensive support was provided by the Regional Office. This included supporting burden of disease assessment through the regional surveillance network and use of the data generated for advocacy and evidence-based decision-making, for developing/updating comprehensive multiyear plans, for preparation of applications to the GAVI Alliance and for preparation for new vaccines introduction. It also included national capacity-building and strengthening of national immunization technical advisory groups.

Special efforts are being made to establish a regional pooled vaccine procurement system in line with the request of the Member States to further facilitate the introduction of new vaccines, particularly in the middle-income countries. The regional surveillance network for assessment of the burden of disease preventable by new vaccines is being strengthened. In line with the target of the regional indicators, currently 18 countries are implementing bacterial meningitis surveillance; 8 are additionally implementing surveillance of other invasive bacterial diseases (pneumonia and sepsis) and 19 collect information documenting the rotavirus disease burden. With regard to programme monitoring and evaluation, most countries currently monitor district level immunzation data and 19 returned the WHO/UNICEF Joint Reporting Form according to the agreed timelines, which is in line with the regional indicator.

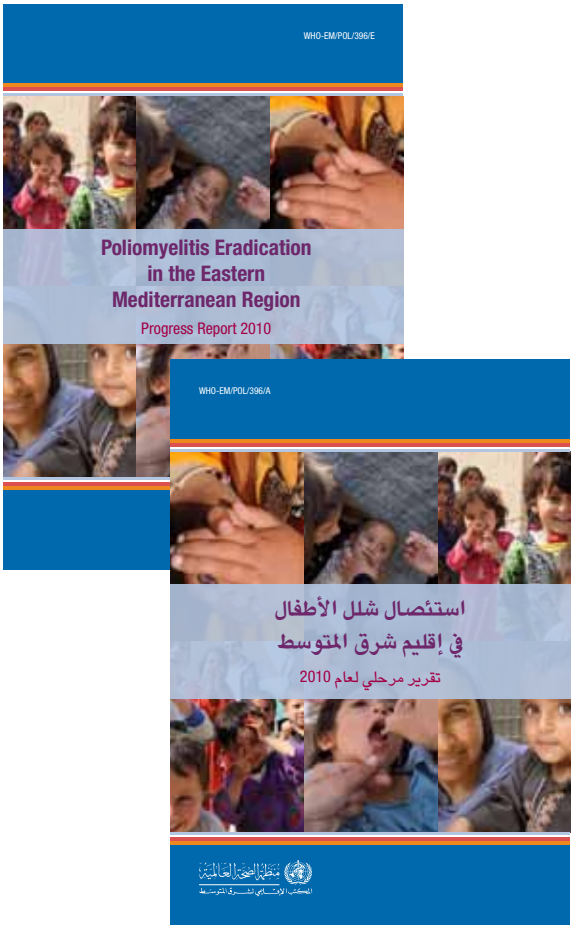
In spite of the multiplicity of challenges facing *poliomyelitis eradication*, the Region continued to proceed towards achieving the target. All countries are free from poliomyelitis except the two endemic countries, Afghanistan and Pakistan. Engagement of the senior political leadership in achieving the target was more visible in 2011. Significant efforts and initiatives were made by the programme, particularly the adequate and appropriate use of bivalent OPV, introduction of short interval additional doses (SIADs), the development of comprehensive sub-district plans, increase in support staff at the implementation level, improvements in the monitoring

Monitoring the polio campaign in Pakistan

system through introduction of lot quality assurance and maintenance of a very sensitive surveillance system supported by a well-functioning network of laboratories. The Regional Technical Advisory Group (RTAG), and technical advisory groups for the Horn of Africa, Afghanistan and Pakistan continued to advise on the appropriateness of ongoing strategies, and additional strategies/approaches to achieve the target. Through close work and advocacy efforts with national authorities, polio eradication was declared an emergency by the leadership of Pakistan and Afghanistan.

Pakistan's national emergency action plan targeted 2011 for interruption of transmission. However, the plan was not implemented fully, particularly at the delivery level and so the target was not achieved. The Government of Pakistan has augmented the existing plan, initiating remedial measures to address the problems, including consistent government oversight, ownership, and accountability at each administrative level. With the aim of achieving interruption by the end of 2012, similar efforts are going on in Afghanistan to strengthen the planning and implementing phases of the supplementary immunization activities and to improve population immunity, with special emphasis on the southern endemic zone. The programme is continually taking innovative measures to increase access and staff safety.

In the polio-free countries, mitigating measures were taken to maintain their status. Supplementary immunization activities were conducted in Djibouti, Iraq, South Sudan and Sudan (with additional rounds in Darfur). To address the possibility of importation in Djibouti, Libya and Sudan, joint efforts by the regional offices for the Eastern Mediterranean and Africa were successful, ensuring the vaccination of the travellers at border crossings. Libya is planning to conduct a sub-national immunization day in all the border target populations, especially in the south. In Somalia, national immunization days and child health days were conducted in the



accessible areas as planned. A national immunization day was conducted in Yemen towards year end, to improve population immunity which has been compromised due to current political unrest, with the second round to take place in 2012.

The regional AFP surveillance system continues to perform at the accepted international standard and exceeds the indicator standard in many priority countries. In 2011, all countries achieved the target non-polio AFP rate, except Morocco (0.68) and Djibouti (1.83). The laboratory network continued its excellent performance and now all laboratories are accredited. Containment and certification processes are continuing satisfactorily. Independent AFP surveillance reviews were conducted in South Sudan and rapid assessment in the border-states of Egypt and Sudan, and Punjab province of Pakistan. A full review is planned in Sudan in January 2012. Supplementary surveillance activities included contact sampling and environmental monitoring.

The weekly *Polio Fax* continues to provide a means of monitoring and evaluation of performance indicators, with timely feedback to ministries of health, partners and donor organizations. The risk of wild poliovirus outbreak following importation is regularly monitored for each country particularly high-risk countries, with the objective of alerting them in a timely manner and ensuring that mitigation measures are conducted in response. The Regional Office increased cooperation with the regional offices for Africa and Western Pacific to support Horn of Africa countries and China (in response to importation from Pakistan), respectively.

In *tropical diseases and zoonoses*, progress was made despite the challenges faced by these "neglected diseases". Cases of dracunculiasis (guinea-worm disease) in South Sudan fell from 1797 in 2010 to 1028 in 2011 (data up to Nov. 2011); 76% of cases are now reported from only one state: Eastern Equatoria. Pre-certification activities and standard operating procedures were initiated in Sudan in former endemic areas. These activities need to be intensified in the areas bordering South Sudan.

The Eastern Mediterranean Region remains the region with the lowest leprosy burden. All countries have eliminated leprosy (prevalence of 1 per 10 000 population or less), except South Sudan whose situation needs to be re-assessed. In response to the challenge of decreasing capacities among health care workers in countries with low endemicity, capacity-building was

conducted for the Eastern Mediterranean and African Region. In collaboration with the Global Leprosy Programme, the Regional Office obtained support from the Sasakawa Memorial Health Foundation for a proposal on leprosy to be implemented in Somalia in 2012 by World Concern International, WHO's main implementing partner in that country.

Egypt was able to sustain its progress towards the elimination of schistosomiasis. Prevalences below 1% of both urinary and intestinal schistosomiasis were reported, and only a few hotspots now remain in the Delta and upper Egypt. In Yemen, despite the civil unrest, 1.68 million people were treated in some accessible affected areas. Egypt finalized the development of sensitive tools and initiated their use for the verification/confirmation of the elimination of lymphatic filariasis. Technical support was provided to Sudan in order to correctly re-map lymphatic filariasis distribution in eight States in order to enable the initiation of an evidence-based mass drug administration control programme.

Mass distribution of ivermectin for control of onchocerciasis continued to be implemented in Sudan in three States (River Nile, Gedaref and South Darfur) where the foci are isolated. The main partner of the programme is The Carter Center. In South Sudan, the African Programme for Onchocerciasis Control supported the activities in the nine affected states. The affected areas coverage and population coverage reached 60% and 80%, respectively, in 2011. In Yemen, where the infection takes the form of a severe and debilitating dermatological condition, locally called *sowda*, a clinic-based ivermectin treatment of severe skin lesions continued to be implemented in most accessible areas.

Refresher training on the new nifurtimox-eflornithine combination therapy for sleeping sickness, Yambio, South Sudan

WHO provided medicines and reagents for case management of human African trypanosomiasis. The use of the eflornithine-nifurtimox combination therapy introduced in 2010 was monitored. The new treatment protocol has proved effective with no major adverse side-effects. Human African 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 some foci, the disease is already re-emerging.

With respect to visceral leishmaniasis, WHO played a major role in responding to the ongoing outbreak in South Sudan, where more than 18 000 cases have been treated since October 2009, at an average of 1000 cases per month in 2011. WHO provided diagnostic tests and specific medicines, including logistic support to access very remote areas. A regional group of experts was appointed by the Regional Office to support countries on cutaneous leishmaniasis. The first regional strategic plan (2012–2016) and regional guidelines for case management of cutaneous leishmaniasis were drafted and

will provide a new standardized framework for the control of the disease across the Region.

In the area of *communicable disease surveillance, forecasting and response*, the surveillance systems in all the countries have greatly improved. Several (Afghanistan, Oman, Pakistan, Somalia, South Sudan and Yemen) have adopted the WHO training guidelines for all communicable diseases of public health importance for their countries and built capacity on surveillance and outbreak response in 2011. The Regional Office continued to provide support to countries to develop, strengthen and maintain 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.

This year, 15 out of 20 rumours of disease outbreaks from 11 countries were confirmed after follow-up and verification. Apart from three major outbreaks (chikungunya/dengue in Yemen, acute watery diarrhoea/cholera in Somalia 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. Afghanistan reported several small outbreaks of pertussis, diphtheria and measles. These were rapidly contained by the Disease Early Warning System (DEWS) teams with active support from the WHO country office and the Regional Office. Egypt continued to report human cases of avian influenza A/H5N1. 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 WHO Global Alert and Response Network (GOARN) to be called in to provide support. The Regional Office and NAMRU-3 collaborating centre continued to respond to requests for technical support.

The Regional Office embarked on several initiatives to develop regional guidelines and protocols to support countries in control of outbreak-prone infections. In response to the re-emerging and expanding situation of dengue fever in the Region, the Regional Office brought together affected countries to discuss and agree on a common approach to recurrent outbreaks. The outcome of the discussions is being developed into a regional strategic guidance document for control of dengue in the Region. The Regional Committee also discussed the issue and emphasized (EM/RC58/R.4) the importance of high-level political commitment, national capabilities at all health care levels, strong coordination in the management and judicious use of pesticides, and exchange of information. The guidelines, protocols and standards on the sentinel surveillance system for influenza (ILI/SARI) were developed and several countries have started to adapt and implement them. A draft guidance document was developed for training health workers on the use of epidemiological concepts in public health services. A framework for the implementation and integration of the syndromic surveillance system into routine public health surveillance system was also developed.

In support of national capacity-building, an international training programme was introduced to develop capacity for control of cholera. It was developed jointly by the Regional Office and headquarters

and the first course was successfully completed in collaboration with the American University of Beirut. A sub-regional meeting focused attention on the threats posed by viral haemorrhagic fever and made recommendations that will complement Regional Committee resolution EM/RC54/R.4 and form the basis of regional guidelines for the control of viral haemorrhagic fever.

With regard to implementation of the *International Health Regulations* (2005), core capacities have improved following the support provided by the Regional Office to conduct advocacy, assessment and monitoring missions at national level. In 2011, such missions were conducted in Djibouti, Egypt, Islamic Republic of Iran, Kuwait, Lebanon, Pakistan, Saudi Arabia and Syrian Arab Republic. All countries that have assessed their core capacities since the Regulations entered into force have now developed national plans of action to meet the technical requirements and capacities by 15 June 2012. Specific missions to build capacities at points of entry and to amend public health laws in line with the Regulations were supported for Egypt, Lebanon, Oman and Pakistan. A monitoring framework developed at headquarters was implemented at regional level to support countries in monitoring their progress and capacity-building was conducted to enable countries to use the tool. Analysis of the outcome showed that good progress has been made in the Region. However, there are still gaps in event-based surveillance, peripheral response capacities, biorisk management and laboratory security, risk communication strategies, coordination with other sectors and stakeholders, points of entry and human resources. The Regional Office contributed to the development of global guidance and training modules to support countries in developing their core capacities at points of entry, strengthening risk communication strategies and developing human resources capacities to meet the requirements.

The Regional Office and the International Civil Aviation Organization (ICAO) met to discuss the Cooperative Agreement for the Prevention of Spread of Communicable Diseases through Air Travel (CAPSCA) in the Region. The Regional Office also provided technical support for exchange of information during mass gatherings and other global events, biorisk and biosecurity and laboratory networking. A framework to include the "all-hazards" approach within the context of the International Health Regulations is being developed in collaboration with the emergency and humanitarian action programme. The secretariat for the International Health Regulations provided countries with the tools and procedures necessary to request an extension for an additional two years to be able to meet the technical capacities for implementation.

In the area of *integrated vector management*, a regional consultation on sound management of public health pesticides was held jointly with the WHO Pesticide Evaluation Scheme (WHOPES) which resulted in a framework for action on the sound management of public health pesticides (2012–2016). This framework will guide the implementation of the Regional Committee resolution on this issue (EM/RC58/R.10). The framework defines specific actions in the areas of pesticide policy and legislation; pesticide registration schemes; procurement, storage and distribution of pesticides, and disposal of pesticide containers and waste; effective pesticide quality control, enforcement of regulations and post-registration monitoring; and safe and judicious application of pesticides for

control of vectors and pests of public health importance.

The Regional Office supported countries to implement the Global Environmental Facility (GEF) project for development of alternatives to DDT and to strengthen the national capacity for vector control. The fourth meeting of the Regional Scientific and Technical Advisory Committee (STAC) of the WHO/UNEP project supported by the Global Environmental Facility recommended all countries to implement the strategies for insecticide resistance management, even where resistance has not been detected. With GEF support, countries reactivated the steering committee for integrated vector management. Islamic Republic of Iran, Jordan and Morocco received support for repackaging and disposal of obsolete pesticides, in collaboration with FAO. Sudan started to implement action for management of insecticide resistance by shifting to another, more expensive, insecticide for indoor residual spraying in Gezira State. The Regional Office continued to support monitoring of insecticide resistance by supplying filter papers and test kits for conduct of fields assays in Djibouti, Egypt, Iraq, South Sudan, Sudan and Syrian Arab Republic, capacity-building in Jordan, and strengthening the national entomological laboratory in Sudan. Additional resources were mobilized for Sudan from the Bill and Melinda Gates Foundation to support a 3-year project on impact of insecticide resistance in *Anopheles arabiensis* on effectiveness of malaria vector control. The project is being implemented by the national malaria control programme, in close collaboration with WHO, Kassala University, Blue Nile National Institute for Communicable Disease, London School of Hygiene and Tropical Medicine and Liverpool School of Tropical Medicine.

The *small grants scheme* research programme supported eight new projects in 2011. Of projects previously supported and results received in 2011, those that informed policy and strategy evaluated: the quality of immunization services and effectiveness of MMR vaccine; the impact of training facility managers and vaccinators and engaging the private sector in immunization services; travellers' adherence 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.

Following the 2010 meeting of the disease reference group on zoonoses and marginalized infectious diseases, the Regional Office contributed to an annual report and an article, published in 2011.

Future directions

Strengthening routine vaccination coverage, especially in countries with DPT3 coverage below 90% at national level and/or below 80% at each district, will continue to be a priority. Support will focus on improving national managerial capacity and other capacity-building, developing comprehensive multiyear plans and supporting countries to implement the RED approach, supplemented by other approaches suitable to the local situation. The third regional vaccination week in April 2012, with the theme of "reaching every community", will be an opportunity to leverage more support to further improve vaccination coverage. Strengthening of monitoring and evaluation systems to use data for action will be a top priority. More support will be devoted to strengthening capacity in Pakistan to assure performance

Strengthening routine vaccination coverage is a priority in order to reach every child in the Region

following devolution. Implementation of the provincial plans, developed in 2011 with Regional Office support, will be followed closely and the necessary technical support will be provided.

Efforts to accelerate measles elimination will focus on establishing and strengthening the regional and national committees for measles elimination, conducting measles surveillance system review and validating measles elimination in countries reporting zero cases. Focus will continue on ensuring timely implementation of follow-up campaigns through technical support for planning and implementation, and advocacy for resource mobilization. Advocacy for implementing the regional strategy for achieving the goal of hepatitis B control, especially implementation of a hepatitis B birth dose, will continue. Support will continue for countries introducing new vaccines or preparing for introduction. National capacity for informed decision-making will be further strengthened.

The regional priorities for polio eradication are to interrupt wild poliovirus transmission in Afghanistan and Pakistan. Collaboration will be strengthened in order to achieve periods of tranquillity to ensure access to children during supplementary immunization activities. Involvement of nongovernmental organizations and oversight will be strengthened and performance-based accountability will be institutionalized. In Pakistan, emphasis will be on full implementation of the emergency action plan by the federal and provincial governments. Special emphasis will be placed on accountability at the delivery level, increasing human resources at the district and union council level, encouraging innovative local solutions, and expanding partnership. The next priority will be to maintain high population immunity, certification standard AFP surveillance, and capability for early detection of importations and optimal response in all polio-free countries. This will be achieved through conducting preventive campaigns, use of the risk assessment tool and development of a sub-national risk assessment model, coordination activities between neighboring countries, and collaboration with partner organizations.

In tropical diseases, focus will be on intensifying interventions against dracunculiasis in the remaining endemic areas in order to achieve the eradication target. Technical support will continue in order to ensure the integration of surveillance with the national surveillance system in all freed areas, including former foci. A specific surveillance programme needs to be implemented in the border area between Sudan and South Sudan, to prevent the introduction of cases. National leprosy programmes are expected to continue implementing the enhanced global strategy for further reducing the disease burden due to leprosy 2011–2015, as well as the guidelines to strengthen participation of persons affected by leprosy in leprosy services. WHO will continue supporting

national leprosy programmes, including establishing district level reporting systems. Sudan requires continuous support to finalize the mapping of lymphatic filariasis, in order to initiate mass drug administration in the affected areas. Post-mass drug administration surveillance activities need to be extended in Egypt and initiated in Yemen. The introduction of sensitive techniques to certify the interruption of schistosomiasis transmission will be continued. Advocacy, proposal development and fund-raising activities will continue in order to ensure adequate implementation of elimination activities in the two remaining countries with high endemicity, and in Yemen in regard to onchocerciasis. Disease control activities and surveillance for human African trypanosomiasis in South Sudan need urgently to be scaled up to prevent an outbreak, since the disease is already re-emerging in some foci. There is a need to implement the new standardized approach to leishmaniasis case management, focusing on prompt diagnosis and treatment for both the cutaneous and visceral forms. Disease surveillance and data analysis are key to design of more cost-effective control strategies.

The Regional Office will continue to support strengthening of national surveillance systems for communicable diseases and to promote the syndromic surveillance and integrated disease surveillance approach, with a strong early warning mechanism for outbreak early detection and timely response. In this regard, 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 to support Member States 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. Capacity-building will be supported in surveillance and response capacities, improving legislation, quality management in laboratories, biorisk management and biosecurity, and points of entry and cross-border surveillance at ground crossings.

Support in vector biology and control will focus on scaling up of vector control interventions to reach universal coverage of all at-risk populations; implementing the results of studies supported by the GEF project; strengthening capacity to monitor and manage vector resistance to insecticides; updating vector mapping, including insecticide resistance to important vectors in priority countries; and implementation of the regional framework for sound management of insecticides.

The small grants scheme programme will focus on mobilizing resources for research. It will continue to support capacity development and to monitor and evaluate implementation of ongoing projects, and the use of research results by the national programmes. The activities of the programme during the past 10 years will be evaluated.

Strategic objective 2: To combat HIV/AIDS, tuberculosis and malaria

Issues and challenges

The HIV epidemic has been on the rise in the Region since 2001. Although the overall prevalence is still low, annual estimated new infections among adults and children have

substantially increased in the past decade. Approximately 560 000 people are living with HIV (Table 1.1), among them 42 000 children aged 0–14 years. It is estimated that 82 000 adults and 7400 children were newly infected in 2010. AIDS-related deaths have almost doubled in the past decade among both adults and children, reaching a total of 38 000 in 2010, including 4100 children.

A number of challenges face the control of HIV. Infections in people with high-risk behaviour and their partners (e.g. injecting drug users and their spouses) are increasing. Investment in interventions that reach out to marginalized and stigmatized population groups is insufficient. Most people living with HIV do not know their HIV status and are not known to the health care system. The

Table 1.1 Burden of HIV/AIDS, 2011

Country	Estimated HIV prevalence in adult population (%)[a]	Estimated number of PLHIV[a]	Estimated number of people needing ART based on UNAIDS/WHO methodology and WHO 2010 ART guidelines[b]	Reported number of people receiving ART[c]
Afghanistan	<0.5[d]	NA	1 600	116
Bahrain	NA	NA	NA	40 (2010)
Djibouti	2.5	14 000	5 700	1 328
Egypt	<0.1	11 000	5 100	760
Iran, Islamic Republic of	0.2	92 000	26 000	2 752
Iraq	<0.2	NA	NA	NA
Jordan	NA	NA	NA	108
Kuwait	NA	NA	NA	186
Lebanon	0.1	3 600	1 100	425
Libya	<0.2	NA	NA	NA
Morocco	0.1	26 000	11 000	4 047
Oman	0.1	1 100	1 100	661
Pakistan	0.1	98 000	22 000	2 491
occupied Palestinian territory	NA	NA	NA	NA
Qatar	<0.1	<200	NA	NA
Saudi Arabia	NA	NA	NA	1 961
Somalia	0.7	34 000	25 000	NA
South Sudan	NA	260 000 (Sudan + South Sudan)	49 000[c]	3 442
Sudan	NA		26 246[c]	2 500
Syrian Arab Republic	NA	NA	NA	NA
Tunisia	NA	2400	4 000	483
United Arab Emirates	NA	NA	NA	229
Yemen	0.07[d]	30 000[c]	4 500[c]	625

NA: not available
PLHIV: people living with HIV
Sources:
[a] *Report on the global AIDS epidemic 2010*, Geneva, UNAIDS, 2011
[b] *Global HIV/AIDS response: epidemic update and health sector progress towards universal access: progress report 2011*. Geneva, WHO, UNAIDS, UNICEF, 2011.
[c] Country Global AIDS Response Progress Reports 2012
[d] Country UNGASS Reports 2010

approaches being undertaken to increase coverage of HIV testing do not target the people most at risk and therefore do not contribute sufficiently to the diagnosis of new cases. Civil unrest in several countries has deflected attention from health in general, and from HIV programmes in particular. Finally, a decrease in donor funding for HIV programmes and inadequate allocation of domestic resources threatens the sustainability of HIV services.

An estimated 47% of the regional population live in malaria risk areas. In 2010, 7.3 million malaria cases were reported in the Region, of which only 28.5% were confirmed parasitologically (Tables 1.2 and 1.3). National capacity in planning and response to impending malaria epidemics and complex emergencies is low. The quality of, and access to, diagnostic facilities for confirmation of suspected malaria fevers is limited. Compliance with national treatment guidelines is poor. Community-based programmes are lacking or weak and the private sector is unregulated. Leadership and management capacity is also limited, particularly at district and lower levels, with high staff turnover. Procurement and supply management systems are inefficient, and malaria surveillance, monitoring and evaluation systems are weak.

Tuberculosis case detection rates did not yet reach the target, mainly because of weaknesses in the tuberculosis laboratory network, ad hoc management of non-national tuberculosis cases, and the limited

Table 1.2 Parasitologically confirmed cases in countries with no or sporadic transmission and countries with low malaria endemicity

Country	Cases in 2009		Cases in 2010		Cases in 2011		Species transmitted locally
	Total	Autochthonous	Total	Autochthonous	Total	Autochthonous	
Bahrain	103	0	90	0	186	0	–
Egypt	94	0	85	0	116	0	–
Iran, Islamic Republic of [a]	6 122	4 477	3 031	1 847	3 137	1 676	*P. vivax* › *P. falciparum*
Iraq	1	0	7	0	11	0	–
Jordan	53	0	61	2	58	0	–
Kuwait	NA	NA	343	0	476	0	–
Lebanon	72	0	NA	NA	NA	NA	–
Libya	27	0	NA	NA	NA	NA	–
Morocco	145	0	218	0	312	0	–
Oman	898	0	1 193	24	1 532	13	–
Occupied Palestine territory	1	0	NA	NA	0	0	–
Qatar	239	0	440	0	673	0	–
Saudi Arabia [b]	2 333	58	1 941	29	NA	NA	*P. falciparum* › *P. vivax*
Syrian Arab Republic	39	0	23	0	NA	NA	–
Tunisia	49	0	71	0	67	0	–
United Arab Emirates	3 018	0	3 264	0	5 242	0	–

NA not available
› Predominance of one species
[a] Endemic areas mainly in the south-east
[b] Endemic areas mainly in the south-west

Table 1.3 Recorded and estimated cases of malaria in countries with high malaria burden

Country	Cases in 2009		Cases in 2010		Cases in 2011		Species transmitted locally
	Total cases reported	Cases confirmed	Total cases reported	Cases confirmed	Total cases reported	Cases confirmed	
Afghanistan	390 729	64 880	392 463	69 397	482 748	77 549	*P. vivax* › *P. falciparum*
Djibouti	2 686	2 686	3 962	1 019	NA	230	*P. falciparum* › *P. vivax*
Pakistan	4 242 032	167 579	4 281 356	240 591	NA	NA	*P. vivax* › *P. falciparum*
Somalia	72 362	25 202	24 553	24 553	NA	NA	*P. falciparum* › *P. vivax*
South Sudan	325 634	NA	900 283	900 283	603 397	NA	*P. falciparum* › *P. vivax*
Sudan	2 361 188	711 462	1 465 496	720 557	NA	NA	*P. falciparum* › *P. vivax*
Yemen	138 579	55 446	198 963	106 697	142 152	90 954	*P. falciparum* › *P. vivax*

NA: not available
› Predominance of one species

collaboration between the different sectors. National engagement in scaling up capacity to manage multidrug-resistance is insufficient. So far only 10 countries have started multidrug resistance management. The 28% funding gap for tuberculosis control in 2010–2011 (out of US$ 233 million required) is expected to widen in 2012–2013.

Collaboration with partners in these areas, particularly the Global Fund to Fight AIDS, Tuberculosis and Malaria, has improved financial status and technical support to the countries, but the sustainability of this support through 2012–2013 is in doubt. Reductions in funding will also affect operational research.

Achievements towards performance indicator targets in each expected result

In the area of *HIV/AIDS*, all regional expected results were achieved except that related to coverage with anti-retroviral therapy (ART). In terms of HIV care and treatment, ART coverage increased from 15 473 in 2010 to 19 050 in 2011, but the estimated regional coverage remains low, at 10%. Oman has the best estimated coverage in the Middle East and North Africa region, with 45% of adults and children living with HIV receiving treatment by the end of 2010, followed by Lebanon (37%) and Morocco (30%). Most countries are falling short of the goal of universal access to treatment. However, it is worth noting that four countries 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). The Regional Office concentrated on providing technical support to Pakistan, Somalia, South Sudan and Sudan to strengthen their HIV care and treatment programmes and service delivery. A continuum-of-care model is being developed in Pakistan in collaboration with UNICEF.

In order to strengthen country capacities for HIV prevention, a regional consultation on progress and challenges in the prevention of mother-to-child transmission (PMTCT) was held involving both national AIDS and reproductive health programmes. Some promising approaches have been developed in a few countries, including Morocco, Oman and Pakistan. More countries (in particular those of the Gulf Cooperation Council) are about to adopt HIV testing of pregnant women in antenatal care as a routine intervention, following the example

of Oman. A review of the situation and programmes for sex workers and men who have sex with men was carried out and is being finalized for publication.

The Regional Office continued to provide support to countries to strengthen their capacity to carry out surveillance of HIV and sexually transmitted infections in accordance with WHO/UNAIDS recommendations, and to monitor coverage of essential prevention and treatment services. A follow-up survey of the development of national HIV surveillance systems was carried out to identify strengths and weaknesses. The number of countries with up-to-date information on behaviours and HIV in populations most at risk has increased and by the end of 2010 included Afghanistan, Egypt, Islamic Republic of Iran, Jordan, Lebanon, Morocco, Pakistan, Palestine, Sudan and Tunisia. The Regional Office continued its support to the regional knowledge hub on HIV surveillance in Kerman, Islamic Republic of Iran, which provides capacity-building and technical support to surveillance activities in countries of the Region. The Regional Office, in collaboration with UNAIDS and the World Bank, convened a regional resource group of experts in HIV surveillance. The group exchanged experiences and best practices in conducting HIV surveys and committed itself to supporting quality assurance of surveys, standardization of indicators and tools to improve comparability of data, and collaboration on a joint publication on HIV epidemiology in the Region.

WHO field staff in Somalia train health workers on HIV record-keeping

Several countries (Afghanistan, Djibouti, Pakistan, Somalia, South Sudan, Sudan and Yemen) were prioritized for support to prevent interruption of supplies of HIV/STI medicines and diagnostics. All these countries benefit from Global Fund grants and, in most of them, UNDP/UNICEF have been selected as grant recipients for procurement and supplies management. The role of WHO is focused on technical guidance regarding the specifications of medicines and laboratory supplies. Only Djibouti and South Sudan reported interruption of supplies for 2010.

In view of the important role that advocacy, the private sector and civil society organizations play in HIV prevention, control and treatment, the World AIDS Campaign in 2011 tackled the issue of stigma

and discrimination against people living with HIV in health care settings. In this context, the Egyptian film "Asmaa" received an award from the Regional Office in acknowledgement of its pioneering work in promoting human rights in health. The Regional Office continued its efforts to strengthen the role of civil society organizations in harm reduction through its support to the Middle East and North Africa Harm Reduction Association (MENAHRA). In Lebanon, a service-delivery model for women and men at risk of HIV has been developed in collaboration with the nongovernmental organization MaRSA. Six countries (Afghanistan, Djibouti, Islamic Republic of Iran, South Sudan, Tunisia and Yemen) receive support for resource mobilization from the Global Fund and other donors.

In operational research, focus was placed on continuing national capacity-building on methodologies of HIV epidemiological studies, with more than 60 experts from countries in the Region now trained. Two further modules in the series on epidemiological methods for assessment of HIV epidemic trends in different populations groups were published. Technical support was provided to Morocco, Oman, occupied Palestinian territory, Somalia, Sudan and

Civil society organizations, such as MENAHRA, have an important role to play in harm reduction and HIV prevention, particularly in vulnerable and marginalized populations

Yemen for planning and/or implementation of HIV bio-behavioural surveys and to Morocco to establish a regional reference centre for *Neisseria gonorrhoeae* drug-resistance monitoring.

Substantial progress was made with respect to *malaria control and elimination*, in line with the regional vision for malaria elimination. Islamic Republic of Iran, Iraq and Saudi Arabia, in particular, achieved more than 80% coverage with the main malaria control and elimination interventions. The other seven endemic countries (Afghanistan, Djibouti, Pakistan, Somalia, South Sudan, Sudan and Yemen) increased coverage with the main interventions for vector control, treatment and diagnosis but remain considerably below the target.

Four countries (Afghanistan, Somalia, Sudan and Yemen) updated their national malaria control strategy 2011–2015. Djibouti initiated a programme review to develop the pre-elimination strategy based on new eco-epidemiological evidence. Afghanistan developed and endorsed its national strategies for community-based management of malaria, with WHO support. However, full implementation is challenged by the sustainability of involving unpaid community volunteers and by financial constraints. Iraq finalized an in-depth programme assessment and the results were used to guide the development of the national strategy for prevention of reintroduction of malaria 2011–2015. The malaria treatment policy/guidelines in Somalia and Sudan were updated with WHO support. Afghanistan, Sudan and Yemen developed and implemented a dual strategy for universal confirmation of malaria diagnosis by microscopy and rapid diagnostic test.

Capacity-building was supported in planning and management of malaria control programmes, advanced malaria microscopy and quality assurance, methods of antimalarial therapeutic efficacy testing and malaria microscopy, advanced malaria surveillance, monitoring and evaluation.

WHO supported the procurement of long-lasting insecticide-treated nets, insecticides, spraying equipment, artemisinin-based combination therapies and rapid diagnostic tests for Afghanistan, Islamic Republic of Iran, Morocco, Pakistan, Somalia and Yemen, using resources from WHO, the Global Fund, the Gulf Cooperation Council, USAID and the Kuwait Patient Helping Fund. The Regional Office is working to secure a regional stock of artemether-lumefantrine, which is distributed to malaria-free countries free of charge, as needed, to treat cases of imported malaria falciparum.

In the area of surveillance, a regional malaria database was developed and made accessible to country offices through the intranet. Technical and capacity-building support was provided to Sudan and Yemen for development of a national database. Afghanistan received support to conduct a malaria indicator survey and Djibouti to plan for a health facility survey in 2012. As part of the global surveillance on antimalarial drug resistance, support was provided to Afghanistan, Pakistan, Somalia, Sudan and Yemen to conduct drug efficacy monitoring studies. Several countries received test kits, and capacity was built to conduct field bioassays for monitoring insecticide resistance. In Djibouti, the second phase of the programme review and evaluation of the malaria information and surveillance system was conducted. With regard to operational research on malaria, the Regional Office partially supported a doctoral study comparing diagnostic tools for malaria in Yemen.

Instability and insecurity around the Region affected the smooth implementation of planned *tuberculosis* activities (Table 1.4). Nevertheless, 17 countries are developing or updating national strategic plans for 2011–2015 and 14 countries have achieved a case detection rate of 70% or above (Bahrain, Djibouti, Islamic Republic of Iran, Jordan, Kuwait, Lebanon, Libya, Morocco, Oman, Qatar, Saudi Arabia, Syrian Arab Republic, Tunisia and Yemen). Eleven countries achieved a treatment success rate of ≥85% (Afghanistan, Bahrain, Egypt, Iraq, Kuwait, Morocco, Oman, Pakistan, Somalia, Syrian Arab Republic and Yemen). The main reasons for not reaching the target in case detection or treatment success in other countries are weak health systems, limited laboratory capacity, weak treatment monitoring and defaulter tracing, and the political situation in some countries.

The laboratory network has expanded, especially for culture and drug susceptibility testing. Liquid culture was introduced in several countries. The quality of laboratory diagnosis has significantly improved. The

Table 1.4 Notifications of tuberculosis cases in 2011

Country	New smear-positive	All forms	Notification rate[a] (smear-positive)	Notification rate[a] (all forms)	% of pulmonary tuberculosis cases that are smear-positive
Afghanistan	13 789	28 167	43	87	77
Bahrain	89	225	7	17	65
Djibouti	1 336	3 723	148	411	70
Egypt	4 508	9 307	5	11	82
Iran, Islamic Republic of	5 539	11 495	7	15	78
Iraq	3 059	9 248	9	28	59
Jordan	103	344	2	5	60
Kuwait	222	672	8	24	61
Lebanon	188	496	4	12	65
Libya	731	1 545	11	24	71
Morocco	11 822	29 770	37	92	84
Oman	180	337	6	12	85
Pakistan	105 733	270 394	60	153	50
Occupied Palestinian territory	11	32	0	1	69
Qatar	197	553	11	30	62
Saudi Arabia	2 055	4 015	7	14	80
Somalia	5 884	12 021	62	126	77
South Sudan	2 797	7 583	28	76	62
Sudan	7 266	20 385	22	61	58
Syrian Arab Republic	1 027	3 675	5	18	72
Tunisia	1 031	3 015	10	28	80
United Arab Emirates	46	106	1	1	64
Yemen	3 135	8 713	13	35	63
Region	170 748	425 821	28	70	57

[a] rate per 100 000 population

Somalia has achieved a tuberculosis success rate above 85% thanks to treatment centres such as this one in Garowe

tuberculosis laboratory in Agha Khan University in Pakistan was designated as a regional supra national reference laboratory. The task force on new diagnostics was developed to guide regional and national implementation. An effective monitoring and evaluation system is in place. The public–private mix and practical approach to lung health (PAL) initiatives have been widely introduced in the Region. Awareness of the need to address prevention, control and care among contacts, refugees, prisoners, tuberculosis among people living with HIV and children, and steps taken in these areas, are rising.

In the area of effective drug management systems and regular access to high quality tuberculosis medicine, WHO continued to provide technical support through Global Drug Facility (GDF) missions, national capacity-building in drug management and promotion of prequalification of pharmaceutical companies. All countries have access to tuberculosis medicines and have a drug management system in place. Quality-assured medicines are provided through government or Global Fund resources. Countries are receiving GDF support in procuring anti-tuberculosis medicines as grants for paediatric medicines (22 countries) or as direct procurement for adult medicines (16 countries). The Green Light Committee (GLC) mechanisms are in place in 11 countries (Djibouti, Egypt, Jordan, Iraq, Lebanon, Pakistan, Morocco, Tunisia, Somalia, Sudan and Syrian Arab Republic). Greater support is needed to properly address the challenges of over-the-counter sale of drugs of unknown quality, non-adherence to the recommended regimens, and reliance on Global Fund support for medicines instead of local resources.

In terms of monitoring and evaluation, the electronic nominal recording and reporting system (ENRS) is used nationwide in six countries (Egypt, Iraq, Jordan, Somalia, Syrian Arab Republic and Yemen). The patient-based web-based surveillance system (WEB TBS) was introduced in five countries (Djibouti, Iraq, occupied Palestinian territory, Tunisia and United Arab Emirates). Countries regularly submit quarterly reports to the Regional Office through the DQ online system, and reports giving feedback are returned. Twelve countries now have reliable estimates of tuberculosis burden, while Iraq's estimates are being revisited through a CAPTURE TB study and Pakistan's estimates through a prevalence survey. The revised estimates will be reported in the global tuberculosis report 2012.

WHO supported technical capacity-building in monitoring and evaluation, surveillance and surveillance of multidrug-resistant tuberculosis in five countries (Djibouti, Iraq, occupied Palestinian territory, South Sudan and Tunisia). Eleven countries received support in conducting surveys to assess the burden of drug-resistant tuberculosis. Review missions to monitor and evaluate programme performance were conducted in six countries (Afghanistan,

Islamic Republic of Iran, Lebanon, Pakistan, Tunisia and United Arab Emirates). The Regional Office is represented in the global task force on impact measurement.

Technical support was provided for establishment of functional national partnerships for tuberculosis control. Most countries have developed advocacy, communication and social mobilization (ACSM) plans. Only eight have officially launched functional national partnerships (Afghanistan, Egypt, Jordan, Kuwait, Morocco, Pakistan, Sudan and Syrian Arab Republic). The impact of ACSM activities is being evaluated through periodic surveys of knowledge, attitudes and practice.

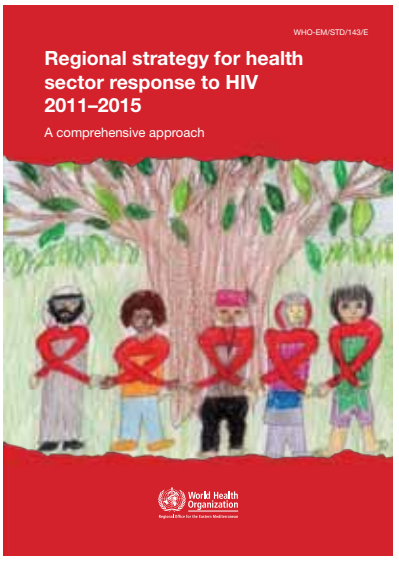
The small grants scheme research programme supported eight operational projects for HIV, malaria and tuberculosis and provided technical support to several other projects supported by the Global Fund. The final report summaries for research conducted in 2007–2008 were published, as well as articles in peer reviewed journals. Capacity-building on research methods and proposal development was supported and 11 protocols were developed for targeted diseases.

Future directions

The Regional Office will support countries in implementing the regional strategy for health sector response to HIV 2011–2015, which targets enrolment of at least 80% of known people living with HIV in HIV care and region-wide coverage of at least 50% of the estimated number of people living with HIV in need with anti-retroviral therapy by 2015. It also promotes strategies for accelerating access to prevention and treatment interventions for people at increased risk of HIV, with the aim of reaching at least 20% with prevention interventions. Particular emphasis will be put on improving strategic information, and on better understanding of factors facilitating access of populations in need to prevention and treatment interventions, within the political and cultural context in the Region. A regional initiative for the elimination of paediatric HIV will be launched.

The Regional Office will continue to support countries to reach universal coverage with quality and effective prevention, diagnosis and treatment of malaria by all means, including involvement of the private sector and the community. Technical support will be provided to implement countries biennial plans and donor-funded projects. Efforts will be exerted to strengthen capacity for epidemiological and entomological surveillance. Targeted countries will be supported to conduct comprehensive malaria programme review and update their national strategies. Support for capacity-building will include support to strengthen capacity for judicious use and sound management of public health pesticides, including management of insecticide resistance.

Support for tuberculosis control will concentrate on improving notifications, scaling



up management of multidrug-resistance, revitalizing the tuberculosis elimination initiative, and developing sustainable cost-effective strategies to avoid reliance on Global Fund support in achieving targets.

Strategic objective 3: To prevent and reduce disease, disability and premature death from chronic noncommunicable conditions, mental disorders, violence and injuries

Issues and challenges

Noncommunicable diseases account for 60% of the disease burden and over 50% of mortality in the Region. Based on the *Global status report on noncommunicable diseases 2010*, the regional prevalence of diabetes is the highest of all regions, ranging from 12% to 29%, and cardiovascular diseases account for 27% of all deaths in the Region. Physical inactivity, overweight and obesity were also reported to be highest in the Eastern Mediterranean Region, with almost 50% of women and 36% of men insufficiently active and over 50% of women overweight and 24% obese. Insufficient political commitment and budgetary provision for noncommunicable diseases continue to be a challenge to the provision of efficient and equitable preventive and institutionalized care for patients with noncommunicable diseases. Integration of tobacco cessation services into primary health care continues to be a challenge due to lack of both technical capacity and adequate resources. However, with the adoption of the guidelines for implementation of article 14 of the Framework Convention on Tobacco Control, it is expected that understanding will increase at country level of what exactly is needed in regard to demand reduction measures concerning tobacco dependence and cessation.

Neuropsychiatric disorders account for 12% of the total burden of disease in the Region. Community-based studies show estimated prevalence rates for mental disorders in adults ranging from 8.2% to 21%, with the rates of common mental disorders significantly higher in women. There has been an increase in mental health expenditure as a proportion of health budgets, and the proportion of spending on institutional-based care has been reduced significantly in the Region, from over 65%

HE the Minister of Health and the WHO Representative inaugurate the first national users association for mental health "Our step" in Jordan

to 38% of total mental health expenditure. However, mental health is still not prioritized in allocation of health budgets, and inefficient and inequitable use of resources in providing institutional care continues. The major challenges in mental health are stigma and discrimination; insufficient political commitment and understanding of the role of mental health in a holistic health care system; limited regional and national resources and capacities; and lack of integration of the mental health component at policy, system and service delivery levels.

Globally and in the Region, the injury burden has continued to grow. Injuries rank as the leading cause of death among certain age groups in many countries of the Region (burden of disease database, 2008). Road traffic injuries stand out in terms of resultant deaths, ranking as the sixth leading cause of death and the first in the 15–29 years age group. Resultant deaths have also shown an alarming rising trend in the Region, which, at 32.2 deaths per 100 000 population, now has the highest death rate due to road traffic injuries among all regions. This compares with a 2002 death rate of 26.4 per 100 000, which was then second to the African Region. In addition, the economic consequences cannot be overlooked, these having been estimated at between 1% and 1.5% of gross national product. The recent instability in the Region has added to the already existing huge burden of injuries and disabilities. Major challenges in the prevention and control of injuries and disabilities remain much the same in terms of human, financial and other resources. There is a need for more coordinated multisectoral collaboration, stronger political commitment, and better coverage and quality of hospital and hospital-based trauma care.

There is a pressing need to address visual and hearing impairment and their risk factors as a public health priority. The challenges to prevention and care of visual and hearing impairment include the need for greater political awareness of the magnitude of the problem and translation of this into financial and human resources; for effective national planning that integrates visual and hearing care into broader health development plans; for strengthening the infrastructure for delivery of effective visual and hearing care programmes, and for wider international development support.

Achievements towards performance indicator targets in each expected result

2011 witnessed a historic event in the commitment to prevention and control of *noncommunicable diseases*. Global leaders agreed at the United Nations in New York on the need for action on the prevention and control of noncommunicable diseases, with the General Assembly issuing a political declaration in this regard. At a regional level, member states of the Gulf Cooperation Council took the lead in action and response to the declaration by developing national plans for prevention and control. The

Regional Office actively participated with WHO headquarters and Member States in preparation for the United Nations high-level meeting, providing support to facilitate Member States' contributions to the meeting. Following the Declaration, the Regional Office continued to support Member States in the global consultation process to set global targets and monitoring indicators. The Regional Office continued to provide technical support for piloting integration of noncommunicable diseases into primary health care, with the addition of three more countries (Jordan, Qatar and Tunisia), bringing the total to six countries. The Regional Office also continued to provide technical support for review and development of national action plans to reflect the six objectives of the regional action plan and for review of surveillance. Technical support was provided for Egypt and Qatar to conduct the e-STEPS survey. Efforts to strengthen cancer control interventions focused on the priority areas of prevention, registry, breast cancer screening and palliative care. National capacity-building was supported in screening and raising community awareness of breast cancer in Kuwait, Jordan and Saudi Arabia, in collaboration with the Gulf Federation for Cancer Control and King Hussein Cancer Center. Support was provided to three countries to operationalize national cancer control plans with national frameworks for monitoring implementation (Jordan, Oman and Sudan).

Multicountry research projects were established with support from regional collaborating centres and international partners Komen for Cure and the European School of Oncology. The national palliative care programmes in Egypt and Islamic Republic of Iran were reviewed in collaboration with the European School of Oncology. A regional prioritized research agenda was developed, guided by the global agenda, in consultation with Member States. The Regional Office continued to collaborate with collaborating centres in the Region to build regional and national capacity. Work to support prevention and control of genetic diseases and haemoglobinopathies focused on data generation and review of existing guidelines and resources. Following a consultative meeting, organized in collaboration with CDC, a regional task force, was formed to develop a strategy on haemoglobinopathies and common genetic diseases.

The Regional Office continued to support capacity-building for *tobacco control* with a subregional activity on integration of cessation services into primary health care, in which Egypt, Iraq, Jordan and Oman participated. At the annual regional workshop on the Framework Convention on Tobacco Control, a session was held on the implementation of the guidelines on tobacco dependence in which all State Parties participated. A WHO collaborating centre was designated in the Islamic Republic of Iran with the implementation of cessation-related activities as its main focus. Capacity-building was supported also in implementation of cessation services and "quit lines".

Based on the evidence generated by the WHO assessment instrument for *mental health* systems (AIMS) and the regional mental health ATLAS, a regional strategy for mental health and substance abuse was developed which was endorsed by the Regional Committee. The ATLAS of maternal, child and adolescent mental health resources in countries of the Region was published. Support was provided to several more countries (Kuwait, Qatar, Somalia, South Sudan and United Arab Emirates) to draft and finalize evidence-based policies and strategies for mental health and substance

abuse. Professionals from Afghanistan and Islamic Republic of Iran were supported to participate in the mental health diploma course organized by the University of Pune, India, in collaboration with WHO headquarters.

Capacity-building of primary health care personnel in recognition and management of common mental disorders to promote integration of the mental health component into primary health care is an important plank of the mhGAP initiative and continued to be supported, with training conducted in Sudan. Project proposals for integration of mental health into primary health care in Afghanistan and Somalia were developed with national authorities, and are currently under review by donors.

Development of community-based services under the chain-free initiative for people with neuropsychiatric disorders, aimed at providing mental health services in a humane manner, and respecting the rights and dignity of the service users and their families, continued in Afghanistan, Somalia and Sudan. In collaboration with the emergency and humanitarian action programme, mental health and psychosocial support was provided during the Egyptian and Libyan crises, as well as for Somalia and Sudan and for displaced Iraqis in Egypt, Jordan and Syrian Arab Republic. In collaboration with the nutrition and school health programmes, a training module for project officers, aimed at integration of social and emotional well-being in health-promoting schools, was developed. A training module for early recognition and management of mental disorders during the peri-natal period was also developed, in collaboration with the women's and reproductive health programme.

Community activities for mothers and children, such as this one in Jordan, help build and maintain mental health

Momentum around vi*olence, injuries and disability* has increased globally and regionally, with Member States undertaking a number of international commitments. However, this needs to be translated into action at the country level to curb the escalating burden of injuries and to manage disabilities more effectively. The Decade of Action for Road Safety 2011–2020 was launched globally and regionally and more than 14 countries designated national decade focal points. The first biennial road safety progress report was submitted to the Regional Committee. Twenty countries participated

in the exercise for the second global status report on road safety and this was followed by a regional meeting to capitalize on the exercise and plan activities in countries. This exercise was exemplary of successful collaboration within WHO, between WHO and Member States, and between concerned sectors within Member States. The collection of reliable data on all forms of injuries remains a challenge. The Regional Office provided support for injury surveillance to Egypt, Iraq, Oman, Saudi Arabia and Yemen. Road safety efforts continued under *The Road Safety in 10 Countries Project* (RS10) in Egypt. A strategic framework for child and adolescent injury prevention was developed in collaboration with the child and adolescent health programme to support concrete and constructive steps for country implementation.

Disability and rehabilitation continued to gain momentum following the launch of the new community-based rehabilitation guidelines and the *World report on disability*. Support continued for collection of disability data based on the International Classification of Functioning, Disability and Health (ICF) in Egypt, Islamic Republic of Iran, Iraq, Jordan and Syrian Arab Republic. The regional initiative to upgrade prosthetics and orthotics training programmes continued, with support for selected training institutions to become internationally recognized centres. An increasing number of countries were actively engaged in a variety of activities, particularly Egypt, Islamic Republic of Iran, Iraq, Jordan, Libya, Pakistan, Saudi Arabia, Sudan and Syrian Arab Republic.

Translation of the community-based rehabilitation guidelines and the *World report on disability* into Arabic was completed. The Regional Office was actively involved in the global launch of the report and in the ongoing development of an e-learning

package for the guidelines. The Regional Task Force on Disability continued to collaborate with the Global Task Force and to undertake its own activities. A seminar was organized on the United Nations Convention on the Rights of Persons with Disabilities, with the participation of WHO and key players from regional and global organizations. Efforts were made to mainstream disability in WHO programmes. National capacities were strengthened through participation in international conferences and international, regional and national-level training courses in injury surveillance and prevention. Together with WHO technical support, these activities and country missions helped the identification of priorities, gaps and constraints facing national programmes and future steps to operationalize interventions and activities at country level.

In an effort to improve eye health and *prevention of blindness* activities, the Regional Office supported capacity-building in integrating and strengthening primary eye care within primary health care. Progress made at country level in the implementation

of the WHO action plan for the prevention of avoidable blindness 2009–2013 was reviewed at a regional meeting held in collaboration with the EMR-International Agency for the Prevention of Blindness.

World Sight Day, 13 October, was celebrated in collaboration with the Ministry of Health, Egypt and Lions Clubs–District 352 in Ashmoon, Menoufia Governorate with the inauguration of the Lions Ashmoon Eye Hospital, which aims to provide eye care services and facilities to the rural blind population in Egypt. The Regional Office developed advocacy materials to raise awareness and deliver key messages on the importance and effectiveness of cataract surgery, avoiding complications in diabetic patients, and promoting periodic testing and wearing of spectacles when needed.

To reduce blindness due to cataract in Afghanistan, over 1500 cataract surgeries were conducted with the financial support of the Patients Helping Fund Society, Kuwait. The training centre at the Kabul Noor Eye Hospital in Afghanistan was strengthened, in collaboration with the College of Ophthalmology and Allied Vision Sciences, King Edward Medical University, Lahore, Pakistan. Over 3000 cataract surgeries were performed by the National Eye Center, Mogadishu, Somalia through eye camps organized in collaboration with the Ministry of Health and Manhal Charitable Organization, funded by the Patients Helping Fund Society, Kuwait.

The Ophthalmic Research Centre of Shahid Beheshti Medical University, Teheran, Islamic Republic of Iran, was designated as a WHO collaborating centre for the prevention of blindness, and the Otolaryngology, Head and Neck Research

Participants in the regional meeting on primary health eye care

The Governor of Menoufia opens the Lions Eye Hospital in Egypt on World Sight Day 2011

Centre, Iran University of Medical Sciences, Teheran, as a WHO collaborating centre for research and education on hearing loss. Eye care equipment and kits were provided for Afghanistan, Somalia, Sudan and Yemen. The Regional Office, in collaboration with the King Saud University, supported capacity-building for strengthening and integrating ear and hearing care programmes within primary health care.

Future directions

The Regional Office will continue to support countries in implementing national plans guided by regional strategies. Support will be provided for integration of noncommunicable diseases, tobacco cessation, visual impairment, injuries and mental health and substance abuse into primary health care and for capacity-building in support of integration activities. Advocacy will be directed towards increasing political commitment and resources in all areas. More countries will be supported to complete the Stepwise survey, WHO AIMS and rapid assessment of avoidable blindness survey, and for development of evidence-based information. Tapping on strengths within the Region and pursuing collaboration between countries will be enhanced. The Regional Office will focus on translating the commitments undertaken by United Nations agencies and Member States at the global and regional level into actions at the country level in different areas, particularly noncommunicable diseases, road safety, child injuries and disability.

Strategic objective 4: To reduce morbidity and mortality and improve health during key stages of life, including pregnancy, childbirth, the neonatal period, childhood and adolescence, and improve sexual and reproductive health and promote active and healthy ageing for all individuals

Issues and challenges

The Region witnessed a reduction in under-five mortality of 32% between 1990 and 2010. However, countries have not progressed at the same pace. Four countries have achieved Millennium Development Goal 4 and six countries are on track; the other countries are most unlikely to achieve this goal. Six countries have achieved Millennium Development Goal 5, nine countries are on track, while eight are not expected to achieve the goal. There is evidence that universal coverage with the interventions under the Integrated Management of Child Health (IMCI) strategy have contributed to the substantial reduction in under-five mortality rate. Nevertheless, the pace of IMCI implementation in most countries remains slow and far from reaching universal coverage. High turnover of qualified staff, lack of plans for reaching universal coverage with IMCI and severe reduction in the level of funds allocated to maternal and child health remain major challenges to progress. Practical implementation of the WHO guidelines on integrated management of pregnancy and childbirth (IMPAC) is also facing difficulty, hindering efforts to improve the quality of maternal and neonatal health services. Despite the international movement towards adolescent health, not all countries have established an adolescent health structure that has a clear mandate, with allocation of required human and financial resources. Scarcity of age and sex disaggregated data continues to be a challenge to the process of adolescent health situation analysis report writing. A lack of tools and guidelines is another major challenge to the implementation and monitoring of adolescent health interventions.

Achievements towards performance indicator targets in each expected result

In the area of *maternal and neonatal health*, efforts were made to promote the use of evidence, products and technologies of regional and national relevance available to improve maternal and newborn health. Regional tools and norms were developed that will facilitate monitoring and evaluation of national programmes and assess their impact on maternal and newborn health. The reproductive health research directory continued to support strategic planning for promoting the health of mothers and their newborn infants. Since effective surveillance, analysis and reporting of maternal and newborn morbidity and mortality is key in guiding efforts to improve quality and management of vital services, the Regional Office embarked on developing generic facility-based maternal and newborn health client record forms. This will further standardize maternal and newborn health information systems.

The Regional Office continued to foster national activities that aim at providing maternal and neonatal quality care by skilled health workers through developing training manuals for facilitating the review, adaptation and implementation of IMPAC guidelines. Country work plans were developed at an intercountry meeting for promoting maternal and neonatal health. These were taken into account in the planning for the joint WHO/country collaborative programmes for 2012–2013.

In the area of protection and promotion of *child and adolescent health*, the Regional Office continued its support to countries to increase IMCI coverage as the main strategy that addresses child health needs in an integrated and standardized manner. Currently, IMCI is being implemented in 71% of primary health care facilities in 13 countries, five of which are expected to achieve universal coverage with IMCI (Figures 1.1 and 1.2). Analysis of IMCI implementation in Egypt showed that universal coverage with IMCI interventions substantially contributed to accelerating the progress towards MDG4. Between 1990 and 2010, Egypt achieved a 77% reduction in under-5 child mortality. This is considered an outstanding accomplishment. To ensure the quality of implementation of child health interventions, the Regional Office provided support to review IMCI and child health programmes in Jordan and Qatar. The IMCI package in the countries implementing the strategy has a strong neonatal component that addresses the most common problems of newborns and includes a preventive component of breastfeeding and ensuring appropriate vaccination status.

Sustainability of IMCI implementation continued to be emphasized through the pre-service education package. Currently, 61 medical schools have taken steps to introduce IMCI into their paediatric teaching programmes. The Regional Office provided technical support to evaluate IMCI teaching in one medical college in Pakistan. Support was also provided to orient teaching staff in 14 medical schools in Jordan and Pakistan. The scope of IMCI pre-service education was expanded and technical support provided for conducting the first orientation and planning workshop for five nursing schools in Jordan.

To support countries in developing adolescent health programmes, the

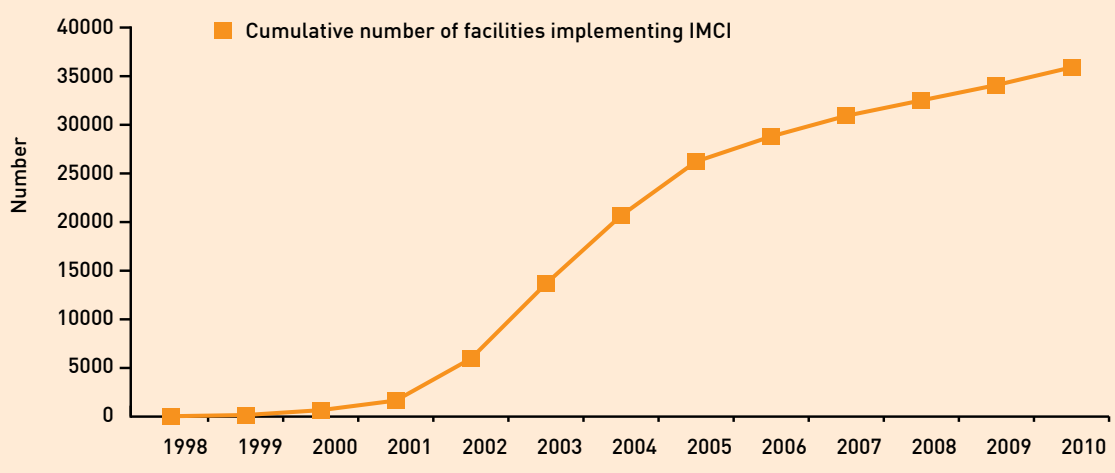


Figure 1.1 Health facilities implementing IMCI in the Region, 1998–2010

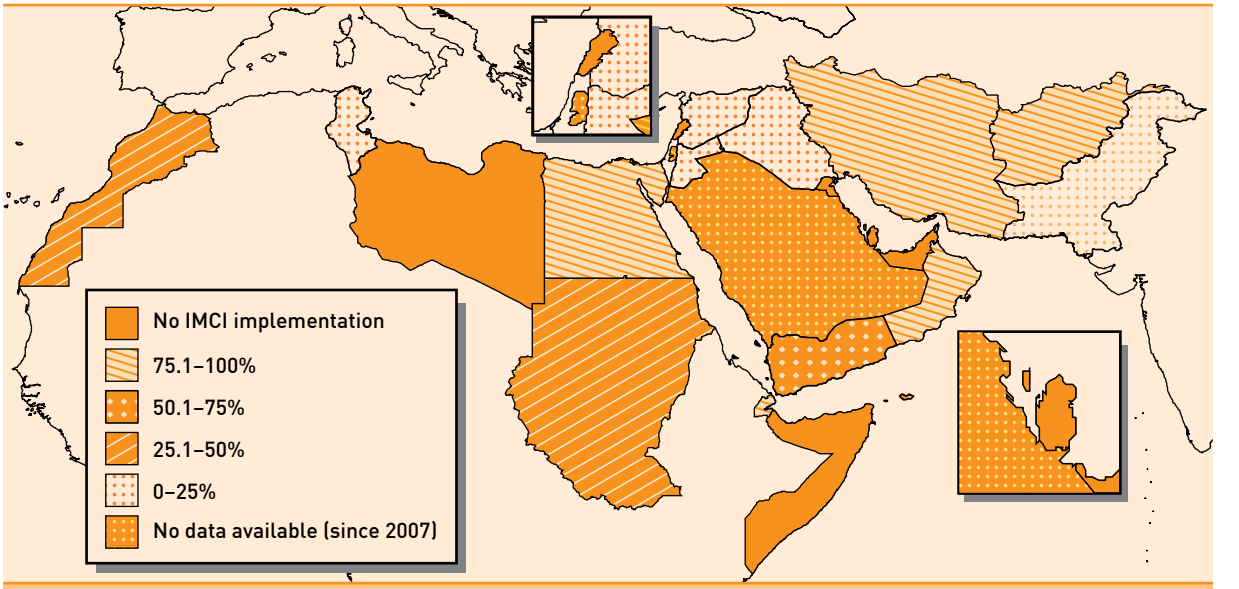
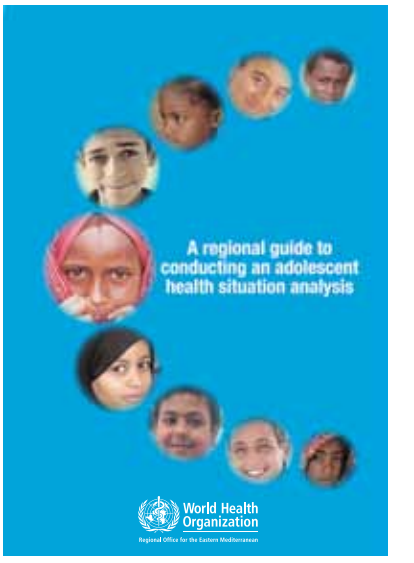


Figure 1.2 Status of implementation (%) of IMCI health facilities in the Region

Regional Office developed a programmatic approach demonstrated by the adolescent health strategic framework. This proposes a stepwise and phased approach towards a comprehensive adolescent health programme and was adopted by countries during a regional meeting. The Regional Office continued to work with countries to establish an adolescent health programme and structure. To date 10 countries have established such a programme within the structure of the Ministry of Health. A regional guide to conducting an adolescent health situation analysis was published to support countries in the process of planning and implementing programmes addressing the health of adolescents. Technical support was provided to eight countries to develop such analysis reports. A regional guide to adolescent health core indicators was developed in consultation with countries and capacity built in identification of adolescent health priorities. This resulted in identification of the general outlines of the preliminary adolescent health package. A draft regional guide on the review of adolescent health programmes was developed. A review and planning workshop for the adolescent health programme in Oman was supported.

Following the 2010 Muscat Declaration on strengthening of school health services to address current and future challenges, a standard package for scaling up school health services was developed. The outcome of the



intercountry survey on school health services conducted in 2010 was used to provide evidence and guide capacity-building on school health and nutrition promotion.

In the area of *reproductive health and research*, the Regional Office sustained its technical support to national efforts to accelerate progress in achieving international development goals and targets related to sexual and reproductive health. Afghanistan, Iraq, Somalia and South Sudan received support for development of their national reproductive health strategies and plans of action for 2011–2015. The Regional Office extended its technical support to Afghanistan and Yemen to develop their national commitment framework to accelerate achievement of Millennium Development Goals 4 and 5.

Together with UNFPA Regional Office for the Arab States, the Regional Office supported capacity-building on reproductive health counselling. This resulted in development of plans for eight countries to strengthen providers' capacity in reproductive health counselling and establishment of a regional core of trainers. This exercise will be repeated in 2012 to cover the other countries.

The Regional Office conducted a survey to map the implementation of evidence-based best policy and programme practices in family planning. Responses were received from 18 countries, out of which 17 confirmed the availability of the majority of the essential components for successful family planning programmes. Fifty-eight geographic information system maps were produced to describe the findings of this survey and an article was submitted for publication.

In the area of *active and healthy ageing*, the Regional Office supported documentation of national activities using a regional comprehensive tool. This activity was complemented by fact-finding field visits to Islamic Republic of Iran, Jordan and Syrian Arab Republic. In order to strengthen capacity-building for providing age-friendly health services in primary health care centres, a regional training guide was developed by a group of regional experts, planned to be published in 2012. Several countries (Bahrain, Egypt, Jordan, Oman, Qatar, Syrian Arab Republic, Tunisia and United Arab Emirates) expressed interest in adopting the age-friendly primary health care initiative. The age-friendly cities initiative continued to attract attention of countries. The Syrian Arab Republic continued its efforts to institutionalize this initiative in cities such as Hamah, Deir Atiyeh and Suwaida. Amman in Jordan continued on its track towards improving the quality of life of older persons in its capacity as an age-friendly city. The Regional Office supported the participation of countries in the first international conference on age-friendly cities aimed at linking global efforts and sharing experiences. As the theme of World Health Day 2012 will be "Ageing and health", a comprehensive work plan for celebrating this event was prepared and discussed in an intercountry workshop.

Future directions

Millennium Development Goals 4 and 5 are unlikely to be achieved in some countries unless major efforts are made. Specific attention needs to be given to a number of priority areas: revision of training curricula of medical and paramedical schools based on contemporary evidence; scaling-up provision of skilled health care for key stages of life; promoting healthy lifestyle practices, such as birth spacing, breast-feeding and health screening for early disease detection and prevention; expanding research on cultural and operational factors contributing

to provision and utilization of health services; and supporting countries to establish and strengthen maternal, neonatal and child health surveillance systems in order to be able to target interventions effectively.

Strategic objective 5: To address the health consequences of emergencies, disasters, crises and conflicts, and minimize their social and economic impact

Issues and challenges

An unprecedented number of countries in the Region were affected by all kinds of natural and manmade disasters. In addition, the "Arab Spring", and its impact generated civil unrest in several countries placing a burden on the health system in provision of urgent medical services. Faced with such increased demands, global health partners in support of ministries of health used the United Nations cluster system as a vehicle to coordinate the delivery of essential services as well as preventive public health programmes in Bahrain, Libya, Syrian Arab Republic, Tunisia and Yemen. In addition to ongoing complex emergencies, floods in Pakistan and Sudan required significant organizational support to establish operations in the affected areas and to advocate for public health needs for displaced populations. The drought in the Horn of Africa and subsequent famine in Somalia presented a huge challenge to the international humanitarian community to obtain access to those most in need, to manage a number of outbreaks and to support displaced populations. The limited capacity in the health sector in these countries further constrained the collective efforts of the aid community.

The number of internally displaced persons (IDP) in the Region has almost tripled in the past 10 years (according to the Internal Displacement Center), with four countries among the top 10 countries in the world hosting large percentages of IDPs per population – Iraq 9%, occupied Palestinian territory 9%, Somalia 16% and Sudan 13%. These vulnerable populations continue to face threats to their physical integrity, difficulties in obtaining access to basic health services and insecurity, hindering any growth and development.

Achievements towards performance indicator targets in each expected result

WHO played a key role in establishing pooled humanitarian funding for Pakistan, Somalia and Sudan and expanded regional humanitarian partnerships through the health cluster by signing new technical collaboration agreements. These included agreement with the Arab Medical Union, which has more than 10 000 medical staff registered who can be deployed in an emergency context for health service provision. Collaboration and interaction with the members of the Inter-Agency Standing Committee for Middle East and North Africa resulted in developing contingency plans for the crises in Egypt, Libya, Syrian Arab Republic and Yemen. The United Nations health cluster was also established in Djibouti and Libya.

WHO continued to support countries in crisis through an overall framework for emergency response and early recovery in the health sector. The concept of operations

(ConOps) tool developed for different scenarios was tested and used in Egypt, Libya, Pakistan, Somalia, Tunisia and Yemen. In the absence of a functional WHO office during the crisis in Libya, WHO and most United Nations agencies operated from Cairo and, to some extent, later on from Zarzis in Tunisia. The Regional Office took the lead in coordinating the health sector response, expanding partnerships and ensuring gaps were covered. Technical support was also provided to countries recovering from a disaster or conflict, in particular with post-conflict assessments and early recovery planning, in conjunction with national authorities, the World Bank and other partners, for example in Djibouti, Libya, Pakistan, South Sudan and Sudan.

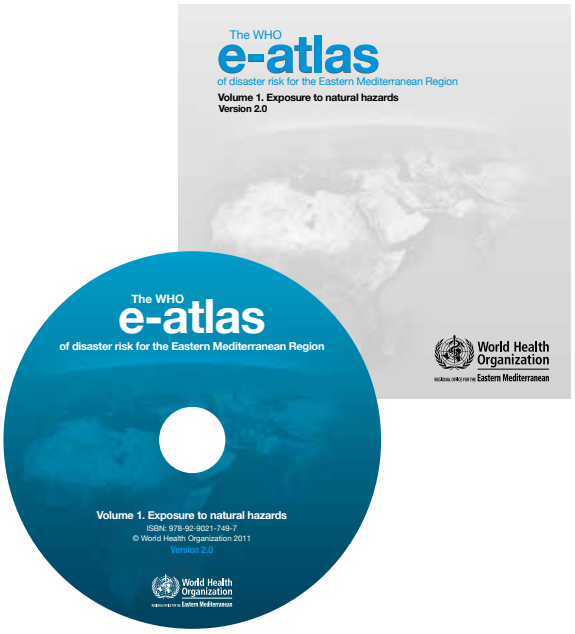
Capacity-building was supported in relation to emergency management, dealing with response to emergencies, preparedness and early recovery, and incorporating disaster risk reduction at all levels. National capacity-building activities were supported on the management of public health risks in emergencies in Oman, occupied Palestinian territory and Qatar, outbreak response and control in emergencies in Egypt, Jordan and Lebanon, and communicable disease control in emergencies in Egypt. Regional capacity-building was supported on analysing disrupted health systems, in collaboration with Merlin and the International Refugee Committee, on public health pre-deployment, and on national hospital preparedness with the support of the Asian Disaster Preparedness Centre. Emergency and humanitarian action training packages were evaluated in order to develop a suitable training course to prepare health professionals for the immediate response in an emergency.

A patient in the trauma section Aljalaa Hospital, Benghazi receives care from a Libyan doctor

Regional emergency supplies were prepositioned in Dubai in preparedness for future emergencies and disasters. Standard operating procedures as well as a business continuity plan were developed for the Regional Office.

The all-hazard framework for emergency management was promoted and rolled out in several countries to institutionalize emergency management in the health sector. Resolutions were adopted by the Regional Committee, World Health Assembly and Executive Board, further emphasizing the need for emergency preparedness and disaster risk reduction in the health sector. All countries have incorporated disaster risk reduction into their health systems. A key component of the strategy is the health facilities' safety programme. This was widely promoted and implemented in Lebanon and Oman, while Afghanistan and Sudan initiated it. Community-based disaster risk reduction activities were strengthened in Islamic Republic of Iran, Pakistan and Sudan.

The first regional risk communication programme for health was developed for schoolchildren in the form of a comic, in collaboration with the United Nations International Strategy for Disaster Reduction (UNISDR). This was pilot tested by the countries and will now be further developed. Coordination and collaboration continued with other regional offices in developing



new protocols and practices. These included a national capacity assessment tool and a global safe hospital action plan.

Partnership with other agencies, including UNISDR, UNDP, UNOCHA, WFP, UNICEF, King Saud University, the League of Arab States, and the Asian Disaster Preparedness Center, was strengthened to ensure collaboration for emergency management and planning and support for capacity development. WHO's response to the crisis in Libya demonstrated organizational and neighbouring countries' readiness to respond to such events.

Future directions

Disasters and crises have resulted in increased regional insecurity, instability, population vulnerability, displacement and poverty. A wealth of lessons can be extracted from these events to incorporate into future planning and programmatic development. However, after almost a decade of managing chronic situations, building national capacity and attempting to reduce risks, the need to reform the emergency programme is both evident and timely. WHO has embarked globally on developing a new operational framework that will guide its work in future health security and emergency operations. Growing criticism from Member States and donors and recent evaluations have concluded that the international community has not harmonized its capacities to collectively reduce morbidity, mortality and disability in the wake of a large-scale emergency. The creation of the transformative agenda led by the United Nations Emergency Relief Coordinator and the Inter-Agency Standing Committee will focus on a number of areas, including information management, leadership, accountability and coordination of relief partners. The need to invest in disaster resilience measures at local and national levels remains a key priority for the health sector and is grossly underfunded. The next biennium will focus on developing and testing systems to manage all acute onset events within the Region. Organizational and national level capacities to manage such events will be enhanced, with a strong emphasis on information and knowledge management and bringing forward best practices in public health. New partnerships will be established with the aim of accelerating risk reduction and preparedness activities.

Strategic objective 6: To promote health and development, and prevent or reduce risk factors for health conditions associated with use of tobacco, alcohol, drugs and other psychoactive substances, unhealthy diets, physical inactivity and unsafe sex

Issues and challenges

There is increasing political attention and commitment to combating the risk factors for health conditions, especially noncommunicable diseases, associated with the use of tobacco, alcohol, drugs and other psychoactive substances, unhealthy diets, physical inactivity and unsafe sex. This was made clear by the political declaration adopted by the United Nations General Assembly in 2011 on prevention and control of noncommunicable diseases. However, these risk factors continue to present a challenge to the Region, with negative impact not only on the health status of the population but also on the achievement of the Millennium Development Goals and on national development. The estimated regional rates of smoking, physical inactivity and overweight and obesity range from 11% to 30%, 30% to 87% and 30% to 75%, respectively. The prevalence of substance use-related disorders is estimated to be 3500 per 100 000 population and that of injecting drug use 172 per 100 000. These account for a loss of 4 disability-adjusted life years (DALYs) per 1000 and 9 deaths per 100 000 of the population, compared with the loss of 2 DALYs per 1000 and 4 deaths per 100 000 of population globally. The Region has the lowest rates of alcohol use disorders, with more than 80% of men and 95% of women abstaining, compared to 46% and 73% globally.

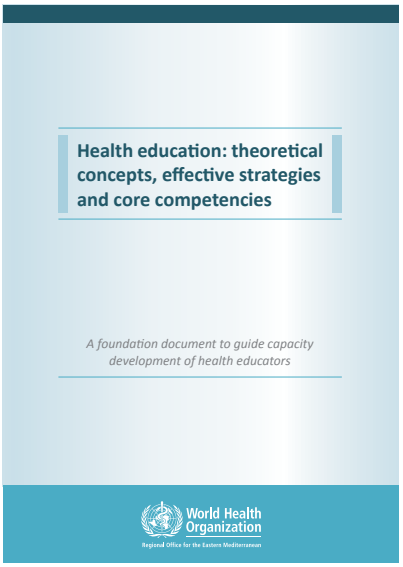
High level political commitment, legislative interventions and articulation of public health policies are needed. Additional human and financial resources also need to be committed, existing resources used more efficiently, synergies fostered across sectors, capacities strengthened to enable better implementation of legislation and policy, and integrated preventive, treatment and rehabilitative services developed. Additional challenges stem from lack of a common conceptual framework for health education and promotion to develop the competencies of professionals, on the one hand, and interventions focused on reducing the health risk factors, on the other. The complex and acute emergency situations prevailing in the majority of the countries is also an important contextual issue, which is tending to divert attention and resources away from actions on these risk factors. Focused, sustained and coordinated commitment of resources to prevent or reduce risk factors is needed if measurable impact on mortality and morbidity, and better quality of life are to be achieved for the people of the Region.

Achievements towards performance indicator targets in each expected result

Health promotion and education are essential approaches and tools for addressing the risk factors associated with communicable and noncommunicable diseases. In order to strengthen capacity for health promotion

and education at national and field levels, the Regional Office continued to pursue two initiatives. The first was development of a regional course for health promotion and education managers, in collaboration with academic institutions from within and outside the Region. This includes a set of core competencies identified by experts at global and regional level. It has been piloted in Kuwait and Qatar and is planned for launch at regional level in collaboration with selected academic partners. The second initiative builds on the health promotion leadership programme, PROLEAD, initiated in the Western Pacific Region, which has already been implemented in six countries and will now be expanded to others. While the first two rounds of the PROLEAD programme focused on strengthening partnerships for health promotion, the next round will focus on strengthening infrastructure and financing for health promotion.

Following up on the recommendations from the Nairobi conference on health promotion, an online tool was developed to promote documentation of health promotion and education initiatives in countries with the aim of building a database of successful interventions. Following launch of the regional framework on diet, physical activity and health in 2010, support was provided to several countries to implement their action plans.



In the area of oral health, the Regional Office conducted a rapid survey to assess oral health status and country capacity. As a result of this exercise, a concept paper highlighting the key challenges and proposed strategic directions in oral health was discussed at an intercountry meeting and led to the Isfahan Call for Action and to Promote Oral Health in the Region. Priority areas include the development of a regional strategy on oral health promotion, a core set of oral health promotion indicators, and development of an oral health surveillance system. Fourteen countries developed plans of action on oral health.

Special attention was given to addressing the health needs of vulnerable population groups, particularly of refugees of the Libyan crisis and schoolchildren. The Regional Office developed health education resources targeting refugees living in camps. Health education materials for schoolchildren were developed in partnership with UNISDR called the Friends Power Series, to address health issues such as healthy lifestyle, environment, food and chemical safety, influenza and risk reduction in drought, flood and earthquake situations. Capacity-building was supported for community mobilization in influenza outbreaks.

In the area of surveillance, and in collaboration with WHO headquarters and the Centers for Disease Control and Prevention, Atlanta, the Global School Health Survey has now been completed in 18 countries. The results so far reveal alarming findings, particularly with regard to

overweight, obesity and mental well-being, due to lack of physical activity and healthy diet, as well as life skills education.

In the area of alcohol and *substance abuse*, the training package for implementation by health personnel of the alcohol, smoking and substance involvement screening test (ASSIST) and linked brief intervention, and the opoid substitution treatment guidelines developed by WHO in 2009 were piloted in regional training workshops to enhance regional capacity to implement them. Technical support was provided to Oman for development of an information and reporting system for substance use. A joint project on substance use treatment and care funded by UNDODC was implemented in selected countries.

In *tobacco control*, the Regional Office continued to support the implementation of the WHO Framework Convention on Tobacco Control with a joint regional workshop, held with the Convention Secretariat for all Parties in the Region, to enhance implementation at regional and national levels. Technical support was provided through an intercountry meeting on the implementation of article 14 on demand reduction, with multisectoral representation from four countries (Egypt, Iraq, Jordan and Oman). Capacity-building was also supported, in collaboration with WHO headquarters and the Gulf Cooperation Council, on tobacco taxes. Ten countries (Egypt, Islamic Republic of Iran, Jordan, Kuwait, Lebanon, Oman, Pakistan, Qatar, Syrian Arab Republic and United Arab Emirates) received technical support to strengthen their tobacco control programme in advocacy, cessation and development of legislation, as well as to strengthen their national direction.

In advocating for tobacco control, the Regional Office and Kobe Center jointly developed and released online a report entitled *Tobacco-free cities for smoke-free air: a case study in Mecca and Medina*, one in a series of global reports released on this topic. The report was translated into Arabic. Technical support was provided to Egypt to conduct two national tobacco control radio campaigns, a public relations campaign, a social media campaign and a 'rebranding of tobacco control' exercise. The rebranding exercise is intended to evaluate tobacco control activities in Egypt over the past 10 years in order to re-plan and re-strategize, with completion scheduled for mid 2012.

The regional celebration of the 2011 World No Tobacco Day took place in Oman under the theme "WHO Framework Convention on Tobacco Control". A set of fact sheets were published to accompany the campaign. The Regional Office supported the release of a report entitled *The economics of tobacco and tobacco taxation in Egypt* online, as part of the Bloomberg Initiative to Reduce Tobacco Use. The report was disseminated to media personnel, decision-makers and policy-makers.

Support continued to be provided to countries to implement the Global Tobacco Surveillance System. In collaboration with international partners, the Regional Office is in the process of reviewing the methodology and tools for continued implementation. Implementation of the Global Adult Tobacco Survey is under way in Qatar and preparation for implementation was supported in United Arab Emirates. In collaboration with Johns Hopkins University, technical support for the completion of second-hand smoke testing was provided for 11 countries, with the report scheduled for release in 2012. The regional portion of the Third Global Tobacco Control Report was completed and the report was published online and is being translated into Arabic.

Future directions

The Regional Office will continue to support strengthening of organizational and human capacities for health promotion and education, focusing on building competencies for multisectoral collaboration and action within and outside the health sector. It will further advocate for the development of legislative action and public policy in support of needed health actions, such as regulating marketing of food and beverages to children and promotion of physical activity. The Global School Health Survey will be expanded to include the 12–18 years age group. This initiative will be supported by the piloting of a new project of Global School Health Policies and Practices Surveillance which looks at the school policy environment in order to support promotion of healthy behaviour.

The Regional Office will continue to provide support to implement the WHO Framework Convention on Tobacco Control, and the Global Tobacco Surveillance System, based on the new methodology. The Global Adult Tobacco Survey will be expanded and core questions included in other ongoing surveys, such as STEPS. A regional strategy for tobacco control will be developed.

Implementation of the regional strategy for mental health and substance abuse will be started, with focus on developing regional information and reporting systems to help countries develop evidence-based policies, strategies and integrated services. In line with the regional strategy and the mhGAP provisions, tools for enhancing the capacity for general health care providers to screen and provide services for alcohol and substance use disorders will be finalized. Technical support will continue for developing national strategies, guidelines and services for management of substance use disorders.

Strategic objective 8: To promote a healthier environment, intensify primary prevention and influence public policies in all sectors so as to address the root causes of environmental threats to health

Issues and challenges

Evidence is growing that environmental health is a major determinant for both communicable and noncommunicable diseases. According to WHO estimates (2009), more than one million deaths could be prevented in the Region each year through the availability of appropriate environmental health interventions. Declining water availability and quality, increasing populations, rapid changes in lifestyles, urbanization, unsustainable energy consumption and inefficient use of water resources are major public health concerns. Ministries of health have not yet identified the environmental determinants of health as a key priority for improving public health. The Region still struggles with traditional environmental health problems, such as solid and liquid waste management, and indoor and outdoor air pollution. Environmental health policies are inadequate and public awareness for influencing such policies is low. Natural and manmade disasters and climate change aggravate most of these problems and exacerbate their public health impacts. Destruction of environmental health facilities is a major concern in countries affected by man-made disaster or civil strife. Shortage of environmental health personnel and limited funding are also major challenges. Actions are required, both in the health sector itself and across sectors. Countries need to develop their national environmental health preparedness plans for emergencies, and to improve the access to information for research and decision-making. In order to ensure effective action in the health sector, risks have to be reduced/controlled in the settings where they occur –homes, schools, workplaces and cities – and in sectors such as energy, transport, industry and agriculture.

Achievements towards performance indicator targets in each expected result

Technical support was provided to countries for updating environmental health norms and standards, and adopting WHO norms on drinking-water quality, wastewater reuse, and health care waste management. The Islamic Republic of Iran, Jordan and Oman started updating their drinking-water standards in response to the 3rd edition of the WHO guidelines, adopting the approach of developing water safety plans. Morocco, Oman and Tunisia completed reporting requirements for the Global Annual Assessment of the Water Supply and Sanitation Sector (GLAAS). Dissemination and adaptation of WHO guidelines, such as the guidelines for drinking-water quality, health care waste management, and healthy and safe workplaces, supported efforts to reduce environmental public health risks. South Sudan and Somalia received technical support to draft environmental health strategies.

In terms of health care waste management, in collaboration with the GAVI Alliance, technical support was provided to Jordan,

Lebanon, Pakistan, Syrian Arab Republic, Sudan and Yemen to develop their national guidelines. Autoclaves were purchased to demonstrate appropriate hospital waste treatment in Pakistan and Yemen and a desk study of the situation of hazardous waste management was developed. A model plan for the safe management of wastes generated from health care facilities was drafted and a regional study of the situation of indoor and outdoor air pollution was launched. Regional training on environmental health risk analysis was conducted in Jordan in which 14 countries were participated.

The Regional Office was involved at global and country levels in strengthening occupational health programmes and plans, in particular in the preparation of a regional model for action to promote healthy wokplaces for employers, workers, policy-makers and practitioners. Egypt was one of the first countries in the Region to launch a national campaign on healthy and safe workplaces and launched the Egyptian Decade of Occupational Safety and Health (2011–2020). Regional capacity-building was supported for protecting health care workers from needle stick injuries and exposure to occupational bloodborne pathogens, in collaboration with Cairo University, Egypt.

The Centre for Environmental Health Activities (CEHA) continued to provide access to the Online Access to Research in the Environment (OARE) and Health Internetwork Access to Research Initiative (HINARI), through which health and environment-related institutions can access more than 8000 online refereed journals and several online databases. The Regional Office supported Iraq, Syrian Arab Republic and Somalia in conducting environmental health situation analysis. Iraq and Syrian Arab Republic are in the process of completing national environmental health strategies.

Several countries continued to take steps towards the implementation of the 2008 Regional Committee resolution on climate change and health. Health authorities in Jordan, Lebanon, Syrian Arab Republic and Tunisia participated in the annual update of the health chapters of the National Communications to the United Nations Framework Convention on Climate Change. Morocco is implementing its national health and climate change strategy. Jordan continued to implement the health component of the United Nations Joint Programme on Adaptations to Climate Change to Sustain Jordan's MDGs Achievements, and to implement the regional component of the WHO/UNDP global project on piloting adaptations to protect health from climate change.

Future directions

The Regional Office, supported by CEHA, will continue to provide technical advice and expert support with regard to capacity-building, research and technology transfer programmes, environmental health vulnerability assessments and situation analyses, and facilitating the adoption of WHO guidance on different aspects of environmental health.WHO will also continue to support the development and implementation of national frameworks for action on climate change and health; to strengthen capacity for monitoring trends and assessing the risks and health impacts of environmental and socioeconomic development; and to improve access to reliable information to support national environmental health strategies and actions. Technical support will be provided to: improve chemical safety systems; secure

basic occupational health services and integrate them into primary health care systems; operationalize healthy workplaces at national level; and protect and promote the health of health care workers. Advocacy and support will be provided to ministries of health and other governmental sectors to promote inclusion of environmental health in all development policies.

Strategic objective 9: To improve nutrition, food safety and food security, throughout the life-course, and in support of public health and sustainable development

Issues and challenges

Malnutrition remains a serious health problem among children and the single biggest contributor to child mortality in the Region, particularly in low-income countries. Nearly one-third of children in the Region are either underweight or stunted, and more than 30% of the population suffers from micronutrient deficiencies. Unless national policies and priorities are changed, the scale of the problem will prevent many countries from achieving the Millennium Development Goals. While undernutrition still exists, the burden of overweight, obesity and diet-related chronic diseases is also increasing. There is need for improved data, as well as knowledge about the importance of nutrition among political leaders in order to make progress in tackling nutritional problems.

Food safety is a major public health issue in the Region, both for consumers and for manufacturers, with many challenges. These include lack of political commitment, inadequate resources, outdated food safety laws and systems, and lack of consumer awareness and consumer protection legislation. Modern food safety systems recognize that food safety is a multisectoral responsibility, that food safety should be addressed throughout the continuum "from farm to fork", and that any decision or approach should be science-based. This approach requires a high degree of intersectoral collaboration, especially between the health and agricultural sectors at all levels, and this is often lacking. In 2011, many food contaminations and foodborne outbreaks were reported from Member States in the Region and beyond, the most notable being the contamination of ready-to-eat fenugreek sprouts in Germany and neighbouring countries with *Escherichia coli* O104:H4. This outbreak alone caused 54 deaths, more than 3800 confirmed cases of disease and disruptions to food trade. Countries are striving to implement the approaches recommended by the WHO global strategy for food safety.

Achievements towards performance indicator targets in each expected result

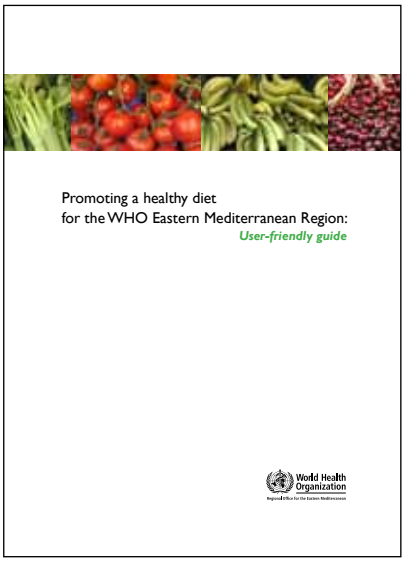
The regional *nutrition* strategy, which was endorsed by the Regional Committee in 2010, is contributing to the global movement to scale up nutrition action to improve maternal and child nutrition during the 1000 days between pregnancy and age two, launched in 2010. The strategy envisages multi-stakeholder processes at local and national levels that aim to help programme staff, organizations and society effectively

expand activities in nutrition. In this context, a regional technical consultation for scaling up nutrition action was held with participation of all key stakeholders.

WHO continued to provide technical support for implementing the WHO growth standards. These have been adopted by 17 countries while the remaining countries are in the process of changing their national growth standards. WHO is working to strengthen the nutrition surveillance system through capacity-building and technical support. Tools have been developed and a training package is being finalized for publication. Technical support was provided in policy development and programming to Afghanistan, Iraq, Pakistan, Qatar and South Sudan. Capacity-building in management of severe malnutrition was supported for priority countries. A training manual in nutrition education for schoolchildren is under development. A user friendly guide on healthy diet was finalized for publication.

Most countries are members of the International Food Safety Authorities Network (INFOSAN) and the INFOSAN Emergency network for rapid food alert systems. Regional capacity-building on food safety and consumer health protection was supported. Countries continued to participate in the ongoing global capacity-building to detect, prevent and manage foodborne diseases and monitor food safety issues.

Apart from countries in complex emergencies, most countries have laboratory ability to detect traditional chemical hazards in food. Countries continued to participate in Codex Alimentarius Commission and Committee meetings as well as in other international standard setting bodies to improve their food safety laws. The Near East Codex Committee, which assesses risks in food and prepares standards on



traditional foods of the Region, met in Tunis. Countries continued to strengthen their microbiological and chemical laboratories to enable them to participate in the international food safety surveillance network. Following implementation of the International Health Regulations (2005), many countries have integrated foodborne disease surveillance within their national disease surveillance. However, availability of foodborne disease and monitoring data remains limited.

Most countries are members of the WHO Global Foodborne Infections Network surveillance although not all are yet contributing actively to the surveillance. Planning for the second cycle of the global foodborne infections training course was initiated. Undertaking the full five cycles of the course will strengthen food surveillance systems in the Region. Countries continued to strengthen laboratory capacity to identify and to sub-type food-related pathogenic bacteria. Pulsenet continued to support capacity-building in molecular identification of zoonotic and nonzoonotic microbes to strengthen the surveillance of foodborne

disease. Continuation of regional capacity-building through the WHO global foodborne infection courses is essential. These courses and laboratory support will create a critical mass of trained personnel to deal with food safety. Distribution and field application of the "five keys to safer food" poster in several languages of the Region was augmented by the distribution of promotional material/consumer education and advocacy.

A comprehensive questionnaire on food safety structure and activities was disseminated to the Member States. The outcome of this questionnaire was discussed at a regional meeting of food safety focal points and laid the foundation for identification of regional priorities in food safety for the next two years.

Future directions

The Regional Office will continue to focus on strengthening the identification and treatment of severe acute malnutrition through the provision of guidelines for facility-based and community-based management, providing technical support and resource mobilization support for countries in need, capacity-building of staff and supporting implementation of monitoring systems. It will promote healthy diets and physical activity in schools and communities through the Nutrition-Friendly Schools Initiative (NFSI), focusing on the preparation of school nutrition policies, awareness-raising, capacity-building, promotion of healthy dietary practices and supportive health and nutrition services.

Food safety activities will continue to focus on provision of technical guidance and support for strengthening capacities and monitoring of food safety. Risk assessment capacity in food safety will be strengthened and regulatory and legislative activities at national level will be supported. Modernization and harmonization of food safety systems in the Region will continue to be an important focus. Efforts to implement the global strategy for food safety in the countries of the Region will continue.