

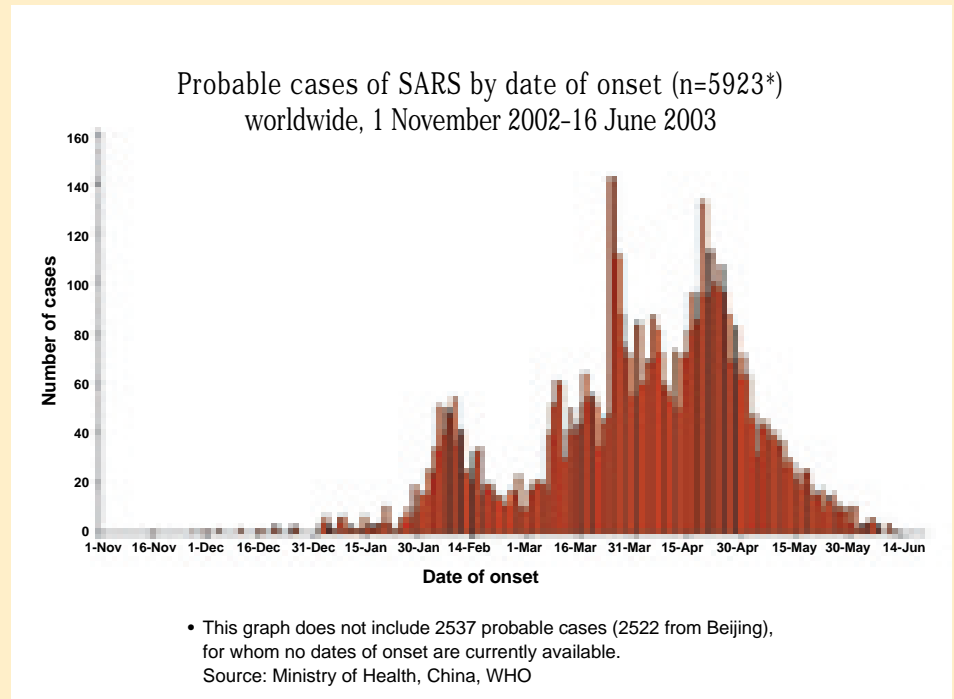


Severe acute respiratory syndrome(SARS): a new challenge

Severe acute respiratory syndrome (SARS) is a newly emerging infectious disease, the first to be recorded in the 21st century. SARS is caused by a previously unidentified coronavirus (CoV). The source has not yet been established, but scientists have suggested that the virus may be a mutation that "jumped" from animals to humans. Whatever its source, SARS is a new health challenge that adds to the double burden of disease facing the human population.

According to the available information, the SARS virus is transmitted mainly by droplet and direct contact. However, the role of indirect contact in transmission cannot be ruled out, especially in the health care setting. There is strong evidence that infection cannot be transmitted by goods, food or live animals imported from affected areas. The virus can live outside the body for a maximum of 2 days at room temperature. It is readily inactivated by many disinfectants and by heating at 56 °C for 30 minutes.

SARS is considered a global public health emergency. It is caused by a newly identified virus for which no treatment or vaccine is available; it has a great potential for international spread; and its case fatality rate is relatively high (9.6 %). These factors prompted WHO to launch an intensive investigation and to spearhead efforts to alert the international community. The international response, led by WHO, represents a real success story. Collaboration between the most experienced laboratories and health facilities across the world was instrumental in the unprecedented speed with which the causative pathogen was identified. WHO has continued to issue updated recommendations for prevention of international spread of the disease. For



the first time in its history, WHO also advised against travel to certain countries and areas as a measure to contain international spread of the disease. However, the main burden of prevention of further spread of SARS falls on departure points of affected countries and entry points of other countries.

Viet Nam, a developing country with limited resources, has been able to successfully contain the outbreak of SARS. Commitment, transparency and collaboration with WHO were the cornerstones of this impressive achievement. The success of Viet Nam is a model and a source of hope for efforts to contain the outbreak elsewhere.

With globalization and increasing air travel, there is real potential for further spread of this disease. Effective mechanisms for identification of suspect cases at airports and other ports of entry and strong surveillance and early

warning systems capable of early detection of cases are crucial for preventing further spread of SARS. With international cooperation led by WHO, the outbreaks of SARS were successfully contained and the last remaining travel recommendation was removed on 24 June 2003. However, continued vigilance through improved surveillance is always needed. For more information visit the following website: www.who.int/csr/sars/en.

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Yet another initiative ... for the Khartoum Malaria-free Initiative



In November 2002, the Khartoum Malaria-Free Initiative (KMFI) began execution of a new and innovative approach to raise public awareness of malaria prevention and control: a statewide school competition involving 612 schools, 542 teachers and last but

most important, 4263 children between the ages of 5 and 14 years. The two-month project was the result of collaboration between of the Ministry of Health and the Ministry of Education who wanted to make the most of the fact that school-based interventions can play a major part in mitigating malaria, and that the active involvement of schoolchildren in protecting their own health can be a very successful disease prevention and control tool.

The aim of the competition was to encourage children, to express their thoughts freely about this threatening disease, malaria. Prior to the announcement of the school competition, the Khartoum malaria control staff trained lead teachers from 612 schools on all malaria-related issues, such as how people get malaria and how they can prevent and treat it. Once

the focal points in schools were ready, the competition was officially announced in all schools, national newspapers and on national TV.

Children are unique in being able to soak up information and promote causes that catch their imagination with passion. That is why they were chosen by the KMFI to help their State realize its aim of being malaria-free despite being in one of the most highly endemic countries in the Eastern Mediterranean Region, Sudan.



Strengthening laboratory-based surveillance of epidemic-prone diseases: Lyon project

As part of ongoing efforts to strengthen national capacity for surveillance and response to epidemic prone diseases, participants from the central public health laboratories of Islamic Republic of Iran, Iraq, Jordan, Lebanon, Sudan, Syrian Arab Republic and Yemen, are undertaking a 2-year in-service training programme at the WHO/CSR Office in Lyon, France. This programme is designed to improve national capacities for laboratory surveillance of epidemic-prone diseases.

The programme entails three periods of residence in Lyon. During these periods, participants review essential

laboratory diagnostic practices and techniques, bio-safety standards, data collection and management, statistical analysis, basic disease epidemiology, and personnel management and administration practices. The curriculum includes actual case studies integrating computer and laboratory sessions and drafting a national plan of action to strengthen laboratory-supported national surveillance activities.

Between the three periods of residence in Lyon, trainees return to their national laboratories to apply the information and skills and implement the plan of action. During this time they receive

continuous support and follow-up by the trainers, including country follow-up visits. The trainees, who started their training course early 2002, will return once more to the WHO/CSR Office in Lyon in 2003 to attend the last training session and to review the implementation of the plan of action and other capacity-strengthening activities in their home countries. The programme also involves supporting the participating laboratories with certain relevant reagents and equipment. In addition, it is expected that the participating laboratories will continue to share information and experiences with one another.

Epidemiological Information

Reported cases of priority communicable diseases in the EMR January-December 2002

Country	Disease									
	Cholera	Meningo-coccal meningitis	Malaria	TB ^a	Measles	MNT	Total tetanus	Diphtheria	AIDS	Leprosy
Afghanistan	NA	NA	414 611	8 538	2 486	595		854	NA	19
Bahrain	0	0	45 ^b	91	8	0	0	0	13	6
Cyprus	0	0	NA	12	NA	NA	NA	NA	NA	NA
Djibouti	NA	NA	NA	1 559	50	0	1	0	NA	2
Egypt	0	130	10 ^b	5 292	653	176	673	0	47	1 318
Iran, Islamic Republic of	118	225	15 558	5 882	9 554	8	16	10	241	88
Iraq	718	NA	NA	6 193	4 088 ^b	22 ^c	NA	33 ^c	NA	NA
Jordan	0	26	159 ^b	162	19	3	3	0	11	0
Kuwait	NA	NA	NA	341	NA	NA	NA	NA	5	0
Lebanon	NA	NA	59 ^b	250	36	1	1	1	13	NA
Libyan Arab Jamahiriya	NA	NA	16 ^b	912	NA	1	NA	NA	NA	7
Morocco	0	120	104	NA	4 703	4	17	0	150	60
Oman	1	6	590 ^b	157	5	0	4	0	45	8
Pakistan	NA	NA	NA	17 753	3 903	935	1 016	22	10	1 202
Palestine	0	4	1 ^b	NA	36	1	3	0	2	NA
Qatar	1 ^b	2	130	158	34	0	0	0	6	7
Saudi Arabia	38	55	2612	1 708	311	28	39	9	19	39
Somalia	2 775	214	1851	3 633	9 559	NA	NA	NA	NA	151
Sudan	0	1 937 ^d	1 434 853	12 549	4 529	97	121	26	NA	1 361
Syrian Arab Republic	0	13	27	2 603	538	16	20	0	13	3
Tunisia	0	19	NA	779	98	0	5	0	36	NA
United Arab Emirates	3 ^b	21	36 ^b	42	NA	NA	NA	NA	NA	NA
Yemen	NA	NA	68 122	3 642	890	NA	122	NA	16	388
Total	3 650	835	1 937 868	72 256	37 412	1 865	2 041	922	627	4 659

NA: no data available

^a Data till end of June 2002

^b Imported cases

^c Data of 2001

^d Probable cases, no confirmation

Epidemiological Analysis

Revision of International Health Regulations

The International Health Regulations (IHR) comprise the only internationally binding legislation on the reporting of epidemics. They were endorsed by the World Health Assembly in 1969. In 1973 they were amended with additional provisions for cholera, and in 1981 they were revised to exclude smallpox after its eradication. Their purpose is to ensure maximum security against international spread of diseases with minimum interference in world traffic and trade. Their main objectives are to ensure consistent application of routine preventive measures; use of internationally approved documents (e.g. vaccination certificates); and formal notification to WHO and implementation of predetermined measures in the event of the occurrence of one of the three notifiable diseases (cholera, plague and yellow fever).

One of the major obstacles hindering effective implementation of the current Regulations arises from the traditional reluctance of countries to promptly and frankly report disease outbreaks, for fear of the economic repercussions in the form of lost trade and tourism.

In 1995, the World Health Assembly adopted a resolution on the revision and updating of the International Health Regulations. The main proposed change is to shift focus from the three diseases mentioned above to any "health emergency of international concern", aiming at ensuring that only public health risks (usually caused by an infectious

agent) that are of urgent international importance are reported under the Regulations. This will help to avoid stigmatization and unnecessary negative impact on international travel and trade as a result of invalid reporting and will help ensure that the system is sensitive enough to detect new or re-emerging public health risks.

The guiding principle for the Regulations is to prevent international disease spread by early detection of events that threaten public health. This requires early detection of unusual disease events through an effective national surveillance system. International coordination is a necessary part of the effective response to public health emergencies of international concern. A notification instrument, for determining whether an event is a potential public health emergency of international concern, has been developed and is being tested in 16 Member States around the world.

The effectiveness of the Regulations as an international instrument depends primarily on the extent to which countries accept the legal framework and are able to work within it. A series of meetings with selected Member States at national, subregional, regional and interregional levels are being held to validate permanent routine measures contained within the existing Regulations, and to test the new proposals. The updated version of the Regulations is expected to be submitted to the Health Assembly for approval by 2004.

From farm to fork, or to hospital bed? Calling for foodborne disease surveillance

Recent major food scares have made consumers all over the world aware of the inherent hazards of food, and of the magnitude of the task faced by governments in trying to guarantee food safety. The task involves controlling the food supply, which must be done in a preventive manner "from farm to fork". Health authorities may need to be involved more closely than other concerned sectors because of the threatening health effects of food hazards. WHO adopted food safety as a public health priority in 2000, and one of the core components of its food safety strategy is foodborne disease surveillance.

Foodborne disease surveillance provides an important opportunity to assess the actual health impact of contaminated food through providing data for risk assessment. For this purpose, the development or strengthening of integrated foodborne disease surveillance systems has become a priority in the area of food safety in WHO. Collaboration in foodborne disease surveillance entails adopting a coordinated approach among epidemiologists, public health officials, clinical physicians, staff in charge of food programmes,

laboratories, and health workers in general, as well as staff involved in food production and in animal health and zoonoses programmes.



WHO/EMRO is currently implementing a number of activities aimed at strengthening intersectoral collaboration in foodborne disease surveillance. Among these is a series of training courses aimed at improving collaboration between national reference laboratories active in the area of salmonella testing and the health and agriculture sectors. It is envisaged that the resulting collaboration will produce a clear picture of the food chain "from farm to hospital bed" that will allow for more coordinated decision-making and lead to activities that effectively target the causes of foodborne illness.

The 80/80 goal: situation of countries in the Region

The 80/80 immunization goal states that "By 2005, 80% of developing countries will have routine immunization coverage of at least 80% in all districts". It is one of the major targets set out by the Global Alliance for Vaccines and Immunization (GAVI). By the end of 2002, 15 out of 23 countries of the Region had already achieved this goal. Morocco is very close to achieving it, with only 4 districts reporting less than 80%

DPT3 coverage. With the exception of Iraq, the remaining countries have successfully applied for GAVI support to improve their routine EPI services and increase immunization coverage. Most of these countries have already started implementing the recommended strategies to reach this target.

Countries that had not reached yet the 80/80 goal, in 2002

	Number of districts with DPT3 coverage in 2002						Total number of districts
	Less than 50%		50% to 79%		More than 80%		
	No.	%	No.	%	No.	%	
Afghanistan	201	60.5	81	24.4	50	15.1	332
Djibouti	0	0	5	100	0	0	5
Iraq	0	0	15	18.5	66	81.5	81
Morocco	0	0	4	5.9	64	94.1	68
Pakistan	17	14.7	75	64.6	24	20.7	116
Somalia	18	100	0	0	0	0	18
Sudan	63	60	29	27.6	13	12.4	105
Yemen	82	28.5	128	44.4	78	27.1	288

Outbreak News

Whooping cough outbreak in Afghanistan

An outbreak of whooping cough severely hit north-eastern Afghanistan, causing great mortality and morbidity among children under 12 years of age. It was first detected in October 2002 in Kofob sub-district of Derwaz district, in Badakhshan province. Sixty-four deaths were reported over a 4-week period. The outbreak later expanded to other areas of Derwaz district, with an additional 100 deaths reported. The actual morbidity and mortality figures could not be investigated because of inaccessibility of the affected area. Nevertheless, the outbreak threatened around 40 000 susceptible children in the area.

Routine immunization coverage is extremely low in the affected area due to the great shortage of health services.

Except for one newly established EPI fixed centre, there is no health facility or physician in the entire district. Although most of the children living in the area have been covered by polio immunization, the recent measles mortality reduction campaign covered only some parts of Derwaz district.

Derwaz borders Tajikistan and is a very remote district. Normally, 3 to 8 days are needed to reach Derwaz from

Faizabad city, centre of Badakhshan province. Moreover, the area can be totally inaccessible during winter. As the outbreak occurred during a very tough winter, the major challenge was access to the affected area. The only means of reaching the area was through Tajikistan. Thanks to high-level Afghan and Tajik cooperation, and numerous partners, medical teams and supplies could finally be transported to the affected area.



Outbreak response activities focused on providing treatment to patients and chemoprophylaxis to the susceptible contacts, in addition to carrying out active case-finding. National immunization day campaign volunteers were trained to do active case-finding using the standard case definition and

a simple line-list, and to provide treatment and chemoprophylaxis.

With the current very low immunization coverage, and the deficient health and immunization services, such an outbreak is likely to recur. There is a crucial need to improve the immunization coverage in that area to prevent more outbreaks of vaccine-preventable diseases.

The United Arab Emirates celebrates malaria-free status



The United Arab Emirates celebrated malaria-free status in December 2002. A national meeting was held in Abu Dhabi, a marathon was run in El Ain and various other awareness and advocacy activities took place in all the Emirates. The Regional Director of

WHO/EMRO, RBM staff from the Regional Office and headquarters and representatives from malaria control programmes in countries of the Gulf Cooperation Council participated in the occasion. The efforts of the national malaria control staff have kept the country free from local malaria transmission for the past five years.

The United Arab Emirates is still vulnerable to malaria, however, and faces a particular challenge with regard to its large population of expatriates, the majority of whom are from malaria-endemic countries. Without vigilance, local malaria transmission could be re-established. To maintain malaria-free status, the country must focus attention on ensuring coordination between the various national services dealing with immigrants and international travel and on strengthening measures for malaria vigilance. Malaria vigilance activities should be directed at providing information to medical and paramedical staff on malaria status; improving laboratory diagnosis; raising malaria awareness among the population; registering and reporting imported cases and ensuring prompt treatment; monitoring and evaluating the preventive measures; and ensuring epidemic preparedness, border coordination and exchange of information with neighbouring countries.

Strengthening tuberculosis surveillance and epidemiology in the Region

Based on a recommendation from the national tuberculosis programme (NTP) managers' meeting in September 2002, WHO conducted two exercises in the first half of 2003 aimed at strengthening tuberculosis surveillance and epidemiology in the Region. The first exercise took place in Damascus, Syrian Arab Republic, on 15–21 February 2003. The exercise involved a comprehensive epidemiological analysis of the available tuberculosis data in several countries. Specific objectives of the exercise included investigating possible causes for the low detection rate; re-estimating the tuberculosis burden; and producing an improved package of analytical techniques for tuberculosis control programmes. The exercise also provided an opportunity to prepare for the interregional workshop on tuberculosis surveillance and epidemiology that took place in Cairo on 3–6 March 2003.

During the Cairo workshop, facilitators demonstrated direct and indirect methods to revise estimates of tuberculosis morbidity and mortality; disease prevalence and duration; tuberculosis mortality statistics; drug consumption; and proportion detected. Different countries used different methods to revise estimates; some used more than one method.

Both exercises resulted in revision of the estimates of tuberculosis morbidity in participating countries.

These activities were part of efforts by WHO and national programmes to improve tuberculosis diagnosis and surveillance. This, in turn, will yield better case detection rates, a crucial step for reducing the burden of tuberculosis in the Region.

Expansion of hepatitis B vaccination for children in the Region

At least 77% of newborns in the Eastern Mediterranean Region now have the opportunity to be vaccinated against hepatitis B, and there is a real chance to raise this proportion to 90%. The nationwide expansion of childhood immunization against hepatitis B in Pakistan is one of the most important achievements in the area of immunization in the Eastern Mediterranean Region in 2002.

Hepatitis B vaccine was first introduced in 11 pilot districts in Pakistan in 2001, and was expanded throughout the country in July 2002. As the population of Pakistan comprises around one-third of the population of the Region, this achievement raised the proportion of infants with access to free-of-charge hepatitis B vaccine, as part of routine immunization, from 40.6% to 77.4%. Moreover, there is a good opportunity to raise this proportion to 90% in the near future with introduction of the vaccine in Sudan and the Republic of Yemen through the support of GAVI.

Orienting research towards effective disease control: first follow-up visit of Small Grants Scheme projects in Sudan

A follow-up visit was made to Sudan for 13 projects funded by the Small Grants Scheme to provide technical support for implementation of fieldwork and development of plans for data management. The principal investigators of the projects in finalization were also provided with assistance in scientific writing to enhance publication of the results. The visit concluded with a meeting, held in the Research Directorate of the Federal Ministry of Health. The main research findings discussed in the meetings included the following.

- Results showed lower malaria prevalence in Khartoum urban area and

among displaced populations compared to previous data. Discussions concluded that the previous figures, which were derived from hospital-based studies rather than well-designed household surveys, had been overestimated.

- In Gedaref State, results showing 40% sub-patent infection during the dry season were used as the basis for administering a gametocytocidal drug during this season to reduce transmission.

- The high malaria case fatality among hospitalized malaria cases was attributed to overestimation of malaria burden. Malaria diagnosis was found to

be not confirmed in half of deceased cases.

- Data showed resistance to pentostam treatment for visceral leishmaniasis, thereby providing evidence about the need for registration of a second-line drug in Sudan.

- KATEX was evaluated as a rapid diagnostic test for visceral leishmaniasis.

During the visit, a survey was conducted among researchers to evaluate the impact of finalized projects following the distribution of final report summaries (1992-2000).

Regional strategic framework for integrated vector management

During the intercountry workshop on the control of malaria and other vector-borne diseases held in Khartoum, Sudan, on 21–23 January 2003, representatives from 21 countries and WHO staff from the Regional Office, headquarters and the field developed a regional strategic framework for integrated vector management (IVM). This followed the DCD informal consultation in February 2002 during which IVM was adopted as one of the strategies for the integrated approach to control communicable diseases.

The regional strategic framework for IVM is intended to provide countries with guidance on the optimal use of resources for enhancing the protection of human health and the environment. Based on this framework, countries are expected to prepare and adopt, by 2004, a national plan of action for IVM that includes incorporating and strengthening vector control capability within national health policies and systems; conducting advocacy; increasing intersectoral and intrasectoral collaboration; strengthening partnerships; and conducting monitoring and evaluation of IVM for evidence-based interventions.

Encouraging results in the second round of applications to the Global Fund to Fight AIDS, Tuberculosis and Malaria

Compared to the first round of applications to the Global Fund to Fight AIDS, Tuberculosis and Malaria, in which only one country from the Eastern Mediterranean Region, Morocco, obtained funding approval, results of the second round were very encouraging. Eight countries obtained funding approval: Afghanistan (integrated HIV/AIDS, tuberculosis and malaria components); Egypt (tuberculosis); Islamic Republic of Iran (HIV/AIDS); Jordan (HIV/AIDS); Pakistan (HIV/AIDS, tuberculosis and malaria); Somalia (malaria); Sudan (tuberculosis and malaria for both the south and Malaria for the north); and Yemen (malaria).

The total amount of funding for the 12 components in these 8 countries is US\$ 148.3 million, of which US\$ 34.2 million has been allocated for the first year of implementation. WHO/EMRO provided technical support to countries interested in applying to the second round. This assistance was instrumental in achieving the encouraging results mentioned above. The Regional Office congratulates the countries that obtained funding approval and offers its encouragement and support to the countries that will apply to the third round of proposals in 2003. For more information, visit the following website www.globalfundatm.org.

World TB Day 2003 a yearlong campaign

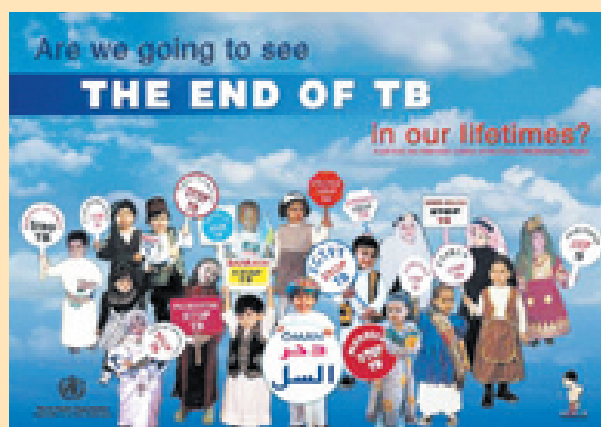
Scaling up elimination of lymphatic filariasis in the Region

The Second Regional Programme Review Group Meeting on Lymphatic Filariasis Elimination (RPRG) was organized in Cairo on 3 November 2002 with participation of the Members of the RPRG and the representatives from national programmes of Egypt, Oman, Pakistan, Saudi Arabia, Sudan and Yemen, and representatives from GlaxoSmithKline. The participants discussed the progress in elimination of lymphatic filariasis in the Region and prepared plans of action for 2003–2005. The final document of the meeting was presented to the partners of the Global Alliance to Eliminate Lymphatic Filariasis at an Ad-hoc Strategic Planning Workshop which was held in Liverpool, UK on 11–13 December 2002.

Egypt is the first country in the Region to have initiated lymphatic filariasis elimination activities in 2000. The national programme successfully completed with high population coverage (95%) the third round of mass drug administration (MDA) in LF endemic areas in September 2002. The effect of MDA on reduction of microfilariae prevalence among the population in high-risk areas and independent evaluation of the implementation of MDA will be organized and supported by the Regional Office during the first quarter 2003. The results of the surveys will facilitate the planning and preparation of the fourth round of MDA in Egypt. Statistical figures on leprosy for the 2002 are not available at present. The national programmes will report the data in March-April 2003.

The global theme for World TB Day 2003 is "**People with TB**" and the global slogan for the campaign is "**DOTS cured me - it will cure you too!**". This year's theme and slogan are based on the fact that people previously infected with tuberculosis and cured by the DOTS strategy represent the best advocates for tuberculosis control. Their healthy, active voices can bring about positive change. Positive change can also be brought about by increasing the case detection rate in the Region.

At present, only about 25% of people with infectious tuberculosis are diagnosed and treated with DOTS in the Region while our challenging regional target is to detect 70% of all active tuberculosis cases 2005. What we need to do is "**Gear up...detect more cases**". This enthusiastic phrase heads all WHO/EMRO advocacy material for World TB Day 2003 and needs to be translated...not into Arabic, but into action. And that is exactly why 24 March 2003 marked only the beginning of a yearlong campaign to advocate for TB control in the Region and to draw the attention of all countries to the importance of increasing case detection to meet the global target.



More national HIV/AIDS care guidelines and strategic plans developed in the Region

With the advance of the HIV/AIDS epidemic, the Regional Office strategy for dealing with the epidemic has changed from prevention to both prevention and care. This was clearly stated in the Regional Strategic Plan for Improving Health Sector Response to HIV/AIDS and Sexually Transmitted Diseases for the period 2002-2005. Accordingly, with WHO/EMRO support, HIV/AIDS care guidelines and action plans were developed in 5 countries, namely, Egypt, Djibouti, Lebanon, Oman and Pakistan. As well, national strategic plans for HIV/AIDS were developed in Djibouti, Islamic Republic of Iran, Sudan and Yemen during the second half of 2002.



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