



Travel and communicable diseases

The world has become a global village within which any destination can be reached from any starting point in only 36 hours of travel. This time interval is well within the incubation period of most communicable diseases and thus travellers, around 700 million worldwide annually, have ample opportunity to become victims or vehicles of these diseases. Information about the risks of communicable disease associated with travel is available in the WHO yearly publication "International Travel and Health". However, data about the actual incidence and mortality from these risks are largely lacking or in most cases limited to specific outbreaks of emerging diseases attracting global attention (e.g. SARS).

"Travel Medicine", a relatively new branch of medicine, is defined as the discipline aiming at maintaining the health of international travellers through health promotion, disease prevention and appropriate diagnosis and management. This branch is gaining more and more importance with the increasing awareness about the many

health risks (not only those of communicable disease) associated with travel and the ever increasing number of international travellers.

Travel medicine in clinical practice is largely focused on preventing individual risks to which travellers may be exposed. However, in the case of communicable diseases the risks related to travel might have consequences beyond the exposed individual. In situations where the traveller becomes the vehicle of specific infectious diseases, whole communities might be at danger. Many diseases have been spread outside their endemic areas by travellers leading sometimes to the occurrence of devastating pandemics. Newly emerging infectious diseases with obvious epidemic potential are expanding outside their natural foci through international travel. It has been demonstrated countless times that infectious diseases require no entry visa to any country. To guard against the public health risks arising from travel, WHO, in full cooperation with its Member States is revising the international health

regulations, with the aim of ensuring maximum security against international spread of diseases, with minimum interference with world traffic. WHO has also developed an international network for early detection of outbreaks and rapid response to control them. This network played a well recognized role in the control of the SARS epidemic, which paralysed world travel to south-east Asia.

The practice of travel medicine has developed enormously in the past three decades, but the public health aspect of it, although much older in development has not yet reached the level targeted by the Member States of WHO. Much work is still needed to strengthen the national capacities in the areas of disease surveillance, early warning and rapid response. In addition, greater transparency in information dissemination is warranted. The clinical aspect of travel medicine is usually covered by private health care providers, working with individuals. However, the public health aspect depends, in most of its activities, on the public sector and the national health authorities. More than that, it depends on international cooperation in different areas and among different players. WHO's role is significant in building up national capacities in this field, and in leading all partners in facilitating international cooperation.

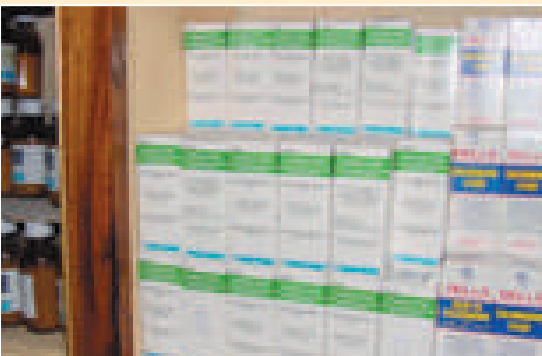


INSIDE

- 2** Malaria and risk for travellers
- 5** 3 by 5 Initiative
Outbreaks of Avian influenza
- 7** Main challenges in the control of zoonotic diseases
- 8** The Small Grants Scheme approves 33 projects in 2003

Malaria and risk for travellers

Most cases of malaria in travellers occur because of poor compliance with prophylactic drug regimens or use of inappropriate prophylaxis. The risk for travellers of contracting malaria is highly variable from country to country and even between areas in a country. Travellers and their advisers should



note the four principles of malaria protection:

- be aware of the risk, the incubation period, and the main symptoms
- avoid being bitten by mosquitoes, especially between dusk and dawn by use of repellents, insecticide-impregnated clothing, or insecticide-impregnated bednets.

- take antimalarial drugs (chemo-prophylaxis) to suppress infection when appropriate
- immediately seek diagnosis and treatment if a fever develops one week or more after entering an area where there is a malaria risk, and up to 3 months after departure

The recommended prophylaxis for each country is mainly decided on the basis the prevailing species of malaria parasites in the area, and the level and spread of drug resistance reported from the country. Depending on the area to be visited, the recommended drug for prophylaxis may be:

- chloroquine; in areas with vivax malaria only (300 mg CQ base weekly, starting 1 week before departure and continuing weekly during stay and for 4 weeks after return)
- chloroquine plus proguanil; for falciparum malaria in areas with low level of resistance to CQ (100 mg chloroquine, 200 mg proguanil, daily, starting 1 day before departure, continuing during stay and for 4 weeks after return)

- mefloquine; for sub-Saharan African countries (mefloquine 250 mg weekly one tablet, starting at least 2 weeks before departure, continuing weekly during stay and for 4 weeks after return) or,
- atovaquone/proguanil combination tablet, one dose daily according to body weight, starting one day before departure and continuing throughout stay and for 1 week after return.

Specific information on anti-malarial drugs to be used for chemo prophylaxis according to geographic area is given in detail in International Travel and Health, available online at www.who.int/ith

The following should also be taken into account:

Antimalarial drugs must be taken with food and swallowed with plenty of water. All prophylactic drugs should be taken with unfailing regularity for the duration of the stay in the malaria risk area, and should be continued for 4 weeks after the last possible exposure to infection (except for atovaquone/proguanil which is given for 1 week only) since parasites may still emerge from the liver during this period.

Field News

Pakistan on the track: successful DQA



The approach of the Global Alliance on Vaccines and Immunization (GAVI) is that of performance-based programming, whereby national EPI programmes are rewarded for actual increases in the

number of children immunized. Every country receiving GAVI support must show evidence of the accuracy of its recording and reporting practices in order to maintain that support. In order to verify country reported performance, as well as to enhance the immunization monitoring and reporting system, WHO

has developed a tool called Data Quality Audit (DQA) that reviews both the number of children reported to have received a DPT3 injection and the accuracy of the EPI reporting system. Effective programmes with accurate data recording and reporting systems receive the most credit in a DQA.

In this context, two external auditors from the WHO collaborative auditing company, assisted by two internal auditors selected by the national EPI, undertook a DQA from 8 to 20 September in Pakistan. The audit confirmed the reported number of infants that received their third DPT injection in 2002, with a verification factor of 99.1% (calculated with a 95%

confidence interval between 90% and 108%). As a result GAVI board clearance was granted to release the second part of the first installment (US\$ 2 505 000) and the second installment (US\$ 5 010 000). In addition, an amount of US\$ 5 548 000 was granted as a reward for the additional number of vaccinated infants.

Currently, there is high hope that this financial support, combined with WHO and UNICEF (global, regional and country level) coordinated efforts and technical support, will soon translate into a major increase in access to immunization services, mainly through proper and adequate implementation of the RED approach.

Epidemiological Information

Reported cases of priority communicable diseases in the EMR January-July 2003

| Country | Disease | | | | | | | | | |
|---------------------------|---------|---------------------------|------------------|------------------|---------------------|-----|---------------|------------|------|---------|
| | Cholera | Meningo-coccal meningitis | Malaria | TB ^a | Measles | MNT | Total tetanus | Diphtheria | AIDS | Leprosy |
| Afghanistan | NA | NA | NA | 6 813 | 630 | 75 | NA | 0 | NA | NA |
| Bahrain | 0 | 0 | 29 ^b | 41 ^c | 9 | 0 | 1 | 0 | 4 | 8 |
| Djibouti | NA | NA | NA | 1 691 | 3 | NA | NA | NA | NA | NA |
| Egypt | NA | NA | NA | 5 734 | NA | NA | NA | NA | 21 | NA |
| Iran, Islamic Republic of | 2 | 105 | 4 723 | 5 972 | 10 249 ^d | 1 | 4 | 0 | 65 | 39 |
| Iraq | NA | NA | NA | 5 956 | NA | NA | NA | NA | NA | NA |
| Jordan | 0 | 6 | 106 ^b | 152 | 135 ^d | 2 | 1 | 0 | 2 | 0 |
| Kuwait | NA | NA | NA | 286 | 1 | 0 | NA | 0 | 3 | NA |
| Lebanon | 0 | 7 | 30 ^b | 221 | 450 | 1 | 0 | 0 | 4 | 0 |
| Libyan Arab Jamahiriya | NA | NA | NA | NA | NA | NA | NA | NA | NA | 8 |
| Morocco | 0 | 54 | 15 ^e | NA | 8 536 | 5 | 4 | 0 | 39 | 26 |
| Oman | 0 | 5 | 182 ^b | 117 ^c | 1 | 0 | 0 | 0 | 15 | 4 |
| Pakistan | NA | NA | NA | 32 854 | NA | NA | NA | NA | NA | 427 |
| Palestine | 0 | 95 | 1 ^b | NA | 0 | 0 | 0 | 0 | 0 | 0 |
| Qatar | 0 | 0 | 25 ^b | 134 | 18 | 0 | 0 | 0 | NA | 2 |
| Saudi Arabia | 13 | 28 | 1 046 | 1 760 | 992 | 13 | 7 | 1 | NA | 23 |
| Somalia | 7 046 | 14 | 20 188 | 4 358 | 3 134 | 32 | NA | NA | NA | 193 |
| Sudan | NA | NA | NA | 12 876 | NA | NA | NA | NA | 274 | NA |
| Syrian Arab Republic | 0 | 13 | 2 ^d | 2 699 | 3 527 ^d | 4 | 2 | 0 | 2 | 0 |
| Tunisia | NA | NA | NA | 818 | NA | NA | NA | NA | 10 | NA |
| United Arab Emirates | 0 | 9 | 618 ^b | 61 | 26 | 0 | 4 | 0 | NA | 7 |
| Yemen | 0 | 58 | 28 132 | 2 993 | 846 | 13 | NA | 2 | NA | 236 |
| Total | 7 061 | 394 | 55 097 | 85 536 | 28 557 | 146 | 23 | 3 | 439 | 973 |

NA: no data available

^a including extra-pulmonary TB

^b imported cases

^c nationals only

^d suspected cases

^e 2 cases only are autochthonous

Epidemiological Analysis

Transparency: a key word in the Revised International Health Regulations

The purpose of the International Health Regulations (IHR) is to ensure the maximum security against the international spread of diseases with minimum interference with world traffic. The IHR were originally intended to help monitor and control six serious infectious diseases: cholera, plague, yellow fever, smallpox, relapsing fever and typhus. Today, only cholera, plague and yellow fever are notifiable diseases.

WHO Member States are obliged to notify WHO for a single case of cholera, plague or yellow fever, occurring in humans in their territories, and give further notification when an area is free from infection. These notifications are reported in WHO's *Weekly Epidemiological Record*. Countries are asked to keep an eye on unusual outbreaks, and not to censor the sharing of health information.

The recent outbreaks of emerging diseases, especially SARS, have triggered a global pressure for transparency in timely reporting and sharing surveillance data by countries. Absence of enough transparency has resulted in lack of ability to analyse data for evidence-based decision-making at national and regional levels, and, thence in over-reaction of many countries. Lack of transparency in reporting of

significant communicable disease may be attributed to fear of economic embargo, and lack of skilled epidemiologists and infectious disease specialists in many countries, among other reasons.

The IHR are currently being revised and are expected to be approved by the World Health Assembly in 2004. To maximize transparency, the revised IHR will take into account reports from sources other than official notifications, to validate these reports according to established epidemiological principles. WHO will alert, when necessary and after informing the government concerned, the international community to the presence of a public health threat that may constitute a serious threat to neighbouring countries or to international health on the basis of criteria and procedures jointly developed with Member States. Also, WHO will collaborate with national authorities in assessing the severity of the threat and the adequacy of control measures and, when necessary, in conducting on-the-spot studies by a WHO team, with the purpose of ensuring that appropriate control measures are being employed. For further details, please visit the IHR website: <http://www.who.int/csr/ihr/current/en/>.

Reaching Every District: EPI's strategy to increase access to immunization services

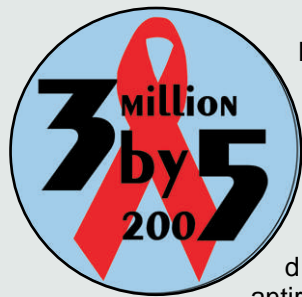
Each year around 3.5 million infants are not immunized in the Eastern Mediterranean Region because of the lack of access to immunization services. This is particularly the case in six countries. Strengthening the routine immunization system in these countries is therefore a very high priority, both to increase coverage and ensure greater uniformity throughout the Region. While national level leadership is crucial, experience has shown that targeting weak district level health management is most likely to lead to sustainable improvement in vaccine delivery. The "Reach Every District" (RED) initiative launched jointly by WHO and UNICEF is a promising new approach aimed at assisting countries to improve district level planning, implementation and monitoring of immunization services through development of model district plans and strengthening of district immunization management, also using lessons learned through polio eradication. RED is composed of simple and achievable strategies:

- re-establishment of regular out-reach services, mainly for communities with poor access
- supportive supervision (on-site training by supervisors)

- community links with service delivery (regular meetings between the community and the health staff)
- monitoring and use of data for action (doses chart, population map in each health facility)
- better planning and management of human and financial resources.

An intercountry training and planning workshop was held in Egypt in May 2003 and was attended by the national EPI manager and one district manager from each of the six priority countries in the Region, as well as representatives from UNICEF and WHO (polio staff) country offices in the same countries. It comprised training of EPI country teams (national, WHO and UNICEF) on the RED approach and drafting by each country team of one pilot district micro-plan as well as a national plan for district micro-planning. The follow-up country visits conducted recently in Pakistan and Sudan by some members of the Regional Working Group on GAVI constituted a good opportunity to monitor the progress made in implementing the RED approach, as well as to assist EPI country teams in addressing some key issues.

3 by 5 Initiative



It is estimated that 40 million people are living with HIV in the world. Of these, around 6 million, most of whom live in developing countries, urgently need antiretroviral treatment due to the seriousness of their illness. Currently, only 300 000 people in developing countries receive antiretroviral medicines.

Deficient access to antiretroviral treatment is considered an emergency that needs urgent action. Accordingly WHO, together with UNAIDS and other partners, is leading the response to this global health emergency and is urging governments, donors, other international organizations, nongovernmental organizations, people living with HIV/AIDS and industry to join together to ensure that millions of people who need antiretroviral medicines will receive them. The

target to which WHO and its partners are committed is to provide antiretroviral medicines to three million people needing them in developing countries by the end of the year 2005. This is known in short as the 3 by 5 target.

WHO has developed a strategy to achieve the 3 by 5 target. The strategy includes providing emergency teams to countries to assess the barriers to and opportunities for achieving 3 by 5, development of simplified treatment guidelines to make antiretroviral drugs relatively simple to administer, and establish a facility to assist countries in obtaining the best prices for and best quality of drugs and diagnostics.

Sudan was the only country of the Region originally included in 3 by 5, however the Regional Office is communicating with the countries and with the 3 by 5 team in headquarters with a view to extending the activities of 3 by 5 in the Region to other countries.

An outbreak of yellow fever in southern Sudan

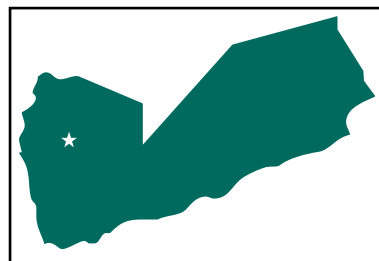
In May 2003, a yellow fever outbreak was confirmed in the Eastern Equatoria region of southern Sudan. A total number of 222 cases were reported with 70 deaths (case-fatality rate (31.5%). Most of the cases were reported from the villages of Imatong (143 cases, 64.4%), Katire (N=30, 13.5%) and Lobire (N=23, 10.4%), and the remaining cases (N=23, 11.7%) were reported from another eight villages. An Inter-Agency Emergency Response Team was formed and held weekly meetings throughout the outbreak period to monitor surveillance activities and institution of control measures. A mass vaccination campaign was conducted in Torit, where 98 705 people were vaccinated (51% of target population), Budi (29 560; 25% of target population), and Kimatong payam (N=15 846, 32% of target population). Vector control activities included health education, and clearing of standing water bodies and other breeding sites for mosquitoes. More than 2700 bednets were distributed. No new cases were reported after July 15, 2003.

In order to maintain active surveillance for yellow fever in the affected areas, 38 health care facilities were identified as sentinel sites and more than 250 staff, counterparts, health care workers and community leaders were trained. The Government of Sudan conducted a campaign in Torit town and its environs and in Juba. Kenya and Uganda also went on alert for yellow fever cases and have undertaken vaccination campaigns in the districts bordering Sudan.

Outbreak News

An outbreak of dengue fever in Yemen

In the second week of July 2003, there was an outbreak of dengue fever in Shabwah Governorate, Yemen. The outbreak was anticipated and was detected early by the surveillance system



because Shabwah had had a similar outbreak (36 confirmed cases) in May 2002. Using a clinical case definition, 210 suspected cases were identified. About 50% of the specimens tested at NAMRU-3, Cairo, Egypt were serologically confirmed (IgM positive).

Unlike the outbreak of 2002, which affected six villages in the Shabwah Governorate, this outbreak occurred mainly in Ataq, the capital of Shabwah. Only 10 cases were admitted to Ataq Hospital and received supportive management; other suspected cases received ambulatory treatment. There were no reported deaths from dengue fever during the outbreak. Control measures, including insecticide spraying, were instituted in coordination with the malaria branch. The outbreak was over by the end of August 2003.

Outbreaks of Avian influenza in Asia

Several outbreaks of Avian influenza (mainly among chickens) caused by H5N1A virus have been reported recently in different parts of eastern and south-eastern Asia. Several human cases of influenza A (H5N1A) have been reported from these areas, particularly from Vietnam and Thailand. No cases were due to transmission from human to human with the same virus. The concern now is that frequent transmission of Avian influenza viruses to humans will increase the possibility for re-combination of these Avian strains with human strains. The resulting new influenza virus will be highly pathogenic for humans and will be easily transmitted among them. The emergence of such a virus could lead to a new influenza pandemic with millions of cases and deaths. We should be on the watch.

An in-depth review of the national communicable disease surveillance systems in the Islamic Republic of Iran

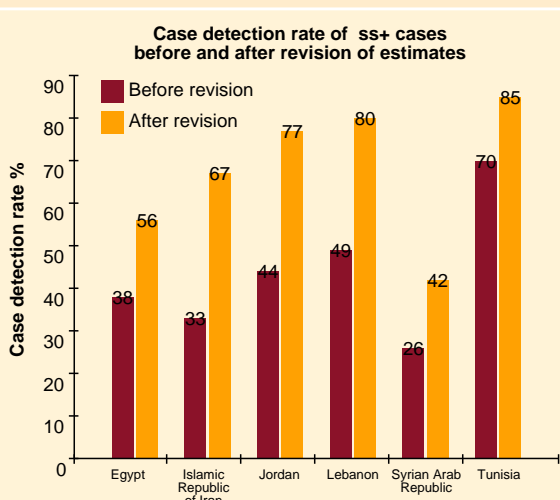
TB epidemiology and surveillance in the Region: incidence estimates

There are indications that the official estimates for TB incidence do not reflect the real situation. Two exercises were conducted in 2003 to review such estimates in the Region, using different methods.

In addition to the classic method of using the Annual Risk of Infection multiplied by Styblo ratio, four additional indirect methods for calculating TB incidence were introduced. These methods are: disease prevalence and duration, mortality statistics from vital registration systems, drug consumption and estimate of the proportion detected.

The Syrian Arab Republic used the classic method in addition to the proportion of extrapulmonary cases detected and drug consumption methods. The Islamic Republic of Iran, Jordan and Tunisia also used the Styblo ratio in their estimations. The estimated percentage of non-response from the private sector was used by Lebanon. Tunisia and Egypt used the mortality data method in their revision of TB estimates.

As these incidence rates are revised and recalculated based on the solid surveillance data presented by these countries, the TB case detection rates have approximately doubled (see bar chart below). This indicates an improvement in the quality of diagnosis and reported surveillance data.



At the request of the Ministry of Health and Medical Education, Islamic Republic of Iran, the WHO Regional Office for the Eastern Mediterranean conducted an in-depth review of the national communicable disease surveillance systems in the Islamic Republic of Iran during the period between 10 and 24 November 2003. The review team was composed of eight national and five international experts with support from WHO/EMRO and WHO, Geneva.

The objectives were to assess the structure, processes, resources and coordination of the national communicable disease surveillance and response system and to propose a plan of action to strengthen surveillance activities. The assessment team reviewed the public health surveillance functions, early warning, routine and disease-specific surveillance systems, training needs, laboratory capacity, cross-border activities, epidemic preparedness, and the role of the private sector.

Six provinces and eight districts were visited, including 37 health facilities from all levels of the public health system as well as private institutions and 28 laboratories. Several strengths and weaknesses of the existing system were identified as well as opportunities for and threats to effective and efficient surveillance and control.

Main challenges in the control of zoonotic diseases

Zoonotic diseases are the cause of significant morbidity and mortality in animal and human populations. They hamper agricultural production and create barriers to international trade. Some zoonotic diseases have emerged or re-emerged in new or free-from-transmission areas.

Prevention and control of zoonoses involves several sectors, including agriculture, public health, trade, food industry and communities.

Success in the control of zoonoses depends on the efficiency of the surveillance system and the coordinated actions of the different sectors involved.

These tasks can be achieved through establishment of an intersectoral coordinating committee responsible for development of a common multisectoral national plan, institution of an integrated surveillance system, coordination and monitoring of activities, strengthening of human and technical capabilities to control zoonoses, promotion of health education and community participation.

Multidisciplinary research on the economic burden of zoonoses, and cost-benefit and cost-effectiveness analysis of control interventions should be encouraged to enhance political support and assist in identifying appropriate control strategies. Partnership and coordination of activities between WHO and other international organization should be strengthened also.

World AIDS Campaign 2003

It was noticed that this year the World AIDS Campaign received more media coverage than in previous years. This may be due to the global interest in the 3 by 5 initiative announced by WHO and which aims to increase the access to antiretroviral drugs.

For the second year consecutively, the World AIDS Campaign focused on stigma and discrimination related to HIV/AIDS. The global slogan for the campaign was the same as last year, "Live and let live". However in order to conform with the 3 by 5 initiative, the Regional Office added a slogan which refers to the availability of drugs for AIDS and encourages all actors to start working for the initiative. The regional slogan was "AIDS is treatable ... for a better future act now!". The slogan adds the perspective of treatment provision to that of fighting stigma and discrimination.

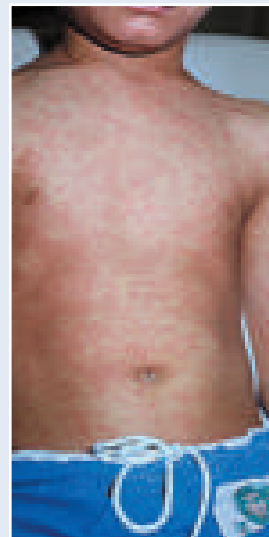
The Regional Office prepared a kit for the Campaign in both Arabic and English. It included a message from Regional Director, briefing about the 3 by 5 initiative, true stories from the Region about stigma and discrimination, ideas for fighting stigma and discrimination, and HIV/AIDS statistics. Video tapes of the Regional Director's message dubbed in the main languages of the Region and samples of short television messages prepared by the Office and by a few countries from the Region were also sent out.

Progress on measles elimination in the Islamic Republic of Iran

In 1997, the Regional Committee passed a resolution to eliminate measles virus transmission in the Region by 2010. Countries are encouraged to take advantage of measles elimination activities as an opportunity to prevent congenital rubella syndrome (CRS).

measles virus circulation and prevent CRS in the Islamic Republic of Iran, the Ministry of Health and Medical Education implemented a nationwide campaign to vaccinate 32 066 978 persons aged 5 to 25 years with a combined measles and rubella (MR) vaccine. The Ministry provided extensive training and support to more than 32 000 vaccination teams that were organized through 40 medical universities in Iran. Extensive planning and social mobilization was conducted in collaboration with WHO and UNICEF, with special emphasis on safe and effective administration of vaccine. A comprehensive surveillance system was established to monitor adverse events following immunization.

Between December 6 2003 and January 3 2004, the teams vaccinated 32 470 499 people (101% of target population) with MR vaccine. Vaccine recipients experienced few adverse events following immunization. After the campaign, the Ministry changed the childhood vaccination schedule to a 2 dose schedule of measles, mumps, and rubella (MMR) vaccine given at 15 months and 4 to 6 years of age. It is expected that the remarkable achievements of the MR campaign, coupled with changes in the vaccination schedule will eliminate measles virus circulation in Iran and greatly reduce the risk of CRS.



The Small Grants Scheme approves 33 projects in 2003 and issues a new call for proposals for 2004

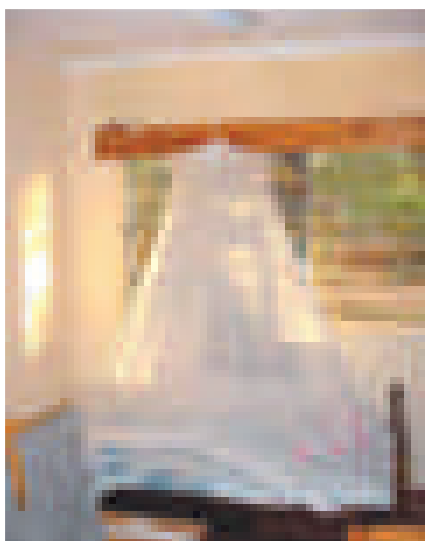
The selection committee of the EMRO/DCD/TDR Small Grants Scheme approved 33 proposals out of the 215 submitted for funding in 2003. Nine countries of the Region obtained grants in the following communicable disease areas: nine in tuberculosis, seven in HIV/AIDS and STD, six in malaria, three in vaccine-preventable diseases, two in leishmaniasis, and one in each of the

following: lymphatic filariasis, soil-transmitted helminths, guinea worm disease, human african trypanosomiasis, Rift Valley fever, and integrated surveillance.

A new call for proposals for 2004 has been issued, widely distributed and posted on the EMRO web site. The deadline for submissions is 29 February

2004. The call indicated the research priorities reflecting challenges facing communicable disease control and gives detailed instructions on how to write each protocol item, thereby providing guidance on proposal writing.

Long lasting insecticidal nets: current status and programmatic issues



What is a long lasting insecticidal net (LLIN)?

A net treated at factory level with insecticide which is either incorporated into or coated around the fibres, resistant to multiple washes and whose biological activity last as long as the net itself (3 to 4 years for polyester nets, 4 to 5 years for polyethylene ones).

LLINs currently on the market and fulfilling WHO specifications

Olyset Net: this is a polyethylene net with 2% permethrin incorporated within

the fibre. Olyset is effective in providing personal protection against malaria vectors for at least 5 years and its use is recommended by WHO.

PermaNet 2: is a polyester net treated with 55 mg/m² deltamethrin. The insecticide is diluted in a wash-resistant resin, which coats the fibres.

Why do we need LLINs?

LLINs offer a practical solution because they resist washing and unlike coloured nets and ready-to-use factory pre-treated nets they contain the right insecticide dosage needed to kill target vectors.

Advice to control programmes on the purchase and use of Insecticide-treated nets (ITNs):

- Be informed of WHO recommendations (obtain regular updates on LLINs and technical information on netting materials and insecticides)
- Preferably use WHO recommended LLINs, especially if difficulties in ensuring proper retreatment rates are anticipated
- Avoid purchase of factory pre-treated nets other than LLINs

- If LLINs are not available or are not preferred, purchase untreated nets that include insecticide treatment kit(s) in the bundle
- When and where possible, use ITNs for multi-disease prevention (e.g. malaria leishmaniasis or lymphatic filariasis)
- Check, whenever possible, the quality of nets and insecticides using WHO specifications
- Ensure regular re-treatment of conventional nets already in use, preferably providing treatment free and, once available, using the new long lasting dipping treatment kits.
- Use of white nets is preferred as coloured polyester nets absorbs much less insecticide.



World Health Organization
Regional Office for the Eastern Mediterranean
Division of Communicable Disease Control
P.O. Box 7608 Nasr City, Cairo 11371, Egypt.
Tel.: (202) 670 25 35 Fax.: (202) 670 24 92/4
www.emro.who.int
email: dcdnews@emro.who.int