Measles elimination. The WHO Western Pacific Region is on track to achieve the goal of regional measles elimination by 2012. WHO recommends a four-pronged approach for measles elimination: high routine immunization coverage with two doses of measles vaccine; supplementary immunization activities when routine immunization coverage has been inadequate; sensitive case-based surveillance supported by laboratories; and case management that includes the provision of vitamin A. Routine first-dose measles coverage in the Region was just 86% in 2000, but it had increased to 93% by the end of 2006; in addition many countries conducted large-scale supplementary immunization activities that covered a wide age range. As a result, the estimated number of measles deaths decreased by 80% from an estimated 25 000 in 2000 to just 5000 in 2006, the latest year for which statistics are available. Twenty-four Member States reported less than 1 measles case per 1 million people in 2007, suggesting measles transmission may have been eliminated in nearly two thirds of the 37 countries and areas that make up the Western Pacific Region.

During the 2006–2007 biennium, six priority countries (Cambodia, China, the Lao People’s Democratic Republic, Mongolia, the Philippines and Viet Nam) conducted large-scale supplementary immunization activities, achieving very high coverage of targeted children. In most countries, measles campaigns also were used to provide vitamin A and deworming medicine. While individual countries provide most of the funds required for their measles elimination activities, partners provided a total of US$ 13.8 million during 2007–2008 through the United Nations Foundation for conducting supplementary immunizations, strengthening routine immunization and improving case-based surveillance.

In 2008, China and Viet Nam will continue to conduct subnational measles campaigns, and Papua New Guinea will conduct a nationwide campaign. WHO will make it a priority in the coming year to increase routine immunization coverage and improve the sensitivity and timeliness of case-based surveillance in order to monitor the incidence of measles and to quickly identify potential importations and subsequent outbreaks.

Hepatitis B control and immunization. Significant progress was made by Member States towards the regional goal of reducing chronic hepatitis B infection rates among children 5 years old to less than 2%. In 2007, 27 countries reported >85% coverage with three doses of hepatitis B vaccine and 29 countries are estimated to have achieved >70% coverage with a timely birth dose. Based on this vaccination coverage data, 26 countries and areas, home to 86.6% of the Region’s population, are estimated to have achieved less than 2% hepatitis B chronic infection rates among...
5-year-old children. Serosurveys have corroborated these findings in 15 of those countries, including China. An independent expert panel has been established to conduct external reviews for validation of these findings.

Following an endorsement of the certification criteria and guidelines for validation of the achievement of the hepatitis B control goal, many countries expressed interest in certification. The Republic of Korea in March 2008 became the first country to be certified as having achieved the regional goal of less than 2% hepatitis B chronic infection rate among 5-year-old children. In addition, WHO prepared and published detailed guidelines for vaccination of health workers, with special focus on hepatitis B. WHO also collaborated with Papua New Guinea and the Philippines to implement special projects to increase coverage with a timely birth dose of hepatitis B vaccine for births taking place in hospitals.

Poliomyelitis-free status. The Region has remained free of poliomyelitis since its certification in 2000, despite the persistent risk of wild poliovirus importation from endemic areas, as Member States generally continue to maintain quality surveillance and immunization systems. It should be noted, though, that pockets exist in the Region where insufficient immunity levels may allow wild poliovirus to spread, subsequent to an importation, and these gaps need to be closed.

The generally high level of “importation preparedness” in the Region was illustrated by the timely detection of and response to the wild poliovirus importation from endemic areas, as Member States generally continue to maintain quality surveillance and immunization systems. It should be noted, though, that pockets exist in the Region where insufficient immunity levels may allow wild poliovirus to spread, subsequent to an importation, and these gaps need to be closed.

The episode was the first such event to take place after the newly revised International Health Regulations (2005) came into force on 15 June 2007.

New, underutilized vaccines. Introducing new and underutilized vaccines is one of the priorities of the Global Immunization Vision and Strategy, jointly developed by WHO and the United Nations Children’s Fund. Five countries—Kiribati, the Lao People’s Democratic Republic, Samoa, Solomon Islands and Viet Nam—decided to introduce Hib vaccine in their national immunization schedules in 2007, bringing the number of countries and areas that have done so to 25 out of 37 countries and areas that make up the Region. Australia in 2007 became the first country in the Region to introduce rotavirus vaccine for infants and human papillomavirus vaccine (HPV) for adolescent girls. In addition to Australia, two Pacific island countries and areas—the Commonwealth of the Northern Mariana Islands and Guam—introduced HPV vaccines into their national schedules. New Zealand in 2008 became the seventh country in the Region to introduce conjugate pneumococcal vaccine into its national schedule. In addition, meningoencephalitis sentinel surveillance got under way last year in the Lao People’s Democratic
Republic, Papua New Guinea and the Philippines, and continues in Cambodia. Data from these surveillance projects will help guide a decision on the introduction of new vaccines for Japanese encephalitis, *Haemophilus influenzae* type B (Hib) and pneumococcus.

In other areas, WHO provided support to Fiji and Tonga to carry out assessments of the disease burden for cervical cancer and the cost-effectiveness of human papillomavirus vaccine as a preventive strategy. WHO collaborated with countries to start or continue rotavirus sentinel surveillance in the Region during 2007–2008 for the seven priority countries: Cambodia, China, the Lao People’s Democratic Republic, Mongolia, the Philippines, Papua New Guinea and Viet Nam.

**Global Alliance for Vaccines and Immunization measles partnerships.** Phase II of the Global Alliance for Vaccines and Immunization (GAVI), initiated in January 2006, is now much wider in scope and includes a health systems strengthening component. In 2007–2008, four of the seven GAVI-eligible countries applied for support and were approved: Mongolia and Viet Nam (immunization system strengthening); Viet Nam (introduction of measles vaccine, second dose); and Kiribati and Solomon Islands (introduction of Hib vaccine). In March 2008, Cambodia re-applied for funding for health systems strengthening, while the Lao People’s Democratic Republic applied for such funding the first time.

In addition to mobilization of resources from global partnerships such as GAVI, US$ 13.8 million were mobilized from the global measles partnership through the United Nations Foundation for measles elimination activities in the Region in 2007–2008. New sources, such as the Church of Jesus Christ of Latter-day Saints, also are being tapped to mobilize resources for the Expanded Programme on Immunization in the Region.
2. Malaria, other vectorborne and parasitic diseases

Malaria. Overall malaria morbidity and mortality continue to decrease in the Western Pacific Region. However, transmission remains high in Papua New Guinea and Solomon Islands. Malaria incidence rates in countries such as China, Malaysia, the Republic of Korea and Viet Nam have fallen to the level at which national malaria control programmes can shift their focus from control to elimination. Malaria elimination plans have been developed in China, Malaysia and the Republic of Korea. The Philippines reported an increase in the number of malaria-free provinces over the past year, while other countries are intensifying their malaria control efforts.

Substantial funding for national malaria control programmes has been secured over the past year from various donors including the Australian Agency for International Development, which funded the Pacific Malaria Initiative in Solomon Islands and Vanuatu; the Global Fund to Fight AIDS, Tuberculosis and Malaria, which approved grants for the Lao People’s Democratic Republic and Viet Nam; and the United States Agency for International Development, which provided support to the Greater Mekong subregion.

Antimalarial drug resistance continues to be a major focus for intervention on the Thai-Cambodian border, where a high-level scientific assessment was conducted from August to December 2007, with WHO support. It verified the presence of falciparum malaria parasites with prolonged parasite clearance times, which is currently interpreted as tolerance to artemisinin derivatives. While further scientific characterization continued, the initial findings warranted high-impact containment and elimination measures. A containment strategy and country action plans were developed in a series of meetings organized by WHO that brought together staff from national malaria programmes and their partners. Implementation of short- and medium-term measures is ongoing. Throughout the Region, antimalarial drug efficacy testing was intensified in 2008 to detect further possible pockets of multidrug resistance.

A two-year project on Strengthening Malaria Control for Ethnic Minorities in the Greater Mekong Subregion, which was jointly funded by the Asian Development Bank and WHO, was completed in December 2007, with a workshop held in Simao, China, to review progress. The project served as a model for malaria control for underserved ethnic minority groups and as a basis for a draft regional framework for addressing vulnerable populations. Several countries are using the model to address the special needs of ethnic minorities and other groups to mobilize greater commitments from national budgets or external funds, such as proposals to the Global Fund. WHO will continue to address the needs of
vulnerable populations including migrant and mobile populations.

Continued cooperation with Interpol, the international police agency, has shown significant success in eliminating or disrupting the production and distribution of counterfeit antimalarials, which are highly prevalent in the Mekong region. Operation Jupiter, coordinated by Interpol, led to arrests that broke up a major counterfeiting network. A new operation is under way in which WHO is working closely with public health officials, law enforcement and customs agencies to fight against this deadly crime.

WHO continues its initiative to improve the quality of malaria diagnosis through rapid diagnostic tests and microscopy. WHO malaria microscopy training manuals and bench aid microscopy identification guides have been revised and are being finalized for publication in cooperation with Headquarters. A new manual on quality assurance programmes for microscopy in endemic countries has been completed. Expert-level microscopists have been retrained in 13 countries through a biregional programme to support the improvement of national-level microscopy standards. In addition, accreditation standards were being harmonized with programmes in other WHO regions. A large regional slide bank has been developed to support this initiative.

The Regional Office, in collaboration with the Pasteur Institute in Cambodia and the Research Institute for Tropical Medicine in the Philippines, continued to support national programmes through lot-testing of malaria rapid diagnostic tests and have contributed samples to the WHO global bank for product testing and prequalification. The WHO malaria rapid diagnostic test evaluation programme is coordinated by the Regional Office in collaboration with the United Nations Children’s Fund, the World Bank, the WHO Special Programme for Research and Training in Tropical Diseases, and the Foundation for Innovative New Diagnostics.

Work on malaria in pregnancy has been intensified over the past year, with intervention trials under way in Cambodia, a low-malaria-endemic country, and Solomon Islands, a high-transmission setting in the Pacific. The trials will be the basis for the development of regional guidelines. The Asian Collaborative Training Network for Malaria has developed over the past year into an important regional training network and has become a model for the Global Malaria Programme as well as for other regions and subregions.
Dengue. High incidence rates of dengue and dengue haemorrhagic fever continued in the Region, particularly in Cambodia, Malaysia, Singapore, Viet Nam and some Pacific island countries. In Cambodia, where the most serious outbreak occurred during 2007, there were 39,850 hospitalizations and 407 deaths. However, the case fatality rate has been declining in most countries in the Region, likely the result of better health care infrastructure, case management and disease surveillance. Funding for dengue control has been increased, both at the regional and country levels, by the Asian Development Bank and the United States Agency for International Development.

The Regional Office convened an informal consultation in Manila in August 2007 to prepare the first draft of a regional strategic plan on dengue. The first regional meeting for dengue programme managers was held in April 2008 in Singapore. The Regional Office for the Western Pacific continues to work alongside the Regional Office for South-East Asia in efforts to prevent and control re-emergences of dengue fever and dengue haemorrhagic fever.

Helminths. Deworming programmes within the Region are making progress towards meeting the global target of at least 75% coverage of school-age children. Cambodia, the Lao People’s Democratic Republic, Vanuatu and Viet Nam reached the target, treating over 9.5 million schoolchildren in 2007. In addition, the Philippines treated an estimated 4 million schoolchildren. In total more than 16 million children of school age were treated throughout the Region in 2007. The greatest number of untreated children is in China, where deworming activities are scaling up slowly.

Over 11 million preschool children in the Region were dewormed. Pilot interventions targeting women of child-bearing age were showing very promising nutritional results.

No new cases of schistosomiasis have been reported recently in Cambodia due to mass drug administrations. The Lao People’s Democratic Republic is following a similar strategy. In the Philippines, where schistosomiasis is a significant public health problem, a Schistosomiasis-free Framework has been formulated by the Department of Health. WHO provided support to China, where there was the potential for further spread of the disease due to the construction of new dams.

Lymphatic filariasis. Countries and areas in the Western Pacific Region continue to make progress towards the goal of global elimination of lymphatic filariasis by 2020. Among the Mekong-Plus countries, China and the Republic of Korea have been certified by WHO as having achieved elimination. Cambodia, Malaysia, the Philippines and Viet Nam have made significant progress with mass drug administrations in recent years. Mapping in
Brunei Darussalam indicated areas of low-level infection that may not require mass drug administrations.

In Pacific island countries and areas, the WHO Pacific Programme for the Elimination of Lymphatic Filariasis continues to tackle the problem. All endemic countries, except Papua New Guinea, have completed five rounds of mass drug administrations and are conducting surveys to determine whether prevalence has dropped below the 1% target. Survey methodologies were revised over the past year, tailored to the needs of each endemic country. A five-year active surveillance plan for the period following mass drug administrations was developed to address lymphatic filariasis resurgence in the Pacific. For Papua New Guinea, a situation analysis was carried out to assess the feasibility of using diethyl carbamazine salt as an alternative to mass drug administrations.
3. Stop TB and leprosy elimination

**Tuberculosis.** WHO’s work in tuberculosis (TB) control is guided by the *Strategic Plan to Stop TB in the Western Pacific Region 2006–2010*. During the past year, WHO provided technical assistance to Member States and collaborated in the mobilization of resources and capacity-building of national TB programme staff. WHO also worked closely with other technical agencies on TB control.

In 2006, the latest year for which data are available, there were an estimated 3.5 million cases of TB in the Region, of which almost 1.9 million were new cases. China, the Philippines and Viet Nam accounted for 88% of the new cases. Over 290,000 people were estimated to have died from TB in 2006, including more than 2,800 people co-infected with HIV. In addition, one quarter of the global burden of multidrug-resistant tuberculosis (MDR-TB)\(^1\) is estimated to be in the Region.

Significant progress is being made in implementing the Strategic Plan, although greater effort will be needed to achieve the regional goal of reducing TB prevalence and mortality by half in the decade ending in 2010. Between 2000 and 2005, the TB prevalence and death rates decreased by 21% and 19%, respectively. However, these rates of decline are insufficient to reach the 2010 regional goal. Further increases in case detection and a stronger response to MDR-TB and the TB-HIV co-infection will be crucial to achieve the goal.

**Laboratories.** Having met the 2005 targets for TB control, a key priority now is to sustain the momentum and optimize the quality of programme implementation, particularly with regard to the quality of TB diagnosis, drug supply and management, as well as case management of all types of TB patients.

In many countries in the Region, limited laboratory capacity continues to hamper TB control activities. It is also necessary to upgrade laboratories so they can perform culture and drug-susceptibility testing, while continuing to ensure quality-assured microscopy services, if we are to respond more effectively to MDR-TB and the TB-HIV co-infection. The regional theme adopted for the World TB Day 2008 was “Focus on laboratories, focus on quality”. An advocacy kit with this theme was distributed to national TB programmes and partners.

A TB laboratory course for the Region, aimed at improving managerial and technical skills of senior TB laboratory staff, was held in September 2007 in Ha Noi, Viet Nam. An informal consultation on TB Laboratory Strengthening in the Western Pacific Region, held after the training course, reviewed regional policies for culture, identified steps to implement quality assurance programmes for culture and...
WHO, in collaboration with various partners, supports the Pacific TB Laboratory Initiative (PATLAB), which aims to improve the quality of sputum microscopy through external quality assessments and the expansion of surveillance for TB drug resistance in Pacific island countries and areas. This initiative is supported by a network of four Pacific TB reference laboratories in Australia, Hawaii and New Zealand.

WHO organized consultancies over the past year to provide technical assistance for TB laboratory services in China, Malaysia, Papua New Guinea, the Philippines, Solomon Islands and Viet Nam.

WHO collaborated with countries in advocating the use of quality-assured drugs in standardized treatment regimens. As a part of this activity, WHO has promoted the services of the Global Drug Facility (GDF), which supplies quality-assured anti-TB drugs as grants or at competitive prices through its direct procurement services. The Federated States of Micronesia, the Lao People’s Democratic Republic, Mongolia, Papua New Guinea, Samoa, Solomon Islands and Tuvalu are now using GDF-supplied drugs. In addition, Cambodia and the Philippines have received the recently introduced paediatric formulation of TB drugs as grants from the GDF. WHO participates in GDF monitoring missions with the aim of strengthening drug management capacities of national TB programmes.

WHO supports countries in adapting WHO guidance for national TB programmes on the management of childhood TB. Technical assistance was provided to Cambodia and Viet Nam in reviewing current management practices and providing recommendations for improving the care of children with TB, acknowledging the challenges created by limited capacity and resources for diagnosis of TB in children, particularly at subnational levels.

Equitable access. WHO encourages and supports countries to adopt public-private mix for directly observed treatment, short-course (PPM-DOTS) as an approach to engage all health care providers in TB control activities. The Philippines continues to make considerable progress in this area—about 5% of TB patients detected nationwide were identified through this approach. When considering only public-private mix areas, this proportion increases to 11% of TB cases. Viet Nam formed a national advisory committee for PPM that recently developed guidelines based on pilot projects. Cambodia is working on expanding the roles of the private sector to include service provision in addition to referral of TB suspects to DOTS centres.

The International Standards for TB Care sets out widely accepted levels of care that must be met by all practitioners, public or private, in managing TB patients. The guidelines have been translated into Chinese and Vietnamese and will soon be available in Khmer. WHO is working with national TB programmes to have the guidelines endorsed and disseminated by professional societies, academic institutions and all care providers.
An advanced training course on PPM-DOTS, organized by WHO in collaboration with the Korean Institute of Tuberculosis, was held in December 2007. The course was attended by delegates from nine countries, including the seven countries in the Region with a high TB burden.

Overall, there remains a need for scaling up advocacy, communications and social mobilization in the Region to contribute to achievement of the targets for TB control, as well as to empower patients. Needs assessment and training workshops were conducted in the Philippines and Papua New Guinea to build capacity to implement advocacy, communications and social mobilization activities.

Several countries continue to address the needs of vulnerable populations in their national TB programmes, notably the huge migrant populations in China and in prisons in Mongolia and Viet Nam.

**Drug-resistant TB.** An estimated 4.2% of new TB cases and 26% of previously treated TB cases in the Western Pacific Region are MDR-TB. One third of the global burden of MDR-TB, translating into 150,000 MDR-TB cases, is in the Region. Australia, Hong Kong (China), Japan, the Philippines and the Republic of Korea have confirmed cases of extensively drug-resistant TB (XDR-TB), calling for urgent measures to prevent XDR-TB from jeopardizing major gains made in TB control.

Progress has been made in responding to MDR-TB in the most affected countries in the Region. The Philippines is scaling up the programmatic management of MDR-TB. Mongolia has an MDR-TB programme in place and a project has gotten under way in Cambodia. China and Viet Nam have recently started to implement MDR-TB programmes. The Green Light Committee, a partnership formed to ensure access to life-saving treatment for MDR-TB patients while preserving the efficacy of second-line drugs, has approved the plans in all of these countries.

WHO supports Member States in capacity-building and in establishing the necessary infrastructure, particularly laboratories, for programmatic management of MDR-TB. A second training course on MDR-TB, organized for nine countries in the Western Pacific Region, was held in December 2007. WHO consultants provided technical assistance for programmatic management of MDR-TB in several countries, including China, Mongolia and the Philippines.

An important challenge faced by countries implementing MDR-TB programmes relates to the management of second-line anti-TB drugs with a short shelf life, which are more toxic and involve multiple sources for procurement. In collaboration with Global Drug Facility and Management Sciences for Health, WHO organized the first regional training workshop on the management of drugs for MDR-TB in November 2007. Attended by participants from five countries, the training workshop aimed to improve the understanding and implementation of basic pharmaceutical supply concepts and methods for MDR-TB programme implementation.

**TB-HIV co-infection.** Reflecting low overall HIV prevalence in the Region, the proportion of new cases infected with HIV among all TB patients in the Region was low compared with rates seen in sub-Saharan Africa. The prevalence of HIV/AIDS in reported TB cases in 2006 was 7% in Papua New Guinea, 4.2% in Singapore and Australia, 4% in Cambodia, 3% in Viet Nam, and 2.8% in Malaysia.
In 2004, WHO published a regional framework for TB-HIV co-infection, which was adapted by several countries in the Region. Since then, access to antiretroviral therapy has greatly expanded, guidance on provider-initiated HIV testing and counselling has been published, and data showing a high level of immunosuppression and case fatality rates of TB-HIV co-infected patients in the Region have emerged. There is concern with the low level of implementation of TB-HIV collaborative activities, given the possible impact of a growing HIV/AIDS epidemic in a high TB burden setting such as in the Western Pacific Region.

To respond to the epidemiological situation of the Region, the Stop TB and HIV/AIDS units of the Regional Office jointly developed an updated regional strategic framework. A consultation with national TB and HIV programme managers on the revised framework was held in Phnom Penh, Cambodia, in February 2008. The framework aims to strengthen collaboration between the national TB and AIDS programmes, increase the rates of HIV testing among TB patients and TB screening among people infected with HIV, and improve infection control in health facilities.

**Monitoring and evaluation.** Prevalence surveys are useful to assess the performance of national TB programmes, look at trends of the disease burden over time, and provide information for planning. The Regional Office took the lead, collaborating with the Korean Institute of Tuberculosis and other international TB experts, in developing and publishing guidance for *Assessing Tuberculosis Prevalence through Population-based Surveys*. This publication, the first document to provide overall guidance for TB prevalence surveys, will be an important standardized resource for countries considering prevalence surveys. The Philippines and Viet Nam have conducted TB prevalence surveys over the past year with support from WHO and other partners. The Lao People’s Democratic Republic will conduct a survey in late 2008.

Also during 2007–2008, WHO helped organize and participated in programme reviews of national TB programmes in Brunei Darussalam, China and the Philippines.

In March 2008, WHO and the Secretariat of the Pacific Community convened the Fourth Pacific Stop TB Meeting in Brisbane, Australia. This meeting, attended by all Pacific island countries and areas, as well as Papua New Guinea, provided an opportunity to review progress, identify constraints, and develop approaches to accelerate the implementation of Stop TB workplans in Pacific island countries and areas, with special attention to TB laboratory issues. A training course for shippers of infectious materials was organized for laboratory managers. In addition, discussions were held on workplans and management arrangements in countries implementing the new grants from the Global Fund to Fight AIDS, Tuberculosis and Malaria.

**Leprosy.** Leprosy was eliminated as a public health problem in all countries and areas in the Region in 2002. A prevalence rate of less than 1 case per 10,000 people has been sustained throughout the Region,
with the exception of the Federated States of Micronesia and the Marshall Islands, where great efforts are being made to reach the elimination goal.

In 2006, the most recent year for which data are available, a total of 9873 cases were registered in the Region, with a prevalence rate of 0.056 per 10 000 people, which is 88% lower than the rate recorded in 1991. There were 5959 new cases reported in 2006, with a case detection rate of 0.341 per 100 000 people, 66% lower than the 1991 rate, showing a continuing decline in the total number of new cases detected. China and the Philippines each had more than 1000 registered cases, while 10 countries and areas had fewer than 10 cases each. Brunei Darussalam, Cook Islands, Macao (China), Mongolia, Niue, the Pitcairn Islands, Tonga and Vanuatu reported zero prevalence and no new cases detected. During the past year, WHO supported the development of information, education and communications materials, including a revised manual of operations for leprosy awareness campaigns.

Technical support and funding were provided for leprosy elimination activities in three cities in the southern Philippines, where a total of 68 new cases were detected. Training was held in Cebu, Philippines, in April 2008 on clinical and programme management, including the prevention of disabilities, for participants from the Commonwealth of the Northern Mariana Islands, the Federated States of Micronesia, Guam, the Marshall Islands and Palau. WHO also worked during the past year to strengthen partnerships with the American Leprosy Mission, which helped organize the training, as well as with the Japan Leprosy Association, the Korean Hansen Welfare Association, the Leprosy Mission International and the Sasakawa Memorial Health Foundation.

Great efforts are under way to sustain the gains made in the elimination of leprosy and to assist and facilitate in the integration of leprosy services into general health services in the Region. This will help to reduce the leprosy burden further and provide comprehensive, quality leprosy services that are accessible for all newly detected patients.

In the coming year, WHO will need to continue to provide technical support to accelerate leprosy elimination and strengthen case and programme management, including the prevention of disabilities and rehabilitation, in the Federated States of Micronesia, Kiribati and the Marshall Islands, as well as in several countries and areas in the northern Pacific.

Implementation of the Global Strategy to Further Reduce the Leprosy Burden and Sustain Leprosy Activities and the Strategy to Sustain Leprosy Services Following Elimination in Asia and the Pacific is under way in Cambodia, China, the Philippines and Viet Nam. WHO also is providing technical and logistical support for expansion into additional provinces, especially the leprosy-endemic areas. Additional activities and workshops will be conducted in the Lao People’s Democratic Republic, Malaysia and Papua New Guinea, focusing on implementation of the biregional strategy and global operational guidelines. These workshops will be coupled with the continued retooling of services and efforts to strengthen the capacity of central and peripheral staff in low-endemic settings.

WHO will continue to collaborate with the International Federation of Anti-Leprosy Associations, members and nongovernmental organizations in the Region to strengthen and harness community participation and cooperation and to solicit renewed political commitment from Member States.
The HIV epidemic continues to expand in the Western Pacific Region. New estimates indicate that 1.3 million people, including 21,000 children, were living with HIV/AIDS in the Region in 2007, compared to 750,000 people in 2001. Some 150,000 new HIV infections occurred in 2007, with 63,000 AIDS-related deaths. However, different trends have emerged in two of the most affected countries. Cambodia has seen HIV prevalence rates in adults declining from an estimated peak of 2% in 1998, to 0.9% in 2006. Papua New Guinea, on the other hand, which still faces a generalized epidemic, has seen its HIV prevalence rate climb to 1.3% in 2006.

The spread of HIV in countries in the Western Pacific Region has been driven largely by sex work and injecting drug use. However, improved surveillance methodologies are showing that men who have sex with men are being increasingly affected. At the same time, high rates of sexually transmitted infections (STI) continue to be recorded. A recent survey in Papua New Guinea indicated that about 40% of the adult population were suffering from at least one STI. In Mongolia, the number of reported cases of congenital syphilis has progressively increased from 9 in 1997 to 24 in 1998, 36 in 2005, and 51 in 2006. Similarly, incident cases of syphilis in China have risen from less than 0.2 cases per 100,000 people in 1993, to 13.3 per 100,000 in 2006.

The HIV/AIDS and STI unit organizes its work around five strategic directions, highlighted under the following headings.

HIV testing and counselling. As HIV testing and counselling is the key entry point for individuals and their families to access HIV/AIDS prevention, treatment and care services, many more people will need to safely know their HIV status through testing and counselling if universal access is to be achieved. In June 2007, a joint WHO/UNICEF/UNAIDS meeting on scaling up HIV testing and counselling in Asia and the Pacific was conducted in Phnom Penh, Cambodia, with more than 70 participants. Critical actions required to scale up access to HIV testing and counselling in the Region were identified and discussed.

By the end of 2007, most countries had increased their number of testing and counselling sites: China had 5342 sites by year’s end; Malaysia 1090; Viet Nam 210; Cambodia 190; Philippines 52; the Lao People’s Democratic Republic 36; Papua New Guinea 32; Mongolia 30; and Fiji 26. In Papua New Guinea, testing and counselling activities have seen a dramatic expansion from 3052 clients tested and counselled in 2006 to more than 27,000 in 2007.

Health sector contribution to prevention. In many Asian countries, sex work and injecting drug use are the major risk factors for HIV transmission. Therefore, interventions for the prevention of HIV transmission need to be intensified and targeted at the most-at-risk populations such as injecting drug users, men having sex with men, male and female sex workers, their clients, and migrant workers.

The main approach in the Region to combat the threat of HIV transmission among injecting drug users who share needles and syringes has been the reduction of drug-related harm. Key to the successful implementation of the harm reduction intervention has been collaboration between public health and the law enforcement and justice sectors. Working with the United Nations Office on Drugs and Crime and other partners, WHO has supported countries in advocacy and the development of technical
guidance and tools. The Organization has also provided direct technical support. Tools also were developed for the appropriate management of the HIV infection and AIDS among people who inject drugs, including those living in closed settings.

The response implemented in countries in the Western Pacific Region has been impressive. China has expanded methadone maintenance therapy to 397 clinics in 22 provinces. In addition, China has established 729 needle exchange sites in 204 counties and districts across 17 provinces. Malaysia has 71 methadone centres and six needle exchange programmes reaching around 8000 injecting drug users. In Viet Nam, the number of needles and syringes distributed to injecting drug users dramatically increased from 200 000 in 2005 to II million in 2007. In Cambodia, the expansion of needle-syringe programmes by nongovernmental organizations is under way, and the Government has agreed to establish the first one-stop centre in Phnom Penh for the provision of health services to injecting drug users.

In order to aid efforts to prevent the spread of HIV through sexual transmission, WHO supported countries by increasing access to good-quality, affordable condoms and by expanding the 100% condom use programme among sex workers and their clients. The Organization also provided support for the expansion of services to treat sexually transmitted infections and for efforts to incorporate HIV/AIDS information, testing and counselling into STI and reproductive health programmes, as well as primary health care services.

A regional meeting on Controlling STI: Enhancing HIV Prevention in the Western Pacific Region was conducted in Penang, Malaysia, from 29 October to 1 November 2007, with participants from 17 countries and areas. The meeting reviewed and finalized the draft Regional Strategic Action Plan for the Prevention and Control of Sexually Transmitted Infections (2008–2012) and identified steps to operationalize it. In addition, a snapshot study on gonococcal antimicrobial susceptibility in the Region was discussed and protocols that are intended to provide evidence-based, up-to-date advice on treatment recommendations to Member States were drafted.

The prevention of mother-to-child transmission is another important area of work. A joint WHO, United Nations Population Fund, UNICEF and UNAIDS framework for Asia Pacific linking services for the prevention and management of HIV and STI with reproductive, maternal, adolescent and child health was finalized in Guilin, China, in 2007. In Cambodia, WHO provided direct technical assistance from January to December 2007 to the programme for the prevention of mother-to-child transmission, supporting the development of a fully costed national strategy. A joint review of the national prevention of mother-to-child transmission programme in Cambodia was conducted in August 2007 by Cambodia’s Ministry of Health, UNICEF, the United States Centers
for Disease Control and Prevention, and WHO. A similar national review was carried out in April 2008 in China.

Scale up of care, treatment and support. Dramatic progress has been achieved in the provision of care and treatment of HIV infection and AIDS. In the Western Pacific Region, there has been a five-fold increase in the number of people receiving antiretroviral therapy (ART) in 2007 as compared to 2004. Some 28% of people living with HIV and in need of treatment were receiving ART services at the end of 2007, with the coverage of over 65% achieved in Cambodia and the Lao People’s Democratic Republic. As scale up continues, cohorts of patients receiving lifelong ART are growing. Despite this encouraging achievement, many who need treatment, in particular vulnerable populations such as injecting drug users, are still significantly underserved.

In the areas of HIV/AIDS and tuberculosis, the Stop TB and HIV/AIDS and STI units of the Regional Office, in collaboration with the United States Centers for Disease Control and Prevention, updated and revised the 2004 TB-HIV co-infection in the Region. A meeting was organized in Cambodia to introduce and finalize the framework, with the participation of experts and programme managers from nine countries in the Region. The meeting identified steps to accelerate and scale up the implementation of TB-HIV collaborative activities.

Strategic information. More knowledge and information on the HIV/AIDS epidemic have become available over the last few years, while the accuracy of projections have significantly improved. Continued support to strategic information is needed to ensure guidance for planning of interventions and allocation of resources.

In July 2007, the Regional Strategic Information Workshop was conducted in Manila, with participation of 10 countries and regional partners, to introduce the WHO framework to monitor the health sector’s response towards universal access and discuss effective means for data reporting. WHO has worked intensively with countries and Headquarters in data collection, data validation and preparation for the 2008 global progress report on universal access.

The regional technical consultation on HIV drug resistance, prevention, surveillance and monitoring in Asia was held in November 2007 in Beijing, in collaboration with the Chinese Center for Disease Control and Prevention. Cambodia, China, Papua New Guinea and Viet Nam had the opportunity to report on progress made on national HIV drug resistance prevention and assessment strategies and to prepare their national HIV drug resistance prevention and assessment plans for 2008.

Strengthening health systems. Weak drug procurement and supply management systems, insufficient laboratory infrastructure, and severe human resources shortages are among the major health constraints that need to be tackled in countries working towards universal access.

Follow-up training in STI, HIV, laboratory diagnostic procedures and lot quality management systems was provided to Pacific island countries, including Fiji, Niue, Solomon Islands, Tonga and Vanuatu. Training on procurement and supply management in the Philippines was focused on the quantification of antiretrovirals and drugs for opportunistic infections, monitoring of stocks and proper reporting. WHO supported three representatives from Viet Nam to attend the first ministerial conference on “task shifting” among health workers in Addis Ababa in January 2008.
Global Fund

The Global Fund to Fight AIDS, Tuberculosis and Malaria, one of the largest sources of external financial assistance to combat these diseases, has approved since its inception US$ 10 billion in grants in 136 countries. Over the past five years, the Western Pacific Region has seen a rapid expansion in financing from the Global Fund. In 2007, the Global Fund approved 61 grants in the Region totalling US$ 1.2 billion, up from US$ 110 million in 2002. This substantial increase in financing has allowed the seven countries with a high burden of HIV/AIDS, malaria or TB—Cambodia, China, the Lao People’s Democratic Republic, Mongolia, Papua New Guinea, the Philippines and Viet Nam—as well as a dozen countries in the Pacific,1 to scale up their programmes to combat these diseases. Two thirds of the proposals from the Region were approved in the Global Fund’s Round 7, a success rate higher than the global average. In addition, several grants in the Region were rated for exceptional performance, thus allowing continued funding through the Rolling Continuation Channel, an additional funding window within the Global Fund.

The Regional Office and WHO country offices continued to be key partners in the work of the Global Fund, with extensive involvement in the development, management and implementation of Global Fund-supported activities in Member States. Recognizing the importance of health systems in the scale up of interventions, the Global Fund has encouraged applicants to include a health systems strengthening component to overcome bottlenecks in the delivery of services. Four countries included a health systems strengthening component in their applications for Global Fund Round 8.

As the leading provider of technical support and an active player in country coordinating mechanisms and technical working groups, WHO has been involved throughout the grant lifecycle, from proposal development and grant negotiation to monitoring and evaluation. WHO will continue to meet the growing need for technical support for Global Fund-related projects.


WHO provided technical support to countries in reallocating internal resources and developing sustainable financing mechanisms for HIV/AIDS prevention, care and treatment, particularly through submissions to Round 7 of the Global Fund to Fight AIDS, Tuberculosis and Malaria, in which HIV proposals from Cambodia, Mongolia and countries in the Pacific were successful. Technical assistance was also provided to countries in developing submissions for Round 8 of the Global Fund.
5. Communicable disease surveillance and response

Epidemic and pandemic threats. The Western Pacific Region continues to face a pandemic risk arising from highly pathogenic avian influenza A(H5N1). Over the past year, outbreaks of avian influenza in animals and human infections of the virus continued to be reported in the Region. In the first six months of 2008, a total of eight human A(H5N1) cases have been reported in China and Viet Nam. Despite the fact that the virus, at present, adapts poorly to humans, some instances of limited human-to-human transmission have occurred. Meanwhile, other emerging infectious diseases, such as cholera and dengue fever, have posed serious public health threats in a number of countries. The threat of an epidemic sparked by emerging infectious diseases and a potential pandemic associated with avian influenza highlight the continuing need for strengthening fundamental public health surveillance and response systems and country capacity for early detection of, rapid response to and effective preparedness for emerging disease threats, in particular pandemic influenza.

Asia Pacific Strategy for Emerging Diseases. Considerable progress has been made in implementing the Asia Pacific Strategy for Emerging Diseases (APSED) as a means to meet the International Health Regulations (IHR) 2005 requirements. Since July 2007, seven Pacific island countries—Cook Islands, the Federated States of Micronesia, Fiji, Palau, Samoa, Tonga and Tuvalu—have conducted assessments of their existing surveillance and response systems and capacities using an IHR-APSED assessment tool developed by WHO. As a result of such assessments, Cook Islands, the Federated States of Micronesia, Fiji, Palau, Samoa, Tonga and Tuvalu have developed their draft national plans of action for IHR (2005) and APSED implementation.

WHO’s support for APSED implementation over the past year focused on event-based surveillance, laboratory bio-safety, infection control, risk communication, field epidemiology training programmes and zoonoses. WHO guidelines on establishing event-based surveillance were published in March 2008. Technical support was provided to Cambodia, the Lao People’s Democratic Republic, Mongolia and the Philippines in the development and strengthening of national event-based surveillance. A regional bio-safety consortium has been established to provide technical advice to Member States in strengthening laboratory bio-safety programmes. An informal consultation on infection control was held in January 2008 to identify core components of infection control activities. A number of regional and national training workshops on risk communication were conducted to improve outbreak communication skills among national officials. A regional framework on strengthening field epidemiology training was developed with a focus on country-level training programmes, including training programmes in Cambodia, Mongolia and Viet Nam. In addition, WHO guidelines on collaboration between animal
and human health sectors at the country level were published in March 2008.

Influenza continues to be a priority disease that makes clear the need for core capacity strengthening in the Region. WHO collaborated with Cambodia, China, Fiji, the Lao People’s Democratic Republic, Mongolia and Papua New Guinea in developing and strengthening their influenza surveillance systems. WHO technical guidelines for influenza surveillance and disease burden studies will be developed in 2008. With the support of WHO, some Member States have embarked on influenza disease burden studies.

*International Health Regulations* (2005). Member States have viewed IHR (2005) as a good opportunity to work more closely with WHO in strengthening national and regional capacities for outbreak alert and response and for public health event management. All Member States have designated their national IHR focal points for event-related communications with WHO. Since the Regulations took effect in June 2007, WHO has been officially notified in a timely manner, through national IHR focal points, of a number of acute public health events, including an outbreak of the Zika virus in the Federated States of Micronesia in June 2007, a case of poliomyelitis imported from Pakistan to Australia in July 2007, and an unusual acute diarrhoea outbreak, later confirmed as cholera, in Viet Nam in October 2007.

To strengthen the functions of national IHR focal points and to facilitate the communication link between them and national emerging infectious diseases programmes, the first Meeting of National Programme Managers for Emerging Infectious Diseases and National IHR Focal Points in the Western Pacific Region was held in July 2007. For countries and areas in the Pacific, a meeting for Pacific national IHR focal points was held in October 2007 to set targets for country capacity assessments. In February 2008, the first informal consultation on strengthening public health measures and IHR (2005) core capacity at designated points of entry was held in October 2007 to set targets for country capacity assessments. In February 2008, the first informal consultation on strengthening public health measures and IHR (2005) core capacity at designated points of entry was conducted. A number of important issues related to points-of-entry designation, assessment and certification were discussed, as well as the need for strengthening collaboration and coordination among various stakeholders.

Country capacity. IHR (2005) came into force on 15 June 2007. Over the past year, significant progress has been made towards the strengthening of national core capacities required under IHR (2005) through implementation of the Asia Pacific Strategy for Emerging Diseases (APSED). Nevertheless, much work lies ahead to achieve the regional capacity development goal by 2010. WHO’s work during the past year focused on supporting Member States in improving pandemic preparedness and facilitating country compliance with the IHR (2005) through APSED implementation.

Pandemic preparedness. The WHO protocol on rapid operations to contain the initial emergence of pandemic influenza has been revised to provide Member States with updated guidance on rapid containment. Following the initial PanStop exercise in April 2007, rapid containment exercises testing country-level operational capacity were conducted in the Lao People’s Democratic Republic in November 2007 and in the Philippines in March 2008. The exercises helped identify a number of gaps in country preparations for rapid containment options. The experience and
lessons learnt from the exercises helped in the development of national protocols for rapid containment operations.

*Emerging Infectious Diseases TAG.* The Asia Pacific Technical Advisory Group (TAG) for Emerging Infectious Diseases will continue to be a vital mechanism for monitoring progress and providing technical advice as work continues on achieving the regional core capacity development goal by 2010. The TAG will convene its third meeting in July 2008 to review APSED and IHR (2005) implementation progress and recommend the next steps for national capacity strengthening.