

Communicable Disease Newsletter

Global Fund and Health Systems Strengthening: Opportunities now available

Strong health systems are crucial for the success and sustainability of disease control programmes. Many countries in the South-East Asia (SEA) Region carry an enormous burden of preventable diseases and a host of emerging problems which the health systems are unable to cope with. In fact, countries face the vicious cycle of weak health systems not being able to support disease programmes to improve their outcomes and disease programmes burdening the health system and weakening them further.

A recent WHO Regional Workshop on Health Systems Strengthening identified the following major constraints faced by countries in the Region :

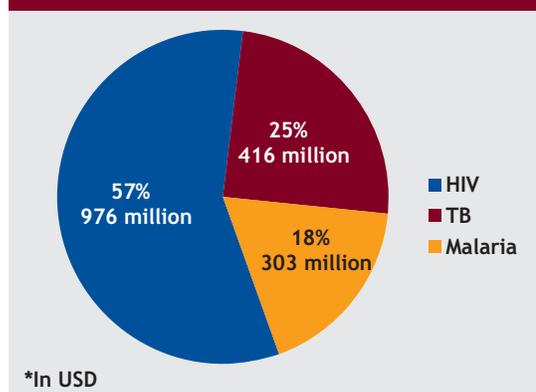
- Shortage of human resources for health
- Lack of adequate management capacity
- Lack of financial resources
- Need for improving the quality of primary health care
- Problems related to accessibility of health care services leading to their low utilization
- Inadequate infrastructure, drugs and equipment.

A well-functioning health system must carry out a number of basic functions. These are, as outlined by WHO, "six essential building blocks of health systems", i.e. information systems, service delivery, medical products & technologies, financing, health workforce, and leadership and governance.

The Global Fund to fight AIDS, TB and malaria (GF) provides an opportunity to not only reduce the burden of HIV, tuberculosis and malaria, but also to contribute to health systems strengthening (HSS) within the overall framework of funding technically sound proposals for Round 8 is an important source of funding for national responses to the three diseases in the SEA Region.

Since 2002, 10 of the 11 countries in the Region have had 55 grants approved, with life-time budgets totaling US \$1.68 billion (Fig 1). Globally, grants worth US \$10 billion have been approved from Round 1 to 7. This amounts to two thirds of global financing to fight tuberculosis and malaria and well over 20% of all international finance against AIDS.

Figure 1: Life-time budget for Global Fund Round 1 to 7 grants to SEA Region countries*



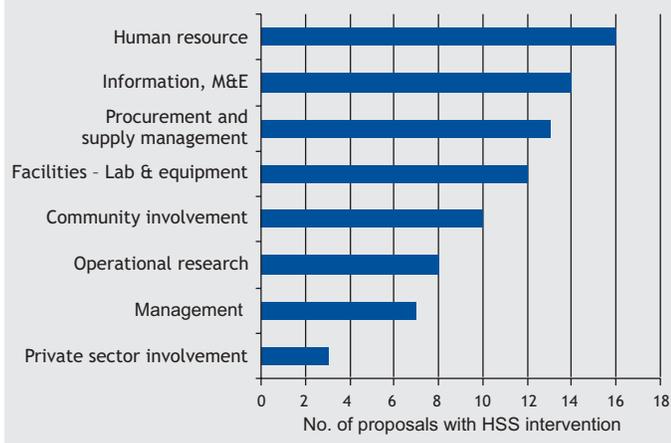
Source: Global Fund

As indicated earlier, GF resources provide an opportunity to not only include HSS interventions to achieve improved out-comes for the three diseases but also to benefit the overall health system in doing so. The resources may be used for primary health care infrastructure and improving service delivery at the district level and below as programmes at that level are integrated in most of the countries including strengthening of laboratories, strengthening surveillance, monitoring and evaluation systems, developing procurement capacity and management systems. A review of successful Round 6 & 7 proposals shows that the proposals had incorporated human resources, information systems, procurement & supply management, and laboratory facilities/equipment (Fig 2).

Inside

- **Global Fund and Health Systems Strengthening: Opportunities now available** 1
- **Outbreak Update** 2
 - ◆ Avian influenza - Indonesia - Bangladesh - India - Thailand
 - ◆ Anthrax
- **Programme Update** 5
 - ◆ Elimination of visceral leishmaniasis in the Region
 - ◆ Tuberculosis in Korean Peninsula
 - ◆ Bhutan: close to eliminating malaria
 - ◆ IHR (2005) implementation in South-East Asia Region
 - ◆ Field Epidemiology Training Program in Indonesia
- **Newbytes** 8
- **New SEARO publications** 11
- **Use of bednets for protection against malaria in South-East Asia** 12
- **Forthcoming events** 12

Figure 2: Common HSS interventions funded in GF Rounds 6 & 7



Source: Global Fund

From the programme point of view, the following areas can be strengthened using GF resources:

- Strategic information – surveillance, monitoring and evaluation
- Human resources – numbers, mix and retention
- Procurement of drugs and supply management - quality
- Laboratory facilities and capacity – coverage, quality and safety
- Management capacity, and
- Community systems

The Round 8 of GF provides an opportunity to incorporate the HSS component. The Global Fund encourages applicants to draw on recent assessments of health system weaknesses and gaps and include stakeholders who are involved in the planning, budgeting and resource allocation processes for the national disease programmes and health systems reform when preparing proposals. Technical agencies like WHO could be called upon to assist in developing technically sound proposals.

Recently, a workshop on GF Round 8 Proposal Development for countries in the South-East Asia Region

organized by WHO/SEARO covered not only the overall proposal development guidelines but also HSS and issues thereof so that the participants could gain practical insights



WHO/SEARO meeting on Global Fund.

into the kind of HSS interventions that can be incorporated in the proposals. As Round 8 proposal developments are currently underway, WHO staff and experts who, at the request of the countries, are assisting proposal development can help in health systems gap analysis and in identifying the appropriate interventions to be included in the proposals. In addition, the mock technical review panel (TRP) that WHO SEARO is keeping open from 26 May to 10 June 2008 can review the proposals with special focus on health systems.

The global environment for strengthening health systems has changed for the better fortunately. Apart from GF there are other initiatives like the Global Alliance on Vaccines (GAVI), Global Health Partnership, Health Metrics Network and bilateral agencies focusing on HSS. The fact that weak health systems pose system-wide barriers and formidable challenges to achieve the Millenium Development Goals (MDGs) are also bringing about positive changes in the national governments, international community and donors. GF Round 8 proposals present an opportunity to continue the efforts to strengthen health systems in the countries which should not be missed.

‘Call for Proposals’ timeline

Launch of new Round 8: 1 March 2008 ‘Call for Proposals’ released on Website



Submission deadline: 1 July 2008



Screening for eligibility: 6 weeks after closing



TRP review: Last week Aug/1st week Sept 2008



Board Decision: 18th Board Meeting, Nov 2008

Outbreak update

Avian Influenza (AI)

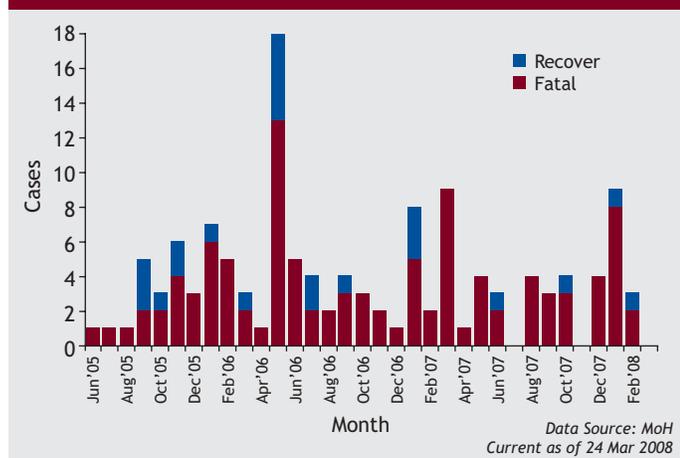
As of 31 March 2008, 372 confirmed human A (H5N1) cases were reported to WHO globally since 2003 of which 235 were fatal. In the South-East Asia Region, since 2004, a total of 154 human cases with 122 deaths have been reported by three countries.

The last three months have seen outbreaks of H5N1 among poultry in Bangladesh, India and Thailand. However, there have been no suspected human cases from these countries.

Indonesia

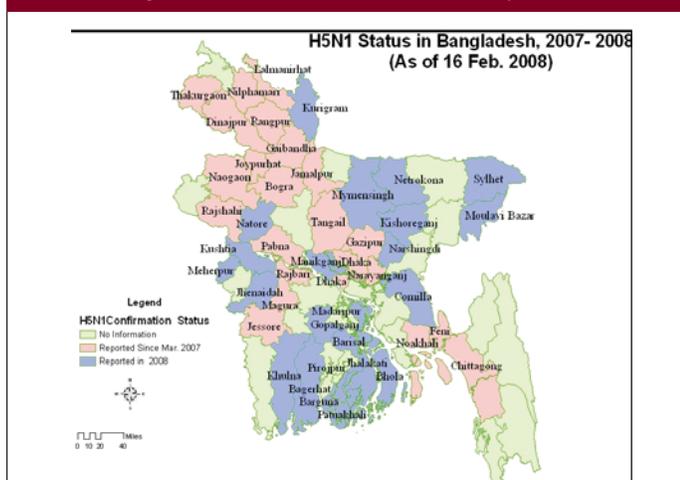
Since June 2005, Indonesia has confirmed 129 cases of which 105 were fatal (case fatality rate: 81.4%). The summary of confirmed human cases reported from June 2005 to March 2008 is presented in Fig. 1. West Java province reported the

Figure 1: Human A (H5N1) cases by onset, Indonesia (June 2005 - March 2008)



largest number of cases; 31 with 25 deaths. Tangerang district within the West Java province accounted for 16 of these cases. While cases are detected throughout the year, January recorded a spike. Children under 14 years accounted for a large proportion of cases. The majority resided in rural settings and

Figure 2: Districts reporting outbreak of poultry AI, Bangladesh, March 2007-February 2008



had direct or indirect exposure to infected backyard poultry. There were 11 clusters of human A (H5N1) cases. A cluster is defined as two or more epi-linked cases where at least two had laboratory confirmed A (H5N1) infections. All of the clusters occurred amongst blood-related family members, where no transmission was observed beyond the family unit.

Bangladesh

As of 15 March 2008, 47 of the 64 districts in Bangladesh have reported AI in poultry. The districts reporting AI (H5N1) in poultry in 2008 and since 2007 are presented in Fig. 2.

This year alone, 27 districts were affected compared to 20 districts over a 10-month period in 2007. So far, no human cases of A (H5N1) have been reported.

India

On 15 January 2008, India's Department of Animal Husbandry, Dairying and Fisheries, confirmed an outbreak of AI (H5N1) in Birbhum and South Dinajpur Districts of West Bengal. This subsequently spread to 14 districts in West Bengal as shown in Fig. 3.

Some 132,739 poultry died with another 3.38 million birds culled. The last outbreak was reported on 9 March, 2008 in Murshidabad of West Bengal after a gap of one month. Active surveillance in human population for influenza-like illness (ILI) was carried out in a 0-3 km and passive surveillance in 3-10 km radius in the outbreak area. So far, no human cases have been detected.

Thailand

Nakhon Sawan and Pichit Province of Thailand confirmed focal outbreaks of H5N1 in the last week of January. All poultry in affected farms were culled and no further outbreaks have been reported. Thailand has experienced five waves of H5N1 avian influenza outbreaks in poultry since early 2004.

Figure 3: Block and district-wise distribution of poultry AI outbreaks, West Bengal, India, Jan-March 2008



Avian influenza (till 31 March 2008)

372: human cases, 235 of whom died
14 : countries reporting human cases
48 : countries reporting birdflu in poultry due to influenza A (H5N1) virus

Lesson learnt

The successful implementation of compensation policies is instrumental for early detection of outbreaks and community

participation in rapid containment. Joint monitoring by public health and animal health authorities is a prerequisite for rapid containment and prevention of human infection.

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RM Rastogi (WHO/SEARO)

Anthrax in South-East Asia Region

Anthrax is enzootic in most countries of the South-East Asia Region in the so called 'Anthrax belt'. Sporadic outbreaks have been reported from many states of India. Similarly, it is enzootic in many provinces of Indonesia. Outbreaks of anthrax in animal population are reported from Bangladesh, Bhutan, Myanmar, Nepal and Sri Lanka. Human anthrax is also considered endemic in India and Indonesia due to consumption of infected meat or contamination of open wound with infected material. The last human anthrax cases were reported from Flores Island of Indonesia in October 2007. The human anthrax outbreaks in three states of India in 2008 are summarized below;

Orissa

Five people died of anthrax in Lohaba village of Koraput district of Orissa. The deaths were reported between 19-25 January 2008 in Lohaba village where villagers were believed to have consumed meat of dead cattle. A total of 278 people, who developed gastro-enteric anthrax after consuming infected meat, were treated. Six people died and 32 others fell ill after eating buffalo meat in a tribal-dominated Koraput district of Orissa district in May 2007. It was later confirmed as anthrax cases.

Andhra Pradesh

In the Nellore area, five persons contracted cutaneous anthrax after reportedly skinning infected sheep. A team of health officers visited the area and instructed the villagers to take precautionary measures. A clinically confirmed human anthrax

case was detected in Vizianagaram district in September 2007. A shepherd's son aged 15 years was infected as a result of skinning a sheep who died of suspected anthrax.

West Bengal

Fourteen cows died on 1 Feb 2008 in three villages of Mathabhanga area in the district of Cooch Behar. Laboratory tests of their blood samples revealed anthrax bacilli. All the dead cows were suffering from fever and died after bleeding from the mouth - typical symptoms of cattle infected with the anthrax bacillus. In June 2007, two persons died of anthrax in Murshidabad after being admitted to the Infectious Diseases Hospital in Calcutta. Thirty-two others were infected.

Outbreaks of anthrax in domestic and wild animals are a potential source of human infection due to existing socio-cultural practices and food habits. Human anthrax cases are reported from remote villages where poverty and illiteracy prevail. Community-based health activities are necessary in those endemic areas in coordination with animal health groups. Human anthrax outbreaks are reported every year in the anthrax belt and ring vaccination programme for cattle is launched after human anthrax cases are reported in these areas. An annual livestock vaccination programme and active surveillance for unexpected animal deaths in enzootic areas can prevent the occurrence of disease in livestock and in the human population.

Sampath Krishnan (WHO India)
Gyanendar Gongal (CSR/SEARO)

Programme update**Elimination of visceral leishmaniasis in the Region**

Based on the WHO/SEARO Regional Strategic Framework (2005-2015) for elimination of visceral leishmaniasis, the following activities have been undertaken:

A training package was developed comprising guidelines, a facilitator's guide and mini lectures. The training package includes standard and standard operating procedures approved by regional technical advisory group (RTAG). After review in two workshops the package has been refined and is being processed for printing.

The Regional Office for South-East Asia organized an intercountry training workshop on kala-azar, the first of its kind at the Rajender Memorial Research Institute, Patna. The workshop was attended by participants from Bangladesh, Bhutan, India, Myanmar, Nepal and Thailand. It enhanced the competency of national participants on technical and programmatic aspects of kala-azar elimination. This was followed by an intracountry workshop of focal points from 26 districts in the four endemic states of India in December 2007.

WHO supported the training of state-level coordinators in March 2008. This was undertaken jointly by NVBDCP, WHO and World Bank. The state and national coordinators will support the development of capacity at district and sub-district levels.

The Regional Office, in collaboration with the National Vector Borne Disease Control Programme (NVBDCP) commissioned a Joint Mission consisting of national and international VBD experts on kala-azar to Bihar to determine the technical and operational challenges and to review the progress of programme implementation, epidemiological trend, and impact review in Feb. 2008. The mission noted the introduction of new diagnostic test rk39 and first-line drug miltefosine. However, gaps were noted in completion of treatment. Although improvements were noted in indoor residual spraying, supportive supervision and IEC activities need to be intensified. It was recommended that the mini mission should take the responsibility for regular review and feedback.

Dr AB Joshi

Dr Chusak Prasittisuk
WHO/SEARO

Tuberculosis control in Korean Peninsula

WHO organized a technical meeting on TB control in the Korean Peninsula to discuss and coordinate TB control activities. The meeting was organized at the National Institute for Parasitic Diseases in Shanghai. It was attended by representatives from the National TB control Programmes (NTP) in DPR Korea and the Republic of Korea (ROK), TB experts and WHO staff from the WHO DPR Korea country office, the Regional Office for the Western Pacific and the Regional Office for South-East Asia.

The national 8-year strategic plan for TB control in DPR Korea, 2008-2015 was presented in detail and specific issues relating to sustaining first-line drugs, the national laboratory network for quality-assured smear microscopy, the central reference laboratory for culture and drug susceptibility testing, and programme management were discussed. The need to establish a firm functional linkage with a second supra-national reference laboratory besides the TB Research Centre in India, that is closer to the country for easier exchange of specimens and to provide support for drug susceptibility testing for detection of multi-drug resistant TB, was also raised.

The limited ARTI survey conducted recently in DPRK has shown a much higher rate of TB prevalence (411 TB cases

/100,000 pop) than has been estimated. It was decided to conduct a more representative survey that would help establish an accurate base-line which had significant implications for planning including forecasting requirements for the procurement of drugs and laboratory consumables.

The key conclusion was that remarkable progress has been made with TB control in DPR Korea, given the limited availability of resources. However, considering the resource constraints, particularly from end-2008 onwards, continuing to implement even basic TB services by the programme was in jeopardy. Consensus emerged at the meeting on the need for the NTP of DPR Korea to prepare a more comprehensive proposal for support so as to apply to various potential funding sources, including the government of ROK and the Global Fund, which is due to receive applications for Round 8. It was also agreed that concerned staff of both programmes meet again in May 2008 for further discussions. A technical review mission comprising various partners engaged or intending to be involved in TB control in DPRK was also proposed.

Dr Nani Nair
WHO/SEARO

Bhutan: close to eliminating malaria

Malaria has been endemic in the southern Bhutan which has a hot and humid climate. The first malaria survey was carried out in 1962 in Samchi District by the National Malaria Eradication Programme, New Delhi. The survey revealed a child parasite rate range from 10.7% to 55.5% with an infant parasite rate range from 3.5% to 33.3%. This survey prompted an urgent need to control malaria and the Malaria Eradication Programme

was launched in 1964. Since then the programme has initiated a systematic prevention and control measures. As a result of these strengthened prevention and control measures, there is a decline in morbidity and mortality due to malaria especially during the past decade which is highlighted below.

In 1994 the number of malaria cases was the highest reported in the history of Bhutan. Due to the high priority accorded by the government, the malaria cases declined from

39,852 in 1994 to just 793 in 2007 and the deaths due to malaria reduced from 48 in 1994 to just two deaths in 2007. The annual blood examination rate was maintained at a steady rate to above 10% of the population as per the WHO recommendation. However, the percentage of *Plasmodium falciparum* (Pf) cases remained at a steady rate which also affected the case fatality rate.

Prevention and Control Strategies:

Bhutan has focused its prevention and control strategies mainly to:

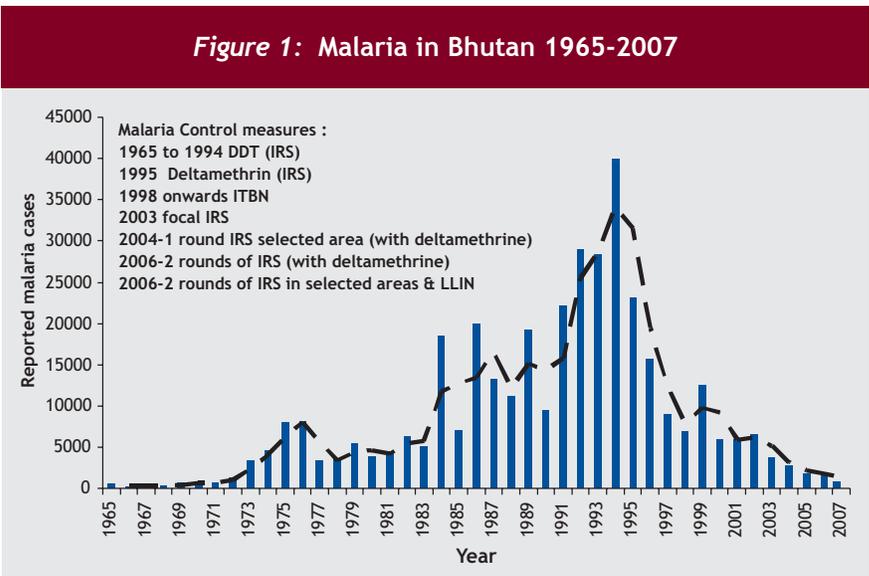
- Provision of Long Lasting Insecticide Treated Bed Nets(LLINs)
- Focal Indoor Residual Spray (IRS)
- Early Diagnosis and Prompt Treatment

With assistance from the Global Fund, Bhutan has started free distribution of long-lasting nets (LLINs) since 2006. By the end of 2006, the programme achieved about 90% population coverage for those people living in the endemic areas. With further subsequent grants, the programme aims to have universal coverage with LLINs by 2013.

Although IRS was the main control strategy earlier, with the distribution of LLINs, the IRS is limited to focal spraying only.

To achieve the target of zero deaths due to malaria by 2015, the programme emphasizes the importance of early diagnosis and prompt treatment through 29 hospitals and 176 basic health units. All health care including provision of essential drugs and referral outside the country is provided free of cost to the public.

As a result of scaled-up interventions, malaria cases have declined from 1993 and in 2007, less than 800 cases and two deaths were reported (Fig 1).The programme aims to provide



treatment within 24 hours of the onset of fever and within one hour after arrival to the health facility. The national drug policy is ACT (artemether-lumefantrine) for uncomplicated Pf cases and treatment with injectable quinine and artemether for severe malaria cases. The treatment for *Plasmodium vivax* malaria has been with chloroquine with 14 days of primaquine.

Scaled up interventions in Bhutan resulted in dramatic decline in malaria cases. In 2007, less than 800 cases with two deaths were reported.

Although the focus is on the above-mentioned strategies, the programme also undertakes larviciding in endemic areas, environmental measures and other preventive and control measures.

Mr Tashi Tobgay
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Dr Karma Lhazeen
(TDR Fellow WHO/SEARO)

IHR (2005) implementation in South-East Asia Region



The International Health Regulations 2005 (IHR) came into force on 15 June 2007. It differs from the previous version in vogue since 1969 at least in three areas. It is wider in scope and includes any event that is considered a public health emergency of international concern

(PHEIC), it is more proactive with action at the port of entry

level, and information as a basis for action includes not only government sources but also NGOs and media.

The basic purpose of IHR (2005) is to ensure maximum response to the international spread of biological (communicable diseases) and chemical threats considered as PHEIC, with minimum interference with trade and travel across borders.

Country obligations

Under IHR 2005, Member countries are required to build core capacity in terms of surveillance, laboratory and infection control in order to rapidly detect, verify, investigate, and respond to the emerging infections that could potentially be PHEIC, strengthen the health system particularly at border

crossings or ports of entry- air, land and sea, agree to international support for outbreak investigations, if warranted, assess and revise national regulations or legal framework as compliant to IHR (2005) and agree to share information and biological specimens with other countries

Initiatives taken by WHO/SEARO

For the effective implementation of IHR (2005) in the Member countries, WHO/SEARO has been actively engaged in providing technical support. Some of the activities are briefly described below:

A comprehensive IHR advocacy package developed by SEARO was released on 15 June 2007—the day IHR 2005 came into force and widely disseminated. Information on IHR 2005 is regularly covered in the SEARO CDS website as well as in the communicable disease newsletter. The status of IHR implementation in India can be seen in the website www.searo.who.int/en/section10.htm. Assessment of national capacity for implementation of IHR undertaken in 2007 showed that core capacity to implement IHR varied from country to country.

National IHR focal points have been established in the Ministry of Health in all Member countries. IHR contact points both in SEARO and in each WHO country offices have also been designated. A meeting of IHR focal points and other sectors on IHR implementation was held in Jan 2007 in Maldives. This was followed by a regional meeting in Bangkok where Member countries discussed cross-border

collaboration in IHR implementation. The recommendations of these meetings form the basis for action during 2008-09 by WHO and the Member countries. IHR is included in each of the Member country 2008-09 workplans for WHO-supported activities with budget provisions made in the plan covering both assessed and voluntary contributions. Rapid response teams for investigation of events have been established in nine of the 11 Member countries.

A step-by-step guide on implementation of IHR in SEAR has been drafted and will be made available to countries soon. Guidelines on port health in the context of IHR are also being developed. An in-house inter-departmental task force on IHR with representation from various departments is being established in the Regional Office.

WHO/SEARO has responded to 38 IHR Notifications of a potential public health emergency of international concern since the new regulations came into effect in June 2007. Notifications involved seven of the eleven SEAR countries. Of the 38 events, six or 16% involved a third party country.

IHR is perceived as a great opportunity to build health system capacity to strengthen national health security and by doing so in ensuring international health security!

Dr Khanchit Limpakarnjanarat
Dr Jai P Narain
WHO/SEARO

Field Epidemiology Training Programme in Indonesia

A review of adult learning methodologies for Field Epidemiology Training Program (FETP) was conducted in Bandung, Indonesia. The five-day refresher course was carried out from December 10 to 14, 2007. This activity was conducted as part of the FETP revitalization process in Indonesia. The FETP is being revitalized to ensure the MOH oversight and responsibility for ensuring the sustainability of the program to contribute to the Indonesian health workforce. The target is to enhance the existing program to align it with the Ministry's workforce goals and to ensure a more systematic and quality-assured recruitment, selection, training, supervision and follow up process.

The course was based on real experiences of teaching/learning methodologies in field epidemiology from various countries and was complemented by participant experiences. Through 'learning by doing', participants were reminded of different teaching/learning methods and asked to apply them to the appropriate topics from field epidemiology curricula.

During the workshop, participants practiced how to identify and formulate learning objectives, how to develop a

case study, how to plan FETP student field investigation using simulation exercises, how to reach consensus and how to use this as a teaching/learning method, usage of interactive presentations and how to apply quizzes and games for field epidemiology.

The refresher course was well received by participants based on the training evaluation results.

Through the refresher course and various other FETP revitalization activities, Indonesia's FETP will continue to develop and enrich student experiences. There is a commitment to 'learning by doing' as well as a commitment to utilizing FETP as a mechanism for improving Indonesia's public health capacity. The refresher course will be conducted periodically and may be made available to countries interested in reinvigorating trainers and supervisors in teaching/learning methods.

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Newsbytes

“I am stopping TB”, the theme of World TB day

A commemorative function was held at the Regional Office on 24 March on the occasion of World TB Day 2008, the theme of which was “I am stopping TB”. Releasing the WHO regional report on tuberculosis Dr Samlee Plianbangchang, WHO Regional Director for South-East Asia, lauded the significant progress being made by national TB control programmes in the Region. At the same time, the Regional Director, pointed out that many sectors would need to actively participate to eliminate this age-old scourge. “We also need to pay attention to other factors impacting tuberculosis control. These include housing and work environments that easily allow for transmission of tuberculosis, malnutrition, age, gender-related factors and ineffective coping strategies that spur the progression to active disease”.



Emerging infectious diseases ‘on the rise’

Emerging infectious diseases (EIDs) are increasing, but their monitoring and surveillance is poorly allocated, with little in areas where outbreaks are likely to occur, say researchers at the UK-based Institute of Zoology, in *Nature* (21 February 2008).

EIDs include newly-evolved pathogens such as drug-resistant bacteria and pathogens that have recently entered human populations from wild or domestic animals – HIV or SARS for example.

The researchers analysed 335 EID ‘events’ – the occurrence of a pathogen in humans for the first time – between 1960 and 2004 to identify and map socioeconomic, environmental and ecological factors associated with EIDs.

They found that the occurrence of EIDs is increasing, and that population density and antibiotic drug use, for example, are linked to the emergence of drug-resistant pathogens, while outbreaks caused by wildlife pathogens are usually correlated with regions high in both human populations and biodiversity.

The authors recommend reallocation of surveillance resources to tropical Africa, Latin America and Asia – at present richer countries in Europe, North America, Australia and parts of Asia receive greater efforts.

“The benefits would not just be felt locally; in an era of increasing globalization, emerging infectious diseases are everybody’s problem,” Mark Woolhouse, chair of Infectious Disease Epidemiology at the University of Edinburgh, writes in an accompanying *Nature News and Views* article.

Thailand develops IHR action plan (2008-2012)

The Ministry of Public Health, Thailand has formulated national action plans to develop public health infrastructure and human resources to meet the core capacity requirements as envisaged under International Health Regulations (2005). The Plan for 2008-2012 was approved by the Cabinet in December 2007.

The objectives of the Plan focus on capacity building of all institutions involved in surveillance and public health emergencies, laboratories, hospitals, 18 points of entry and capacity to coordinate the integrated implementation of IHR (2005) among various related governmental, private institutions and the community.

The budget to implement the plan has been estimated at 250,000,000 Baht for the period 2008-2012.

Treatment of pneumonia at home reduces mortality

Pneumonia is the leading killer disease affecting children. It is still responsible for more than 2 million deaths in young children (under-5) worldwide. Most of these deaths occur in Africa and in the South-East Asia regions of WHO. WHO protocol recommends oral antibiotics for non-severe pneumonia and referral of cases with severe pneumonia for hospital treatment with injectable antibiotics. Unfortunately, many of the referred children in the South-East Asia Region never reach hospital. The reasons are many but the main one is that access to hospital is often not possible for people living in remote areas without basic transport facilities or economic means.

A group of researchers reported that treating children with severe pneumonia without underlying complications with high dose of oral amoxicillin for five days at home is equivalent in efficacy to the current WHO recommended treatment with parenteral ampicillin in a hospital. Their research has shown that treatment of this category of pneumonia outside a hospital is efficacious as well as safe. It is a milestone in itself and carries an enormous implication for patients in many developing countries where hospitalization of all children with severe pneumonia is simply not an option. There is another facet to this blessing for children with pneumonia. It removes the threat of death and disability from nosocomial infections as well. One can expect to see a significant reduction in fall in under-5 mortality from this approach to pneumonia in future.

Source: *The Lancet*, London

Chikungunya strikes Italy, Australia, and Singapore

Chikungunya in Italy

Since 15 June to 28 September 2007, 334 cases of Chikungunya were identified in Ravenna, Forli, Rimini, Bologna and Reggio Emilia, all provinces in the Emilia Romagna Region, Italy. Samples from 281 cases could be examined and 204 were found to be positive for Chikungunya virus either by PCR or haemagglutination-inhibition test.

Epidemiological data so far indicate that indigenous transmission might have occurred in four different localities. The index case is believed to be a foreigner coming from an infected area in the Indian subcontinent and not resident in Castiglione. This outbreak of chikungunya fever in north-eastern Italy was the first recorded occasion that the virus has been transmitted by mosquitoes within Europe. *Aedes albopictus* is thought to be the main vector of this outbreak.

Chikungunya in Australia

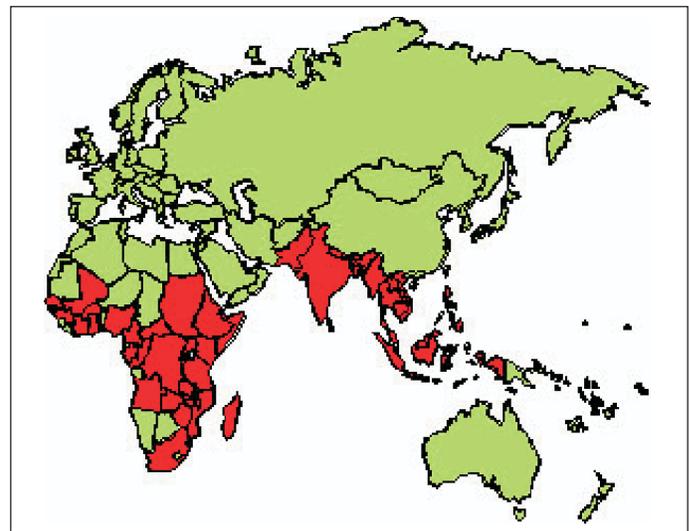
Eight cases of Chikungunya virus infection in travellers to Australia were reported between February 2006 and September 2007. The patients presented with fever, rigors, headache, arthralgia, and rash. As clinicians became aware of the Indian Ocean epidemic, unwell travellers returning from affected countries were tested for Chikungunya virus. The Australian mosquitoes are susceptible to infection with the East African strain of chikungunya. Until recently, the proven vectors of transmission of chikungunya were limited to northern Queensland, but it has recently been seen that these species of mosquitoes are distributed throughout most of coastal Australia. The probability of an outbreak of chikungunya in Australia could be higher than previously thought.

Chikungunya in Singapore

The first reported local chikungunya case in Singapore was detected through a laboratory-based general practitioner (GP's) surveillance network, in January 2008. In the surveillance system, GPs are encouraged to consider chikungunya as a possibility, when they suspect dengue. In addition, samples sent for dengue PCR testing, and found to be negative for dengue, were screened for chikungunya. Prior to the detection of this first local case, about 10 imported cases were detected through an extensive surveillance system that includes hospitals and GPs.

Since the detection of the first case, enhanced surveillance throughout the country and active case detection around the cluster was undertaken. Approximately 3000 samples were screened for chikungunya virus and 12 new cases were identified. *Aedes aegypti* was identified in the local area and was considered to be the principal vector.

Cases of chikungunya fever (between 1952-2006) have been reported in the countries depicted in red on this map.



In Africa, these include Burundi; Central African Republic; Comoros; Democratic Republic of Congo; Guinea; Kenya; Nigeria; Madagascar; Malawi; Mauritius; Mayotte; Reunion; Senegal; Seychelles, South Africa; Tanzania; Uganda; Zimbabwe. In Asia-Pacific, these include Australia; Burma; Cambodia; India; Indonesia; Malaysia; Pakistan; Philippines; Taiwan; Thailand; Timor-Leste; Vietnam.

MDR TB more common in people living with HIV

Multidrug-resistant tuberculosis (MDR-TB) has been recorded at the highest rates ever, according to a new report that presents findings from the largest survey to date on the scale of drug resistance in tuberculosis. Extensively drug-resistant tuberculosis (XDR-TB), a virtually untreatable form of the respiratory disease, has been recorded in 45 countries.



The report also found a link between HIV infection and MDR-TB. Surveys in several countries have found nearly twice the level of MDR-TB among TB patients living with HIV compared with TB patients without HIV.

Based on an analysis of the survey data, WHO estimates there are nearly half a million new cases of MDR-TB—about 5% of the total nine million new TB cases—worldwide each year.

WHO/SEARO launches integrated control of diarrhoea and respiratory infections

Respiratory infections and infectious diarrhoeas remain significant public health problems in the South-East Asia Region accounting for sufficient mortality and morbidity. Morbidity rates from these conditions have been increasing and the falling trend in child mortality too is no longer observed, especially in countries like India with a large population of children under 5 years of age. Approximately 1.4 million out of the estimated 4.5 million annual deaths from these diseases globally occur in the SEAR countries.

The disease burden from bacterial pneumonia caused by *Haemophilus influenzae* or *Strept. pneumoniae* infection is considerable. Countries continue to suffer outbreaks of viral respiratory infections including measles outbreaks in some areas. Cholera and shigellosis outbreaks leading to considerable morbidity and mortality among children and adults alike are not uncommon in the Region.

In recent months there has been an increasing realization within and outside WHO that the problem cannot remain neglected anymore and that there is a need to develop and actively support a comprehensive control programme for these diseases. The Department of Communicable Diseases in SEARO has therefore taken an initiative in this regard by launching an integrated control of infectious diarrhoea and respiratory disease (ICDR) programme as an important part of the work of the Department.

The programme cuts across many different areas of work within WHO and needs collaboration from many technical units. WHO/SEARO has therefore created an internal working group with representation from all the relevant technical units. Similarly, to give the programme continuous scientific support and maximum effectiveness, a Regional Technical Advisory Group consisting of independent experts of international repute has been established. With these efforts one can expect to develop a sound and practical package of interventions for the Region and to support its implementation in the Member countries.

Scientist of Indian origin discovers AI gene

Close on the heels of the bird flu outbreak in Bengal, team at the Massachusetts Institute of Technology (MIT) led by Indian-born Ram Sasisekharan has explained just how bird flu spread to humans in 1918, leading to a pandemic that killed 50-100 million people worldwide.

Scientists fear the emergence of a new bird flu strain that could jump easily from birds to humans — potentially unleashing a pandemic. Sasisekharan's team reports in the February 18 issue of the Proceedings of the National Academy of Sciences that two mutations in the 1918 bird flu virus played a key role in transmitting it to humans. The mutations developed on a surface molecule called hemagglutinin (HA), allowing it to infect humans, by binding tightly to the human upper respiratory tract

India increases its annual health allocation by 15 percent

The Union Finance Minister of India, in his annual budget announcements, allocated Rs.165,340 million (USD 4 billion) for the health sector for 2008-2009. This marks an increase of 15 per cent over the allocation for 2007-08. The National Rural Health Mission (NRHM) which aims to establish a fully functional, community owned, decentralised health delivery

system has been allocated Rs.120,500 million (USD 3 billion). Prevention and control of communicable diseases are covered under NRHM. In addition, the National Aids Control Programme will be provided Rs.9,930 million (USD 250 million) and the Polio activities will get Rs.10,420 million (USD 260 million) in 2008-09. The health allocation is likely to double to 2% of the GDP during the five year period of 2007-2011.

Incurable dengue disease could spread in US: researchers

Incurable, mosquito-borne dengue disease could spread from subtropical areas into the United States through global warming, requiring greater efforts to combat it: National Institute of Allergy and Infectious Diseases director Anthony Fauci, in commentary published in Journal of the American Medical Association. <http://afp.google.com/article/ALeqM5gcHgPsUTqnvzhwui4abVOOIpJFJQ>

Nepal radio breaks sex taboos

Ignoring social taboos in this conservative nation, a Nepali radio programme on safe sex is spreading awareness against HIV/AIDS and offers life-saving advice to young people who are vulnerable to the disease.

Confined only to a few towns six years ago, "Chatting with my best friend", a youth-friendly programme about serious day-to-day issues like sexual health and HIV/AIDS, has expanded to cover much of this mountainous nation. <http://www.reuters.com/article/asiaCrisis/idUSDEL174243>

WHO Regional Director for South-East Asia conferred honorary fellowship

The Indian Society for Malaria and other Communicable Diseases conferred an honorary fellowship on Dr Samlee Plianbangchang, Regional Director for WHO South-East Asia region, for his outstanding contribution towards promotion and strengthening of public health in South-East Asia on 12 February 2008. On behalf of the Society, the fellowship was conferred by Prof N.K.Ganguly, former Director-General of the Indian Council of Medical Research in New Delhi.



Fighting Neglected Tropical Diseases Around the World

President George Bush of the United States of America announced a New Global Initiative to Combat Neglected Tropical Diseases to reduce dramatically and eventually control and eliminate the burden of neglected tropical diseases (NTDs) as a major threat to health and economic growth in the developing world. This initiative will make a total of \$350 million available over five years to provide integrated treatment of more than 300 million people in Africa, Asia, and Latin America and target seven major NTDs: lymphatic filariasis (elephantiasis); schistosomiasis (snail fever); trachoma (eye infection); onchocerciasis (river blindness); and three soil-transmitted helminthes (STHs – hookworm, roundworm, and whipworm).

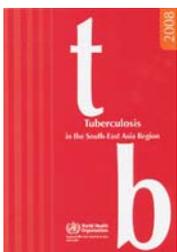
This investment increases the United States' commitment to NTDs from \$ 15 million in 2008 to a total of \$350 million over the next five years (2009 – 2013) and will expand the targeted number of countries from 10 in 2008 to approximately 30 by 2013. The new initiative will target communities with integrated treatment annually for three to five years in order to reduce the prevalence of these diseases within these communities.

National Institute of Virology, Pune, India designated as WHO H5 Reference Laboratory



The National Institute of Virology, Indian Council of Medical Research, Pune, India (NIV) has been designated as the first WHO Influenza A/H5 Reference Laboratory in the South-East Asia Region. With this designation the global number of H5 Reference Laboratories has increased to 10, five of which are also the WHO Collaborating Centres for Influenza. The terms of reference of H5 Reference Laboratories include provision of diagnostic referral services that support surveillance, epidemiological tracing, and vaccine development as well as training the human resource to enhance their skills.

New SEARO publications

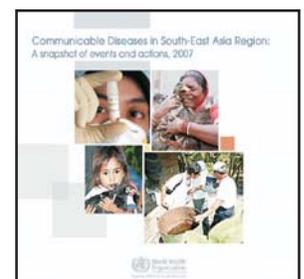


Tuberculosis in the South-East Asia Region: The Regional Report 2008

Major progress has been achieved in the Member countries of the South-East Asia Region in implementing the DOTS strategy since its introduction in the early 1990s. Over two million patients are registered for treatment every year. Six of the Member countries in the South-East Asia Region had achieved both global targets for case detection and treatment success. The Region as a whole achieved a case detection rate of 68% and treatment success rate of 87%. The details of status of TB in South-East Asia Region is available at http://www.searo.who.int/LinkFiles/TB_Day_Kit_SEAR_Annual-Report-08.pdf

Communicable Diseases in South-East Asia Region: a snapshot of events and activities, 2007.

The technical support provided by WHO to its Member states for prevention and control of communicable diseases during 2007 has been captured in this document which also doubles up as a planner for 2008. Access it at http://www.searo.who.int/LinkFiles/CDS_Communicable_Diseases_in_SEA_Region_2007.pdf



Implementation of IHR (2005) in South-East Asia Region

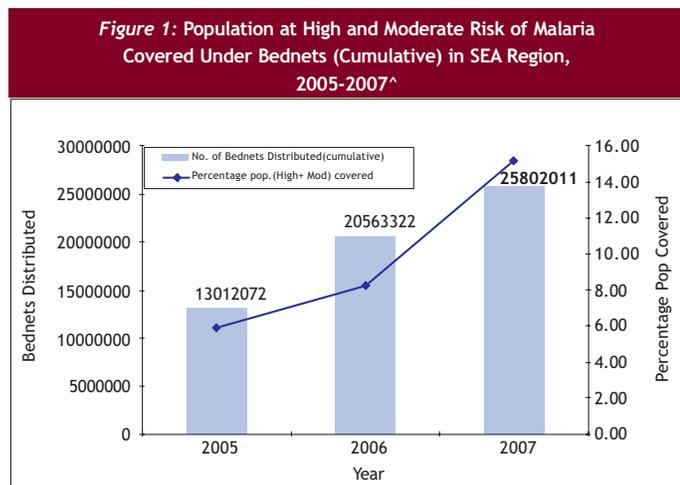
The threat from infectious diseases has over the past few years increased mainly due to their emergence and re-emergence, and increased international travel and trade. Severe Acute Respiratory Syndrome and avian influenza are just two recent examples of such threats with serious public health and socioeconomic implications...

Weblink: http://www.searo.who.int/en/Section10/Section369/Section1615_13738.htm

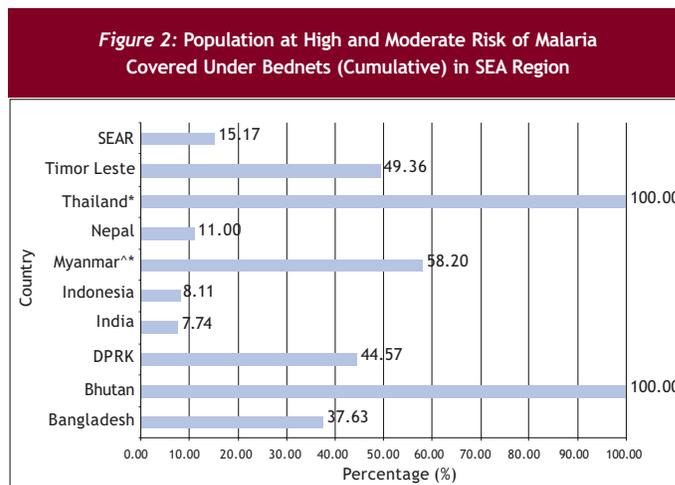


Use of bednets for protection against malaria in South-East Asia

Efforts have been made by several Member countries to increase the population that is covered by bednets to prevent mosquito bites. Between 2005 to 2007, this population almost doubled (Fig 1). While Bhutan and Thailand have the entire population at high and moderate risk covered under bednets, in the remaining countries in the South-East Asia Region, this varies from 8% to 50% (Fig 2).



[^] : Provisional data including untreated bednets
 Source : Country Reports, 2006, WMR 2007



Note: * Bednets distributed to low risk population also. Population at High +Moderate risk =0 in Sri Lanka and Maldives is Malaria Free since 1984.
[^] :Provisional Data; ** : Including untreated bednets.
 Definition: API> 10 : High Risk; API> 1 : Moderate Risk; API < 1 : Low Risk

Forthcoming events

WHO-CDC Joint International Conference on Quality in Laboratories	Lyon, France 9-11 April 2008
Thirteenth International Congress on Infectious Diseases	Kuala Lumpur, Malaysia 19-21 June 2008
Twenty ninth World Veterinary Congress	Vancouver, B.C. Canada 27-31 July 2008
XVII International AIDS Conference	Mexico City 3-8 August 2008

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