Malaria control: heading towards elimination in the WHO South-East Asia Region

Historical perspective

Historically, the WHO South-East Asia Region has been successful in the fight against malaria. In the late 1960s and early 1970s, the number of malaria cases was brought down to less than 2 million, from 115 million in the 1950s (Figure 1). This was a significant achievement, although the disease was not eliminated and the gains were not sustained: massive resurgence occurred and cases peaked to around 7.2 million in the mid-1970s. Since then, the number of malaria cases has once again been reduced gradually, to very low levels in some countries. The key challenge this time is to learn from the past and sustain the gains until malaria is eliminated.

For malaria prevention and control in 1992, four basic strategies were outlined at a ministerial meeting in Amsterdam: early diagnosis and prompt treatment; selective application of vector control and personal protection; epidemic preparedness and response; and basic and applied research to improve the programme. In 1998, WHO, the United Nations Children’s Fund (UNICEF), the World Bank and the United Nations Development Programme (UNDP) launched the Roll Back Malaria (RBM) Partnership. RBM, which now has over 500 partners and its secretariat at WHO headquarters, catalysed the global movement that put malaria high on the global and national agenda. The United Nations General Assembly passed resolution 59/256 entitled “2001–2010: Decade to Roll Back Malaria in Developing Countries, Particularly in Africa”. Combating HIV/AIDS, malaria and other diseases is included in the Millennium Development Goals. In 2002, the Global Fund to Fight AIDS, Tuberculosis and Malaria was launched to provide the much needed logistics to scale up key interventions. In 2007, a World Health Assembly resolution WHA58.2 urged Member States “to establish national policies and operational plans to ensure that at least 80% of those at risk of, or suffering from, malaria benefit from major preventive and curative interventions by 2010 in accordance with WHO technical recommendations, so as to ensure a reduction in the burden of malaria of at least 50% by 2010 and 75% by 2015”. In the South-East Asia Region that year, the Regional Committee endorsed the Revised Malaria Control Strategy.

Figure 1: Milestones and trend of malaria in South-East Asia, 1948-2011

*Source: A decade of Health Development in South-East Asia, 1968-77, WHO/SEARO
Progress and current situation

Against this background, the malaria situation in the South-East Asia Region has improved since 1994 as shown by a declining trend in annual parasite incidence (API), malaria mortality rate and case-fatality rate (CFR) (Figure 2).

A good example is Sri Lanka where the number of cases and deaths, respectively, were reduced from 210 039 and 76 in 2000 to only 175 and no deaths in 2011. Sri Lanka’s next goal is elimination of the disease. Similarly, in Bhutan cases and deaths, respectively, were reduced from 5935 and 15 in 2000 to only 207 and 1 death in 2011. The malaria pre-elimination strategy has been implemented in the country since 2010. Meanwhile, the Maldives has sustained its malaria-free status since 1984.

This success is due to several factors. Increased funding both from governments of endemic countries and donors enabled national programmes to scale up evidence-based interventions that were adopted as part of their Malaria National Strategic Plans, and improve surveillance, monitoring and evaluation. The active involvement of nongovernmental organizations and communities at risk contributed to improving access to malaria control services. WHO also responded to the challenges by strengthening its technical and management support to national malaria control programmes. But the greatest difference was made because of the hard work of dedicated staff from general health services and national malaria control programmes.

Although significant progress has been achieved, malaria remains a major health problem and a threat to socioeconomic development in the Region. South-East Asia contributes around 15% of malaria cases and 3% of malaria deaths in the world, second only to Africa where 75% of cases and 95% of malaria deaths occur. The economic losses are estimated to be enormous since malaria affects the productive age groups most. In 2010, WHO estimated 28 million malaria cases and 38 000 deaths in South-East Asia, although only 2.14 million confirmed cases and 1819 deaths were reported. Pockets of high endemicity exists (Figure 3) particularly in India, Indonesia and Myanmar – the countries that contributed around 95% of reported malaria cases and deaths in the South-East Asia Region in 2011.

Around 1.33 billion people reside in areas with malaria transmission (Table 1). The high-risk groups are tribal communities, migrant populations, forest-related workers and those working in development projects such as hydropower dams, roads, irrigations, mining, and plantations. Malaria in this Region is mainly a rural disease; however, it is also a growing issue in periurban and urban areas.

Challenges

Malaria elimination is facing enormous challenges, though none are insurmountable. Some of the key challenges are:

1. Ensuring universal coverage: More needs to be done to achieve universal coverage so that all people, and particularly high-risk groups, have access to key interventions. This requires, among other things, strengthening the health system, sustainable financing and innovative delivery mechanisms.

2. Containment of artemisinin resistance: The emergence of Plasmodium falciparum resistance to artemisinin in the Greater Mekong Subregion is a serious threat if not contained. History indicates that the emergence of drug resistance in this part of the world and its spread globally had an enormous negative impact on malaria morbidity and mortality. Under the technical leadership of WHO, efforts are being made to contain artemisinin resistance in Cambodia, Myanmar, Thailand, and Viet Nam.

3. Control of outdoor transmission: Outdoor transmission of malaria, which is linked to occupations in agro-forestry, rubber plantation, mining, road and dam construction, etc. is not amenable to current tools such as indoor residual spraying and long-lasting insecticidal nets. Aside from early diagnosis and prompt and effective treatment, appropriate preventive measures are needed.

Table 1: Malaria profile in the South-East Asia Region, 2011

<table>
<thead>
<tr>
<th>Country</th>
<th>Population</th>
<th>BSE</th>
<th>ABER</th>
<th>Positives</th>
<th>API</th>
<th>SPR%</th>
<th>Pf Cases</th>
<th>Pf%</th>
<th>Deaths</th>
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<td>390102</td>
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<td>1309653</td>
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</table>

Source: National Malaria Programme Reports, 2011

Population = Mid year estimate of people living at risk of malaria; BSE = Blood smears examined; Positives = Microscopically diagnosed / RDT confirmed malaria positive cases; Pf cases = Plasmodium falciparum infections (including mixed infections); ABER = Annual blood examination Rate; API = Annual Parasite Incidence (malaria positives in 1000 population at risk of malaria); SPR = Slide Positivity Rate (positives per 100 slides examined); Pf% = Pf infections per 100 malaria positives; Deaths = Malaria deaths.
Control of vivax malaria: Due to its biological characteristics, vivax malaria is more difficult to control than falciparum malaria. New drugs need to replace the 14-day treatment with primaquine to circumvent liver stages and prevent relapse. A diagnostic test for glucose-6-phosphate dehydrogenase deficiency is also needed for easy use at point-of-care.

Responding to the challenges

(1) Political commitment: The global community has responded very positively to the challenges facing malaria control. Through AusAID, the Government of Australia organized a high-level conference, “Malaria 2012: Saving Lives” in Sydney from 31 October to 2 November 2012. Over 300 delegates attended from 30 countries and 130 organizations, including WHO. South-East Asia sent official delegations from Bhutan, Indonesia, Myanmar, Sri Lanka and Thailand. The conference culminated in a ministerial meeting co-chaired by Senator Bob Carr, Foreign Minister of Australia and Mr Ray Chambers, UN Special Envoy for Malaria.

The delegates agreed to accelerate progress towards a 75% reduction in malaria cases and deaths (baseline: 2000) in the Asia Pacific by 2015. Five key areas for actions were:

- Establishment of an Asia Pacific Leaders Malaria Alliance to sustain political commitment
- Establishment of a regional financial mechanism to close the financing gap
- Improving access to quality antimalarials and technologies
- Ensuring universal coverage of malaria control interventions
- Accelerating research on priority areas.

Australia announced an additional A$ 100 million for malaria control in the next four years, including around A$ 5 million to WHO for artemisinin resistance activities to complement US$ 10.5 million recently granted by the Bill & Melinda Gates Foundation. Further high-level support was seen during the 7th East Asia Summit (EAS) held in Phnom Penh, Cambodia, on 20 November 2012. During this Summit, the Heads of State/Government of the Association of Southeast Asian Nations (ASEAN), Australia, China, India, Japan, Republic of Korea, New Zealand, Russian Federation and the United States of America issued a Declaration on Regional Responses to Malaria Control and Addressing Resistance to Antimalarial Medicines.

(2) Moving forward: strategic objectives: WHO-SEARO, in collaboration with Member countries and partner agencies, is strengthening the assault against malaria, with following strategic objectives:

- to scale up key interventions in countries and areas with a high burden of malaria;
- to reorient national malaria control programmes towards pre-elimination/ elimination in countries with a very low burden of malaria;
- to prevent emergence of artemisinin-resistance and contain it in areas where it has already emerged;
- to strengthen managerial and technical capacities for malaria control and elimination;
- to strengthen partnerships, multisector participation and international collaboration in malaria control and elimination; and
- to improve strategic information for policy and strategy development, operational planning and decision making.

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Outbreaks and Public Health Emergencies

Re-emerging diphtheria outbreaks in Loei Province, Thailand

Diphtheria is currently being seen as a re-emerging infectious disease in Thailand. As a result of the Expanded Programme on Immunization (EPI) in Thailand, diphtheria toxoid has been provided to children below 15 years of age in both the private and public sectors since 1977 with high coverage. Thus, until recently only a few diphtheria cases were reported in Thailand each year, and cases in adults are especially rare. However, unimmunized adults above 30 years of age and under-immunized children remain susceptible to severe clinical manifestation of diphtheria.

According to the Bureau of Epidemiology in the Department of Disease Control, Ministry of Public Health, although Thailand has experienced an upsurge in diphtheria cases in recent years, the majority (56%) of cases reported between January and November 2012 were from a single province, Loei, which is a border province in the North-Eastern Region (Figure 1). To date in 2012, 48 diphtheria cases and 5 deaths have been reported, with most deaths due to cardiomyopathy caused by diphtheria toxin.1,2

No diphtheria cases had been reported in Loei since 1995. The index case in this outbreak was a 40-year-old man who was admitted to hospital on 29 June 2012, around five days after onset of illness. His symptoms included fever, cough, sore throat, difficulty in swallowing and neck swelling. On examination, a greyish pseudo-membrane was seen and laboratory testing by the National Institute of Health (a WHO Collaborating Centre) subsequently confirmed toxigenic strain Corynebacterium diphtheriae. Unfortunately, despite recovery from upper respiratory tract symptoms, he passed away on 12 July from acute myocarditis and heart failure. The second case was reported on 11 July in a 25-year-old male resident of the same district who also died of myocarditis caused by diphtheria toxin. Both cases were reported as being unvaccinated, and both experienced delay in administration of diphtheria anti-toxin.

Between June and October 2012, a total of 26 laboratory confirmed cases (i.e. with toxigenic strain C. diphtheria) were reported in Loei Province. Nearly 77% of cases (20) were children under 15 years, but cases were reported over a wide range of ages (4–72 years). All cases had pharyngeal pseudo-membrane and most (81%) were either unvaccinated for diphtheria toxoid or had an incomplete vaccination status. The number of confirmed diphtheria cases by date of onset and age groups is shown in Figure 2.

The outbreak was investigated by central and local surveillance and rapid response teams (SRRT) to confirm the outbreak and the diagnosis. The epidemiological characteristics were described with data obtained from active case finding in a total of 1846 contacts, including households, classmates, colleagues, and health-care workers, who were interviewed and followed up for two weeks. The toxigenic strain of C. diphtheriae was isolated from 62 contacts who were asymptomatic or had mild upper respiratory tract infection (URI) symptoms without a pharyngeal pseudo-membrane.

In responding to the outbreak, active surveillance was implemented by physicians and public health professionals to ensure the rapid detection of any new cases. Management was based on clinical guidelines, including isolation of confirmed cases. Diphtheria toxoid was provided to all children and

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1 In accordance with the WHO guidelines on case definitions for diphtheria, a clinical case in the outbreak was defined by laryngitis, pharyngitis or tonsillitis and an adherent membrane of the tonsils, pharynx and/or nose. Isolation of C. diphtheriae from a clinical specimen was the laboratory criteria for diagnosis.


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Figure 1: Number of diphtheria cases in Thailand and Loei Province, 2003–2012

![Figure 1](image1.png)

Figure 2: Number of confirmed diphtheria cases by date of onset and age group, Loei Province, Thailand, June–October 2012

![Figure 2](image2.png)

D, death case.

Source: Bureau of Epidemiology, Department of Disease Control, Ministry of Public Health, Thailand
adults in the epidemic area who were either unvaccinated who had a history of incomplete vaccination. Risk communication messages were also delivered through health volunteers and villagers on the natural history of the disease, prevention with frequent hand washing and the use of face masks.

Plans are now in place to stockpile diphtheria anti-toxin and antibiotics in order to ensure adequate supply and access when there is an urgent need. Further studies on the effectiveness of a booster dose of diphtheria toxoid in the adult population have also been recommended.

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A novel virus is reported

Coronaviruses (CoV) are a large family of viruses that can affect humans and animals. In humans, they cause illnesses ranging from the common cold to infection with Severe Acute Respiratory Syndrome (SARS).

On 23 September 2012, WHO was informed of a case of acute respiratory syndrome with renal failure caused by a previously unidentified coronavirus, and associated with travel to Qatar and Saudi Arabia. Since then, WHO has received reports of nine cases of infection with this novel coronavirus from Qatar, Saudi Arabia and Jordan. All patients were severely ill, and five have died.

National authorities are now working closely with WHO to investigate these cases and learn more about this new virus. At present, gaps in information include the mode of transmission and whether the source of infection is from animals, or through human-to-human spread. The recognition of two clusters in Jordan and Saudi Arabia raises the possibility of limited human-to-human transmission, but may also be explained by exposure to a common source. Although this novel virus is distantly related to the SARS CoV, it does not appear to transmit easily between people, unlike the SARS virus.

Current activities being undertaken in relation to this event include the following:

- Laboratory assays for the virus have been developed. Reagents and other materials for testing have been made available, as well as protocols, algorithms and reference laboratory services. WHO has activated its laboratory network to assist in testing and other services, and has issued preliminary guidance for laboratory biorisk management.
- Guidance is available for infection prevention and control.

The risk posed by this novel infectious disease to the South-East Asia Region is difficult to quantify. However, based on the current situation and available information WHO encourages all Member States to continue surveillance for severe acute respiratory infections (SARI) and to review carefully any unusual patterns of cases. Specific recommendations are:

- To consider testing for the new coronavirus in patients with unexplained pneumonia, especially in persons residing in or returning from the Arabian peninsula and neighbouring countries. Any new cases should be promptly reported both to national health authorities and to WHO.
- to investigate thoroughly any clusters of SARI, or any health-care worker with SARI, regardless of where in the world they occur. These investigations will help determine whether the virus is distributed more widely in the human population, i.e. beyond the three countries that have identified cases.

WHO does not advise any special screening at points of entry with regard to this event nor does it recommend that any travel or trade restrictions are applied.

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Progress Update

Scaling up antiretroviral coverage in the Asia Pacific Region through Treatment 2.0 Initiative

The Asia Pacific region has approximately 4.9 million people living with HIV/AIDS, the majority of whom live in Cambodia, China, India, Indonesia, Malaysia, Myanmar, Nepal, Pakistan, Papua New Guinea (PNG), Thailand and Viet Nam. Key affected populations – people who inject drugs, sex workers, transgender populations and men who have sex with men – are the drivers of disease transmission. Despite the regional success in scaling up antiretroviral therapy (ART) among people living with HIV over the years (from 280 000 in 2006 to 1 075 272 in 2011), half of those in need are still waiting to access treatment.

International frameworks and commitments to intensify action against HIV – the 2011 United Nations General Assembly High Level Meeting targets; UNAIDS (Joint United Nations Programme on HIV/AIDS) Three Zeros Strategy 2011–2015; the WHO Global and Regional Health Sector Strategy on HIV 2011–2015 – have reiterated the need to accelerate the prevention and treatment efforts in the region. In 2010, WHO and UNAIDS jointly launched the Treatment 2.0 (T2.0) initiative to radically fast-track and simplify the response to HIV towards achieving the goals of these international frameworks. The T2.0 initiative builds on the programmatic and clinical evidence and experience gathered over the last decade to expand HIV diagnosis, treatment and care. Focusing on five priority areas (Figure 1), it was developed as a platform to maximize the efficiency and effectiveness of HIV responses by stimulating innovation in resource limited settings.1

WHO regions and countries play a critical role in implementing this initiative. To this end, the regional offices for South-East Asia and the Western Pacific, in collaboration with the UNAIDS Regional Support Team for Asia and Pacific, held an “Intercountry workshop on optimizing HIV treatment through Treatment 2.0 Initiative” in Yangon, Myanmar on 13–14 September 2012. Fifty-three participants attended the meeting, including country representatives from Cambodia, China, India, Indonesia, Malaysia, Myanmar, Nepal, PNG, Thailand and Viet Nam and staff from partner agencies.2

Recent new evidence supports a move towards earlier initiation of ART for certain groups, for both prevention of HIV and TB transmission (Treatment as Prevention), and potential clinical benefits. The potential approach of self-testing with a saliva-based test and potential cost–benefits of optimizing antiretrovirals reaffirmed that T2.0 is more than just a vision, it is clearly contributing to advancing scale-up. Emerging breakthroughs in diagnostic testing and patient monitoring at point-of-care (testing CD4, VL and EID) also bring hope to implement T2.0 at primary care level.

WHO is developing a simplified guideline, with safer drug options, preferably fixed dosed combinations with lowest drug toxicity, and diagnostic techniques that can be used at community level. WHO has already issued guidance in 2012 on Couples HIV Testing and Counselling including ART for treatment and prevention, and the new consolidated HIV prevention, treatment and care guidelines will be released in 2013.

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1 See ‘Treatment 2.0 At-a-Glance’ for more details: http://www.who.int/hiv/pub/treatment2_flyer.pdf.
2 Asia Pacific Network of Positive People (APN+), United States Centers for Disease Control and Prevention (CDC), Clinton Health Access Initiative (CHAI), International Treatment Preparedness Coalition (ITPC), Médecins Sans Frontières (MSF), UNICEF and Treat Asia.
A Regional framework to scale up programmatic management of drug-resistant tuberculosis

Background
The Green Light Committee (GLC) Initiative was established in 2000 to ensure that patients receive appropriate treatment for multidrug-resistant tuberculosis (MDR-TB) with quality assured second-line drugs (SLDs) in programmatic settings that prevent the emergence of further drug resistance. The Initiative, launched by WHO and the Stop TB Partnership, consists of a Secretariat, an expert Committee, the Global Drug Facility, and technical and financial partners. The GLC approved the case management of patients with MDR-TB under national programmes.

At the 62nd World Health Assembly in May 2009, Member States committed to achieve universal access to diagnosis and treatment of MDR-TB by 2015. The Global Plan to Stop TB 2011–2015 aims to have 1 million MDR-TB patients treated, and 270000 new patients placed on treatment by 2015.

In response to the need for scaling up programmatic management of drug-resistant TB (PMDT), a new global framework was endorsed at the 20th Stop TB Partnership Coordinating Board meeting in April 2011 and the WHO TB Strategic Technical Advisory Group meeting in June 2011. In line with this framework, a new global GLC (gGLC) and regional GLCs (rGLCs) were created in the American, European, South-East Asian, and Western Pacific regions to bring GLC activities closer to countries and enable them to benefit from the greater involvement of key national and international partners in the scale-up of MDR-TB services and care in the respective regions.

Structure of the new mechanism
The Regional Advisory Committee on MDR-TB in the South-East Asia Region (r-GLC SEAR) is composed of nine members, each having expertise in at least one essential technical area focused on drug-resistant TB and representing at least one constituency.

The technical areas are: programmatic management of drug resistant tuberculosis; clinical experience with DR-TB; patient support; drug management; TB laboratory; TB infection control; epidemiology and surveillance, and information systems; communication and advocacy; and developing and/or reviewing PMDT scale-up plans.

The constituencies to be represented are: technical/implementing agencies and partners; civil society organizations/nongovernmental organizations; private sector health-care providers; academia and research institutions; and Member States health authorities involved in MDR-TB prevention and control.

The r-GLC SEAR is supported by a Secretariat, housed in the WHO Regional Office, which is responsible for the day-to-day logistics of the Committee.

First meeting of Regional Advisory Committee on MDR-TB (r-GLC SEAR)
The WHO South-East Asia Regional Office convened the first meeting of the Regional Advisory Committee on Multi Drug-resistant Tuberculosis on 21–22 May 2012. The Committee reviewed, revised and endorsed its modus operandi and the Package of Services to be provided through the new mechanism.

The main recommendations of the meeting were:
- to support countries to build clinical and programmatic capacity to enrol patients;
- to facilitate interchange of experiences with different models of care co-existing in the Region;
- to improve infection control, which will require a wider involvement of the health sector beyond TB control;
- to find innovative ways and provide advice on the engagement of private providers; and
- to improve the supply and management of SLDs, with particular focus on drug regulation and quality.

The way forward
The Regional Advisory Committee, functioning as the Green Light Committee at the regional level (r-GLC), will strive to increase national capacity through increased technical assistance, regular monitoring and evaluation, regularly updating of international policy and guidelines and strengthened advocacy. The r-GLC will provide technical assistance to update the PMDT guidelines and national expansion plan, facilitate the procurement of SLD through GDF, assist in implementing DR-TB management, monitoring and evaluation, and provide recommendations on progress of the GLC programme.

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Vector control for visceral leishmaniasis elimination: a long and winding road

Visceral leishmaniasis (VL), or kala-azar, is a vector-borne neglected disease that is fatal if left untreated. It is caused by protozoa *Leishmania donovani* and transmitted by sandflies. Globally, 90% of cases are reported from India, Sudan, Bangladesh, Nepal, and Brazil. It is a disease of poverty and of significant public health importance. A Kala-azar Elimination initiative was launched in 2005 by Bangladesh, India and Nepal with the target to reduce the incidence of VL to less than 1/10 000 by 2015 at district or subdistrict level.

VL elimination in the Indian sub-continent is deemed feasible due to the favourable technical factors (political commitment, confinement to certain geographical areas, availability of rapid diagnostic tests and oral treatment, and countries’ experience in vector control) as well as biological factors (man as the only reservoir in this Region and the behaviour of *Phlebotomus argentipes* as the only known vector). Strategies of elimination include early diagnosis and complete case management, integrated vector management, surveillance, social mobilization and partnership, and operational research.

A recent study¹ has reviewed evidence from published studies in 2005–2010 on the efficacy of different tools to control the VL vector, *P. argentipes*. Widely used vector control measures are indoor residual spraying (IRS), insecticide treated nets (ITNs) or long-lasting insecticidal nets (LLINs), and environmental management such as plastering the walls with mud or lime. The results of the review show that existing vector control interventions are insufficient to reach the VL elimination target by 2015: the quality of IRS needs to be improved and further research on alternative and integrated vector control methods have to be promoted.

Several studies have been undertaken in the Region to assess the impact of different vector control measures. For example, IRS has been found to significantly reduce the indoor resting *P. argentipes* density when applied properly.² However, it seems that current IRS strategies are suboptimal in the three countries aiming to eliminate VL. There are still gaps in training, equipment, pesticide management and general lack of coordination. As for the use of ITNs, though various trials concluded that they are beneficial as personal protection, especially in countries with no IRS activity such as Bangladesh, the results are not conclusive in other countries.³

Further investigation is needed to properly assess the impact of LLINs on the epidemiology of VL. Therefore, large-scale distribution of ITNs should not be relied alone to reduce VL transmission in endemic areas. Similarly, evidence from one study shows that plastering the walls can reduce vector density by up to 42%⁴ but impact on VL in humans has not yet been evaluated.

It is clear that an integrated approach using different methods targeting adult sandflies at different locations (IRS in cattle sheds and ITN in households), and environmental changes to reduce breeding sites, may have a greater impact on VL transmission than any of these measures alone. WHO is promoting this approach through integrated vector management to optimize available resources and promote cost-effectiveness. Furthermore, sustainability is the key issue here, as history shows how VL re-emerged in the Indian subcontinent after IRS activities were discontinued.

In conclusion, the road to reach the VL elimination target is still long and vector control cannot be undermined in this effort. This component deserves more attention and support, coupled with a stronger body of evidence to guide policymaking and implementation.

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Reducing soil-transmitted helminthiasis morbidity in the South-East Asia Region

Soil-transmitted helminthiasis (STH) is the most common parasitic infection in the world, widely distributed in tropical and subtropical countries. More than 1 billion people are affected globally, of whom 300 million, mostly children, suffer from severe morbidity. This neglected tropical disease is caused by nematode worms such as *Ascaris lumbricoides*, *Trichuris trichiura* and hookworms, and they thrive in places where there is poverty, overcrowding, and lack of adequate hygiene and sanitation facilities. Though rarely fatal, morbidity caused by STH affects children's growth and future development as heavy infection leads to absenteeism in school, malnutrition and poor cognitive performances.

In 2001, the World Health Assembly (WHA54.19) resolved to reach treatment coverage targets of between 75–100% of all school-age children at risk of morbidity from the disease. To scale up preventive chemotherapy and transmission control (PCT) to reach the minimum of 75% of targeted children by 2020, WHO published the Global Strategic Plan for Soil-Transmitted Helminthiasis 2011–2020, highlighting the way forward for Member States. The effective and affordable deworming drugs albendazole and mebendazole are being donated by partners in this effort.

As per the revised WHO estimate (2009), 883 million children require preventive chemotherapy or deworming globally. Of these, 372 million (42%) reside in the South-East Asia Region. All 11 member countries of WHO South-East Asia region are endemic for STH and among them eight considered as high burden (Figure 1). Countries with a large population such as India, Indonesia and Bangladesh contribute to 92% of the total regional burden. It is of priority to focus on the high-burden countries to achieve set targets.

Major de-worming campaigns are undertaken, either through school-based health programmes or in places where co-endemicity with Lymphatic Filariasis (LF), through community based mass drugs administration. Approximately one-third of children requiring preventive chemotherapy receive them through LF elimination programme.

STH treatment coverage increased dramatically from 15 million children in 2003 to 182 million children by 2011 (Figure 2). The coverage in 2009 was 39% of 265 million school-age children (SAC) and 38% of 106 million pre-SAC children. In 2011, regional coverage stands at 49%.

Since the Region has to reach treatment coverage of at least 50% of the total number of 372 million children by 2016 (as per the regional road map) and 75% as per the global target by 2020, it is imperative to boost efforts to scale up deworming through integrated approaches. In addition, involvement of education, water, sanitation, nutrition and environmental sectors is an essential component of deworming programme.

NewsBytes

Building regional risk communication capacity for public health events

Risk communication is essential for an effective and cohesive public response to any public health event, and is therefore a core component of the International Health Regulations (IHR) 2005, a legally binding treaty that everyWHO Member State is mandated to follow. To build risk communication capacity in the Region for public health events, two national-level training workshops were conducted, one in Bhutan and the other in Timor-Leste.

Bhutan has had avian influenza outbreaks in poultry in five districts in 2012, and the first ever chikungunya outbreak...
in the country in August. At the request of the Ministry of Health, therefore, WHO supported and facilitated a three-day Communications for Behavioural Impact (COMBI) training course on outbreak-prone diseases, based on a global toolkit, on 20–23 August 2012. This was the first time, globally, that this training module was pilot-tested for emerging infectious diseases, and was based on innovative learning techniques. Thirty-one participants from 10 districts and the central Ministry of Health attended. The participants developed draft communications strategies for avian influenza and chikungunya outbreaks based on COMBI, which will be further revised and finalized for immediate adoption in the affected districts. Participants learnt about communications and behavioural adoption concepts in health emergency settings (when there is uncertainty and fear), and how to apply the COMBI techniques in their regular work.

In Timor-Leste, approximately 20 people from the Ministry of Health, partners and nongovernmental organizations attended a risk communication simulation workshop supported and facilitated by WHO on 10–12 October 2012. Key communications concepts and skills needed for an outbreak were covered, such as understanding how to share information with the public, what information to share, how to communicate with different affected communities and different stakeholders and partners, as well as listening skills. Draft guidelines were developed by participants for the three areas of risk communication based on IHR (2005): health emergency communications, operational communications, and behaviour change communications.

Regional workshop on programmatic management of drug-resistant tuberculosis

The Regional Workshop on Programmatic Management of Drug-Resistant Tuberculosis (PMDT), held in Chiang Mai, Thailand from 17 to 21 September 2012, aimed to improve the management of drug-resistant TB cases under national TB programmes in the South-East Asia Region. The specific objectives of the workshop were to review the progress of PMDT; provide updates on technical and programmatic guidelines under national programmes; and revise and draft country-specific plans for effective scale-up of PMDT. The workshop was attended by 66 participants comprising delegates from national TB programmes of Member States of the WHO South-East Asia Region, partners, and resource persons.

The workshop observed that there had been steady and significant PMDT expansion in the Region since the last regional workshop, with all countries except Maldives now implementing a national PMDT expansion plan. Nearly 4600 MDR-TB cases were enrolled in 2011, and this number is expected to rise in 2012–2013 as per the country plans. A regional response plan for PMDT was developed by SEARO in 2011 with the consensus of countries and stakeholders.

Some of the recommendations of the workshop to Member States are highlighted below.

- Continue prioritizing basic TB care services to prevent emergence of resistance;
- Intensify DR-TB case finding activities with specific focus on high-risk groups;
- Develop and monitor a laboratory expansion plan for access to bacteriology/ molecular diagnostics in the entire country;
- Align country PMDT expansion plan with regional response plan with an overall goal of universal access to PMDT services;
- Expand palliative care component and include end-of-life care as needed for MDR-TB patients;
- Develop innovative methods to enhance treatment adherence among MDR-TB patients including psychosocial support;
- Mobilize resources for PMDT scale-up plan through local domestic sources and bridging any gaps through the Global Fund and other bilateral donors;
- Ensure systematic and timely plan for procurement of quality assured SLDs;
- Advocate with drug regulatory authorities for restricted sale of first and second line drugs;
- Coordinate with partners for regular monitoring of progress of PMDT implementation; and
- Expand PPM for MDR-TB care and management in all sectors.

Strengthening capacity for international outbreak control

From 27 November to 3 December 2012, the WHO South-East Asia Regional Office conducted a training workshop on “Strengthening Capacity for International Outbreak Response” in Medan and Berastagi, Indonesia. The training involved class-based interactive presentations. In addition experienced...
mentors took participants through a realistic simulation of an outbreak ‘in the field’. This consisted of the mentor facilitating an intensive and potentially stressful outbreak scenario in a fictional country through role-play and information ‘injects’, in order to demonstrate issues commonly encountered when working closely in a multidisciplinary and multinational team. Participants came from Bangladesh, Bhutan, Cambodia, China, Indonesia, Japan, Maldives, Myanmar, Nepal, Singapore, Sri Lanka and Thailand. Several participants stated that this was the best training workshop in which they had ever taken part. Moreover, individuals from the SEA Region have also been identified as suitable for future deployment by WHO in the event of a request for assistance for outbreak response. The same training workshop is tentatively planned for 2013.

New publication

Frequently Asked Questions on HIV and AIDS

Many people in the WHO South-East Asia Region are not aware that they are HIV-infected because they either feel well or they have not taken an HIV test. As HIV does not discriminate – everyone is at risk regardless of age, gender, race, class, income or religion – having an HIV test is important and should be encouraged. These frequently asked questions explain in basic language key issues about HIV and AIDS that cover various aspects of disease prevention, treatment, care and support.

First person

Working for health in a district in Bhutan

Although there were more than 30 people in the large, traditionally decorated hall in the centre near Paro, Bhutan, the only sound that could be heard was the rain lashing the mountains outside, and the presenter’s voice explaining the basics of communicating effectively to local communities. Among the participants in this workshop, held in Paro in August 2012, frowning in concentration and listening intently, was Kencho Wangdi, the Assistant District Health Officer of Chukha Dzongkhap (district).

There’s a reason why he’s paying such close attention. A portly man with a ready smile, Kencho Wangdi has been in the health service for over 15 years and is passionate about his job, which gives him responsibility over several basic health units (BHUs) and a couple of hospitals in the district. Chukha district borders the state of Assam in India, and has a population of about 60 000. The district capital, Chukha, is a major urban centre, but most people live in rural villages, many of them high in the mountains and without easy connection to roads.

Since March 2012, this district has witnessed a major outbreak of avian influenza in poultry, initially near a major highway running through the district. It is among Mr Wangdi’s responsibilities to ensure that people in his district are aware of the possible health implications and follow preventive measures. This has involved coordination with animal health officials and ensuring that community and basic health workers are aware of the risks.

Avian influenza is not perceived as a major health threat among the population, he feels, although farmers and poultry owners are worried. The major concerns he faces in the basic health units relate to maternal and child health, and ulcers – common due to the high consumption of chillies, he thinks.

He tries to ensure that people’s concerns are dealt with and that the basic health facilities provide services well. But it is not always easy. “Some of the villages are very remote, and there are no roads, so we have to walk, climbing mountains,” Mr Wangdi explains. Successfully negotiating difficult terrain, both literally and metaphorically, is the way public health workers like Kencho Wangdi ensure the people of the Region remain safe and healthy.

As told to Supriya Bezbaruah, Communication Officer, Disease Surveillance and Epidemiology Unit, WHO SEARO
Surveillance corner

Avian influenza in the South-East Asia Region

On 10 August 2012, the Ministry of Health of Indonesia notified WHO of a new case of human infection with avian influenza A(H5N1) virus. The case was a 37-year-old male from Yogyakarta province who developed fever on 24 July 2012, was hospitalized on 27 July and died on 30 July. Epidemiological investigation found that the man had four pet caged birds at home, which is about 50 metres from a poultry slaughter house and near a farm. Infection with A(H5N1) virus was confirmed by the National Institute of Health Research and Development (NIHRD), Ministry of Health and reported to WHO by the National IHR Focal Point. Since then, another case was reported in Indonesia in December 2012.

The total number of human avian influenza A(H5N1) cases reported in Indonesia since the beginning of 2005 is 192 with 160 fatalities, 9 (all fatal) of which occurred in 2012 (Figure 1). However, this is the first human avian influenza case reported in the SEA Region for six months, which may indicate that the downward trend in human cases in the Region is set to continue.

Moreover, given that it is almost nine years since the first human cases of A(H5N1) in the current epizootic outbreak were reported, WHO has now decided to publish information on these cases in two ways:(1) on a monthly basis on its main influenza webpage, and (2) whenever an event occurs that is considered unusual, or is associated with a potential increased risk. Member States remain obliged to report to WHO information on every sporadic case of H5N1 human infection or novel influenza virus infection as per Article 6 of the International Health Regulations (2005).

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( ) = deaths

Figure 1: A(H5N1) avian influenza in the South-East Asia Region, 2004 to 2012 (August)