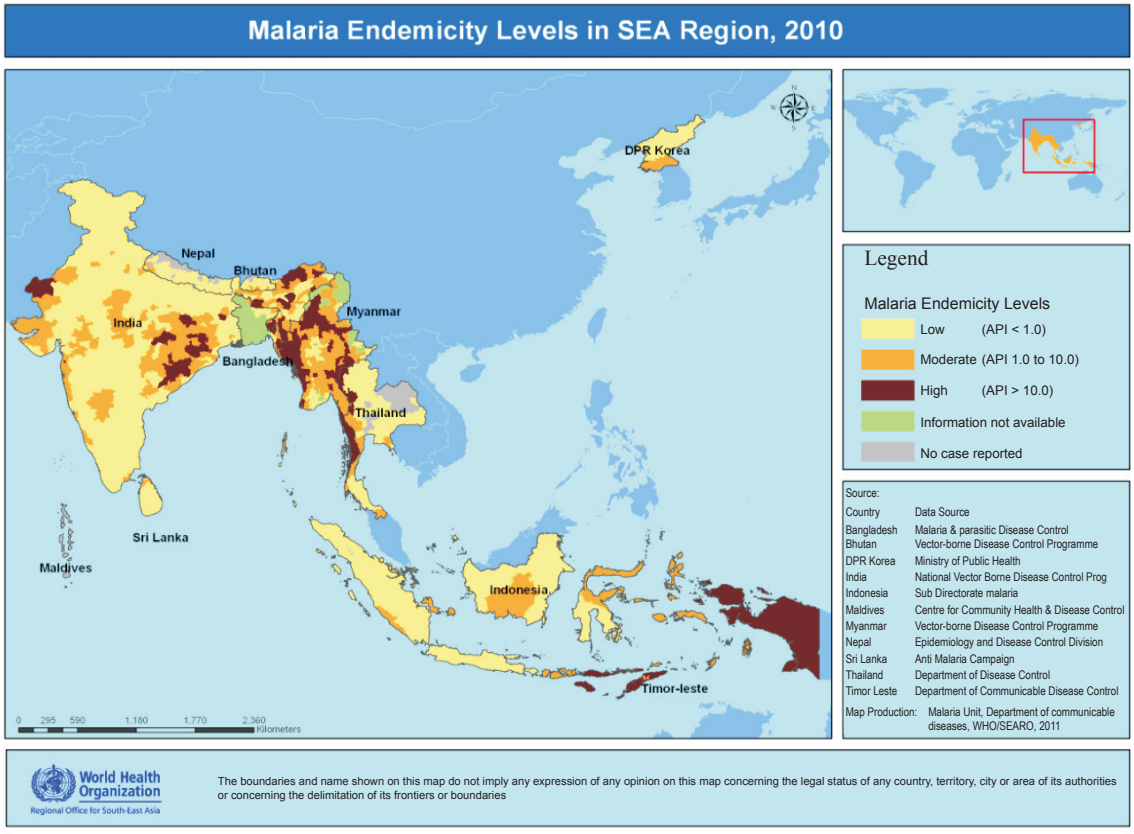
World Health Organization
Regional Office for South-East Asia

Malaria and its control in the WHO South-East Asia Region

Malaria situation

- Malaria is a life-threatening disease caused by parasites that are transmitted to people through the bites of infected *Anopheles* mosquitoes at night.
- *Plasmodium falciparum* and *Plasmodium vivax* are the most common types of malaria in the WHO South-East Asia (SEA) Region. Deaths due to malaria are mainly due to *P. falciparum*; however, reports in the past few years indicate an increasing incidence of severe vivax malaria.
- The burden of malaria in the SEA Region is still high; it is second to Sub-Saharan Africa:
  - around 1.32 billion people are at risk of malaria
  - most cases are among the productive age groups, mainly the poor and vulnerable populations (e.g. migrant workers, subsistence farmers, ethnic communities)
  - in 2010, the reported cases and deaths due to malaria were 2.4 million and 2426, respectively; WHO estimated that there were 28 million cases and 38 000 deaths due to malaria.
- Transmission occurs in 10 of the 11 countries in the SEA Region, mainly in hard-to-reach rural areas and, in some urban areas in India. Maldives has been free of malaria since 1984.
- From 2000 to 2010, the incidence of malaria in the Region was reduced from 30 to 22 per 1000 population at risk, and the malaria mortality rate was reduced from 4.2 to 3.0 per 100 000 population at risk.
- The malaria situation varies among countries and within a country. Annually in the past ten years, India, Indonesia and Myanmar contributed more than 90% of the reported malaria cases and deaths in the SEA Region.



Malaria control and elimination

Malaria can be controlled by using a combination of preventive and curative interventions such as:

- Indoor residual spraying (IRS) with insecticide to reduce the mosquito population density
- Use of long-lasting insecticidal nets (LLINs) to prevent mosquito bites at night while sleeping
- Diagnosis using either rapid diagnostic test (RDT) or microscopy

- Treatment with efficacious drugs (artemisinin-based combination therapy – ACT for *P. falciparum* and chloroquine for other types of malaria)
- Behaviour change communications to increase awareness and to help ensure adherence to interventions

Additional tools and delivery mechanisms are needed to ultimately eliminate malaria and prevent its re-emergence.

Key achievements

- The cumulative availability of effective, long-lasting insecticidal nets (LLINs) and insecticide-treated nets (ITNs) for malaria prevention increased from 4.3 million in 2005 to 17.05 million in 2010 in the Region. Although the overall coverage was less than 10 % of the population at risk, better planning ensured at least 80% coverage of the villages targeted.
- The use of RDT for diagnosis increased from 1.4 million in 2005 to 15.2 million in 2010 in the Region.
- All countries with *P. falciparum* adopted ACT as the first-line treatment. Treatment courses of ACT procured increased from 79 000 in 2005 to 3.9 million in 2010 in the SEA Region.
- Although there was not much change in the number of malaria cases reported, the malaria mortality rate declined in the past decade due to improved coverage of early case detection and appropriate treatment.
- Bhutan, DPR Korea, Nepal and Sri Lanka are now moving towards malaria pre-elimination as they have significantly reduced the malaria incidence.
- Maldives has sustained its malaria-free status since 1984.
- Malaria cases and deaths have declined markedly in Bangladesh and Thailand and transmission is now limited to only a few districts. Improvements have also been noted in India, Indonesia, Myanmar and Timor-Leste.
- The overall financial support for malaria control, both from donors and governments of Member States has increased markedly. The available fund per person at risk is just less than twenty cents and two thirds of this are from the national governments of malaria-endemic countries.

Key challenges

- Scaling up preventive and curative interventions to attain universal coverage.
- Containing the spread of artemisinin resistance that had emerged in the Greater Mekong Sub-region, and preventing its emergence in other countries.
- Sustaining strong political commitments, financial support and community participation to further reduce the burden of malaria and to prevent its resurgence.
- Addressing the high burden of malaria among tribal communities and settlers in forests and forest fringes, and migrant labour working in mines, plantations, and in road and dam construction, and other development projects.
- Addressing urban malaria in India.
- Strengthening technical and managerial capacities at all levels to address the remaining burden of malaria.
- Filling the gaps in human resources to deliver malaria control services particularly in hard-to-reach areas.

The way forward

- Increase political commitments and budgetary support to further scale up coverage of key interventions.
- Mobilize other sectors and the communities at risk for malaria control.
- Formulate and implement healthy public policy, including health impact assessment for any development project. Malaria control should be a component of any development project to be implemented either by the government or private sector in endemic areas.
- Strengthen education on malaria prevention and control in primary and secondary schools as well as in adult literacy classes particularly for tribal communities.
- Strengthen regulatory authority to ensure the quality of diagnostics and drugs.
- Ensure the rational use of antimalarial drugs both in public and private sectors.
- Strengthen cross-border/intercountry/bi-regional collaborations to address the key challenges like drug resistance and malaria among migrant workers.
- Strengthen surveillance, monitoring and evaluation.
- Invest in research and capacity development for malaria control.