Countering the spread of drug-resistant malaria in northern Cambodia

Accelerating malaria elimination through targeted screening and effective treatment of at-risk populations

Background

Medical teams rely on artemisinin-based combination therapy to treat malaria caused by *Plasmodium falciparum* — the deadliest species of the parasite in humans. However, partial resistance to artemisinin has been confirmed in malaria parasites in Cambodia, as well as in four other countries in the Greater Mekong Subregion. To avoid further emergence of resistant mutations and take the final steps towards eliminating *P. falciparum* in the country, a specific focus on detecting and treating the last individuals carrying the parasite is required.

Project outline and objectives

A quarter of the population of five districts in Preah Vihear and Stung Treng provinces in northern Cambodia — a total of 25,000 individuals — is at risk of contracting malaria. The majority are local villagers who visit the forest or forested areas to log, harvest honey or resin, pick mushrooms or flowers, hunt, fish or work on family plantations. A sizeable mobile and migrant population also resides in the area — especially during planting and harvesting seasons — and is usually excluded from official malaria prevention or screening campaigns, which leaves them particularly vulnerable.
Malaria Consortium aims to strengthen malaria case management in the area by training 80 volunteer village malaria workers (VMWs) and staff members at 10 health facilities to diagnose and treat symptomatic and asymptomatic cases. Our overall objective is to reduce the number of cases and contribute to malaria elimination in the targeted area.

**Activities**

Malaria Consortium will:

- prevent malaria infection by distributing a long lasting insecticidal net or impregnated hammock net to each individual in the at-risk population
- improve the diagnosis and treatment of symptomatic malaria cases by:
  - training VMWs and health facility staff on testing, treatment and data registration
  - conducting regular supportive visits to motivate the teams and ensure that the required materials for screening and treatment are available, that treatment guidelines are well-understood and that data are registered correctly
  - supporting monthly VMW meetings organised by Provincial Health Departments, during which potential issues are discussed and refresher training is provided as needed
  - monitoring and analysing the registered data regularly
- drive up proactive detection of asymptomatic cases to prevent further transmission by:
  - screening the at-risk population in villages in or near the forest monthly
  - training VMWs to deliver social and behaviour change messaging to at-risk members of their community, explaining the importance of participating in the monthly screenings, even in the absence of symptoms
  - screen all co-workers and family members of diagnosed malaria cases that were present at the time and place of infection
  - keep a mobile team on stand-by to carry out active screening and quickly reduce transmission in case of a malaria resurgence in the area.

All activities will follow a strong community-based approach and will be implemented in close coordination with local authorities.