



Health workers participating in a dengue seminar in Myanmar

# PROJECT BRIEF

## Supporting effective roll-out of dengue prevention and control guidelines in Myanmar

The study will identify an effective approach for the roll-out of revised dengue prevention and control guidelines for health workers in Myanmar

### Project outline

Dengue is a viral infection spread by mosquitoes. It causes flu-like illness and can develop into a serious complication called severe dengue (also known as dengue haemorrhagic fever), a leading cause of illness and death in many countries in Southeast Asia. The incidence of dengue has grown dramatically in recent decades. In 2015, Myanmar saw the highest number of dengue cases, with 120 confirmed deaths between January and September. However, deaths caused by dengue may be much higher, as many cases remain undetected or unreported. Prevention and control of the disease relies on effectively combating the vector mosquitoes and ensuring proper medical care to manage the symptoms of the disease.

Malaria Consortium is currently working with the Ministry of Health in Myanmar to revise the country's national dengue prevention and control guidelines. The new guidelines are adapted from the most recent World Health Organization recommendations, bringing them in line with the latest evidence and making them more applicable in programmatic settings.

For the guidelines to have a positive effect on dengue outcomes among the population, health workers tasked with implementing them need to be trained. Many of these health workers work in poorly-resourced health facilities at lower levels of the health system where training opportunities are limited and resources are scarce. It is essential, therefore, that training approaches are

#### Country

Myanmar

#### Donors

Department for International Development, UK

#### Length of project

April 2016 – December 2016

#### Partners

Nuffield Centre for International Health and Development, University of Leeds

effective, i.e. they improve health workers' knowledge and skills, as well as efficient, i.e. they are feasible and acceptable to health workers.

## Intervention

This study will compare two approaches to rolling out the revised guidelines to health workers:

- » A 'traditional' approach, which consists of providing basic didactic training in the form of lectures and presentations
- » A comprehensive approach, using adult learning techniques and interactive exercises, such as a dengue outbreak simulation

The study will be conducted in four townships in two states or regions of Myanmar where dengue is prevalent. Within each state or region, health workers in one of the selected townships will receive basic training, while in the other township, comprehensive training will be conducted. Some 160 health workers are estimated to attend the training courses.

## Evaluation research

The study will evaluate the impact of the two training approaches on the following:

### Health worker knowledge and skills

A multiple-choice questionnaire will be used to assess health worker knowledge of dengue prevention and control. Health workers will also be asked to complete skills based evaluation exercises to assess how they apply the knowledge in their day-to-day roles.

### Health facilities' dengue outbreak preparedness

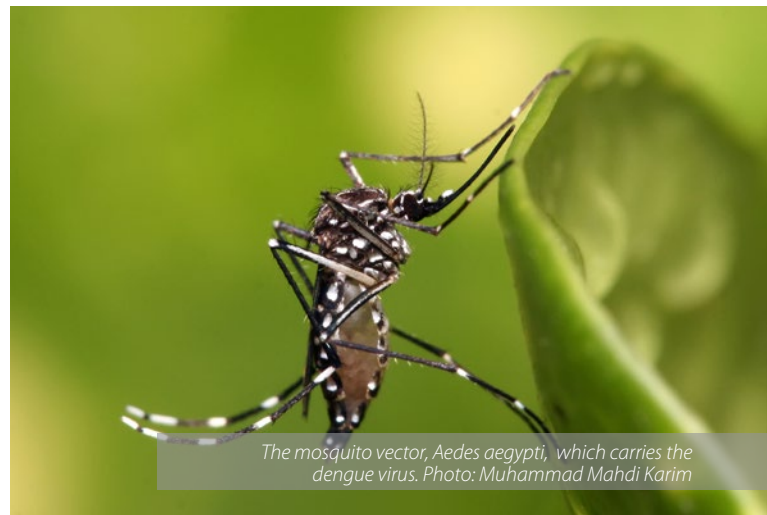
One to two months after the training, each facility in the four study townships will be assessed for outbreak preparedness. A checklist of indicators, such as the presence of an emergency action plan or the availability of diagnostic laboratory testing equipment at the facility, will be used.

### Health facilities' dengue data recording practices

Timeliness and completeness of data records will be assessed by analysing all dengue reports submitted by the health facilities to their township health office.

#### This project supports efforts to deliver:

- ✓ NTDs prevention and control
- ✓ Health systems and service delivery
- ✓ Research



The mosquito vector, *Aedes aegypti*, which carries the dengue virus. Photo: Muhammad Mahdi Karim

In addition to evaluating the outcomes of the intervention, the study will also include a process evaluation, i.e. an assessment of how the intervention was implemented and how this impacted on the outcomes.

## Project objectives

The study will determine an effective and efficient approach for the roll-out of revised guidelines to health workers, which will contribute towards improving dengue prevention and control, in particular with regard to ensuring consistent, timely and complete reporting of dengue cases and increasing outbreak preparedness at the lower levels of the health system.

The findings from the study may also help to inform the roll-out of other guidelines to health workers in resource-poor settings.

This study is conducted through COMDIS-HSD, a Research Programme Consortium led by the Nuffield Centre for International Health and Development at the University of Leeds, UK.

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