ALL HANDS ON DECK IN THE BATTLE AGAINST DENGUE MOSQUITO

GENEVA – The battle against the mosquito that spreads dengue, a serious illness that affects around 50 million people each year, needs more than insecticides alone, according to a study published today in the international public health journal, the Bulletin of the World Health Organization.

This important study held in six Asian cities explored the breeding patterns of the Aedes aegypti mosquito (the species that transmits dengue) and discovered significant differences in breeding and dengue transmission between the sites, affected by such factors as household habits, local environmental conditions and the ecology and behaviour of the mosquito.

For the first time, this large-scale multi-country study, supported by a research partnership between the Special Programme for Research and Training in Tropical Diseases (TDR) at the World Health Organization and the International Development Research Centre in Canada, comprehensively combed public and private buildings and open spaces in selected areas in six cities in India, Indonesia, Myanmar, the Philippines, Sri Lanka and Thailand. It identified almost 50,000 containers holding water and found the highest number of mosquito larvae in unused and uncovered outdoor containers on private land.

While the study found that this mosquito prefers to breed in containers filled with rainwater, when larvicides were used at the study site in Thailand, the mosquitoes found alternative breeding sites indoors in covered containers filled with tap water.

“Traditionally, communities expect public health services to carry out mosquito control, normally through insecticide fogging,” says co-author Dr Johannes Sommerfeld, of TDR in Geneva. “Large-scale insecticide spraying, however, is not effective in reducing immature (larval) stages of the mosquito. These mosquitoes breed in various water containers in and around households so individuals, families and communities have an equally important role to play in reducing these breeding sites in their own backyards. Communities need to work closely with public health and other services in this battle.”

Dengue is a serious, potentially lethal, illness. Infections have dramatically increased in recent decades due to increased urbanization, trade and travel. No effective drug or vaccine is available yet so the only solution is to prevent the disease-carrying mosquito from breeding and biting humans.

Read the paper here: http://www.who.int/bulletin/volumes/88/3/09-067892.pdf
The *Bulletin of the World Health Organization* is one of the world’s leading public health journals. It is the flagship periodical of the World Health Organization (WHO), with a special focus on developing countries. Articles are peer-reviewed and are independent of WHO guidelines.

The March issue has the special theme of communicable diseases in the South-East Asia region. Further items in this issue include:

- How will climate change affect health?
- A new approach to introducing toilets to communities
- High hopes for cholera vaccine
- Can we eliminate neglected tropical diseases such as leprosy?
- Child diarrhoea and pneumonia deaths on decline in Nepal
- Progress in reducing maternal mortality in Mongolia
- Professor Prabhat Jha tells why counting the world’s deaths is so important to public health
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