

# China to attack mala

The disease has re-emerged in central and southern provinces like Henan, Anhui and Hubei as well as Yunnan and Hainan since 2000 due to weakened prevention work — GETTYpic



CHINA'S Ministry of Health announced recently that it has mapped out a draft plan to largely eradicate malaria by the end of 2015, the state media reported.

According to *Xinhua* news agency, the major goal of the 2010-2015 plans is to reduce the incidence of malaria to below one confirmed case for every 10,000 people in the most seriously affected regions, and to zero in on less affected areas.

The plan requires local health departments and medical institutions to use diagnostic technology, standardised treatment and health education to help prevent the disease more effectively.

Central and local governments would be responsible for funding malaria control programmes, said an official with the ministry's disease control department, who declined to be named. He said the amount of investment would be decided only after the



# RM817m to fight the disease in Africa



Malaria is estimated to kill more than 2,000 children every day — GETTYpic

ELEVEN mainly African countries are to be offered cheaper, more effective malaria drugs as part of a partnership between international agencies and governments, officials said recently. Benin, Cambodia, Ghana, Kenya, Madagascar, Niger, Nigeria, Rwanda, Senegal, Tanzania and Uganda are the first countries to take part of the programme — launched in the Norwegian capital, Oslo.

Some US\$220 million (RM817 million) will be spent during the first two years to buy and distribute more effective anti-malaria drugs. The Global Fund to Fight AIDS, Tuberculosis and Malaria will manage the scheme.

Donors included UNITAID — an international mechanism



A rural woman and her children prepare for bed underneath donated repellent-impregnated mosquito netting in the Sauri Millenium village locale in Kisumu, Kenya — GETTYpic

to finance drugs against HIV/AIDS, malaria and tuberculosis, created by France and supported by Norway and 26 other nations — and Britain.

“Controlling malaria is a key component of the global effort to reach the Millennium Development Goals by 2015,” UNITAID board chairman Philippe Douste-Blazy said.

Around nine in 10 malaria cases worldwide occur in sub-Saharan Africa. Transmitted via mosquito bites malaria is estimated to kill more than 2,000 children every day.

New drugs, known as artemisinin combination therapies or ACTs, were needed since the malaria parasite has developed resistance to old

drugs like chloroquine, Awa-Marie Coll-Seck, head of the Roll Back Malaria Partnership, said.

In addition to new drugs, there has been success in tackling malaria by distributing mosquito bed nets in malaria-affected areas, Coll-Seck said citing Ethiopia, Rwanda, Zambia and Zimbabwe. — dpa

# Malaria menace



plan was finalised.

The number of Chinese infected with malaria dropped from 24 million in the early 1970s to several hundred thousand in the late 1990s. China was basically free of malaria, except southwestern Yunnan

Province and southernmost Hainan Province, at that time, according to the ministry.

However, the disease has re-emerged in central and southern provinces like Henan, Anhui and Hubei as well as Yunnan and Hainan since 2000 due to weakened prevention work.

A total of 26,358 cases and 22 deaths were reported nationwide last year.

The ministry proposed stepping up malaria awareness and prevention efforts in affected areas, including spraying insecticide indoors and using mosquito nets impregnated with deltamethrin, an insecticide, as recommended by the World Health Organisation for malaria control.

By 2015, the use of the specially treated bed nets should

be introduced in 95 per cent of level one regions, according to the plan, which was published on the ministry's website Wednesday for public comment. — Bernama

**April 25 is a day of commemoration of the global effort to provide effective control of malaria around the world.**



ellent-impregnated mosquito netting

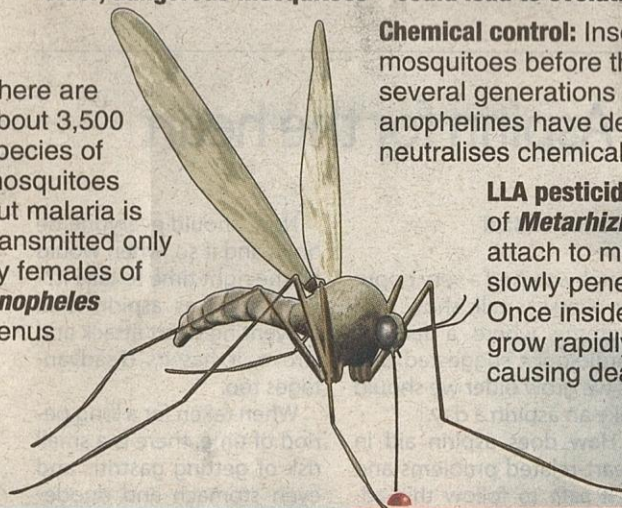
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# Evolutionary idea to fight malaria

Repeated exposure to an insecticide leads to the evolution of insecticide-resistant mosquitoes. Late-life-acting (LLA) pesticides – which only kill older, dangerous mosquitoes – could lead to evolution-proof insecticides

There are about 3,500 species of mosquitoes but malaria is transmitted only by females of *Anopheles* genus



**Chemical control:** Insecticides aim to kill mosquitoes before they can breed. After several generations of exposure, some anophelines have developed a gene which neutralises chemical attack

**LLA pesticide using fungi:** Spores of *Metarhizium anisopliae* fungus attach to mosquito, germinate, and slowly penetrate outer skeleton. Once inside they grow rapidly, causing death



**Gonotrophic cycle:** Egg production and laying takes 2-4 days

**Parasitic infection:** Plasmodium parasite takes 10–14 days to develop to stage when it can be transmitted from mosquito to human

**LLA pesticide:** Only lethal to mosquitoes after 2 or more gonotrophic cycles. Progeny do not develop resistance – infectious bites cut by 95%