

Resistance to malaria drugs has spread in SE Asia (Update)

November 12 2013, by Matthew Pennington

International experts raised the alarm Tuesday over the spread of drug-resistant malaria in several Southeast Asian countries, saying it endangers major global gains in fighting the mosquito-borne disease that kills more than 600,000 people annually.

While the disease wreaks its heaviest toll in Africa, it's in nations along the Mekong River where the most serious threat to treating it has emerged.

The availability of therapies using the drug artemisinin has helped cut global malaria deaths by a quarter in the past decade. But over the same period, resistance to the drug emerged on Thailand's borders with Myanmar and Cambodia and has spread. It has been detected in southern Vietnam and likely exists in southern Laos, said Professor Nick White of the Thailand-based Mahidol Oxford Tropical Medicine Research Unit.

White, a leading authority on the subject, said that while there's no confirmed evidence of resistance in Africa, there's plenty of risk of transmission by air travelers from affected countries, such as construction laborers, aid workers or soldiers serving on peacekeeping missions.

"We have to take a radical approach to this. It's like a cancer that's spreading and we have to take it out now," White told a conference at the Center for Strategic and International Studies think tank in Washington. He said no alternative anti-malarial drug is on the horizon.

The U.N. World Health Organization, or WHO, is also warning that what seems to be a localized threat could easily get out of control and have serious implications for global health.

Mosquitoes have developed resistance to antimalarial drugs before.

It happened with the drug chloroquine, which helped eliminate malaria from Europe, North America, the Caribbean and parts of Asia and South-Central America during the 1950s. Resistance first began appearing on the Thai-Cambodia border, and by the early 1990s it was virtually useless as an antimalarial in much of the world.

Scientists have been working for decades to develop a malaria vaccine, a complicated endeavor since the disease is caused by five different species of parasites. Dozens of candidate vaccines are being researched worldwide.

Nowhere are the challenges in countering the threat to drug resistance greater than in Myanmar, also known as Burma. Some 70 percent of its 55 million people live in malaria-endemic areas, and as a nation, it accounts for about three-quarters of malaria infections and deaths in the Mekong region, according to a report for the conference by Dr. Christopher Daniel, former commander of the U.S. Naval Medical Research Center.

Myanmar's public health system is ill-equipped to cope, as government spending on health dwindled to the equivalent of just 60 U.S. cents per person under military rule, although it has been increased significantly under the quasi-civilian administration that took power in 2011. Myanmar also has a large transient population in its border regions, including ethnic minorities displaced by fighting and migrant workers who cross borders.

White said resistance has been found in the east, center and south of the country, but it's unknown if it has reached the country's north and its northwestern border with densely populated India. "In my view, once it gets into the northeast part of India, that's it, it's too late, you won't be able to stop it," White said.

The Center for Strategic and International Studies is advocating greater U.S. involvement and aid for health and fighting malaria in the Mekong region, particularly in Myanmar, where Washington has been in the vanguard of ramping up international aid, as sanctions have been eased to reward it for democratic reforms.

The centrist think tank argues that can increase America's profile in Southeast Asia in a way that will benefit needy people and not be viewed as threatening to strategic rival, China.

But securing more funds won't be easy at a time when Washington is cutting back on programs for its own poor. The U.S. is already a major contributor to international anti-malaria efforts, and in Myanmar, is promising \$20 million per year in health assistance under its recently resumed bilateral aid program.

White said the problem was less one of lack of funds, than in countries having the will to take quick action to fight a disease that hits the rural poor, which have less of a political voice than urban populations.

He said infection rates have been dropping but the disease needs to be wiped out entirely or it could be distilled to the most resistant parasites and infection rates will rise again. "Once it reaches a higher level of resistance where the drugs don't work, we are technically stuffed," White said.

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