

# US malaria cases climb as global rates drop

Erin Allday Published

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This undated handout photo provided by the Consortium for the Barcode of Life shows *Aedes aegypti* and *albopictus*, the world's worst vectors of arboviruses, which include yellow fever and dengue; *Anopheles gambiae* is the world's worst malaria vector. To help shoppers avoid mislabeled toxic pufferfish, and pilots steer clear of birds, federal agencies are starting to tap into an ambitious project that is gathering DNA "barcodes" for the Earth's 1.8 million known species. Photo: Judith A. Stoffer, ASSOCIATED PRESS

Even as rates of malaria are falling in many of the world's hot spots for tropical diseases, the number of cases in the United States is climbing as global travel becomes cheaper and easier, health officials say.

Rates of malaria - a parasitic illness that is spread by mosquitoes - have dropped 25 to 50 percent in parts of Asia and Africa where the disease is endemic. But in 2011, the U.S. reported 1,925 cases, the most in more than 40 years, the [Centers for Disease Control and Prevention](#) said in a report released last week. California had the second-highest number of cases, 149, behind only New York.

All but a handful of those diagnosed in the U.S. that year became infected in another country. The report suggests that Americans are not taking proper precautions when they travel to places where malaria is prevalent.

"People are traveling to malaria-endemic places more than they did," said Dr. [Michele Barry](#), senior associate dean for global health at [Stanford University](#). "And people tend not to see travel medicine doctors. They are not being prepared correctly for the more exotic destinations."

## **200 million cases**

About 200 million people worldwide become infected with malaria each year, and the disease kills about 660,000 people, according to the World Health Organization. The illness is a major global public health concern, and intense efforts are under way in the United States and abroad to develop a vaccine to wipe it out.

In the U.S., rare cases occur from blood transfusions or transmission from mother to child during pregnancy or childbirth. Also rare are small domestic outbreaks, which occur when a person who comes to the U.S. with malaria is bitten by a domestic mosquito that spreads the infection to other people. The last such outbreak was a decade ago in Florida, according to the [CDC](#).

But the vast majority of cases diagnosed in the U.S. were people who had been infected elsewhere.

Malaria is accompanied by flu-like symptoms, high fevers and chills that cause shaking. The illness is easily diagnosed with a blood test and it's treatable, although it can cause serious symptoms that require hospitalization, and death if left unchecked.

Travelers who are heading somewhere that may put them at risk of infection can take one of several medications that prevent illness. They also should take precautions to avoid mosquito bites.

CDC reports show that many travelers aren't taking those preventive medications, often because they didn't see a doctor to prescribe the drugs. Public health experts believe many malaria cases are among people who visit family in their country of origin, where malaria may be prevalent.

## **Immunity fades**

They may believe, incorrectly, that they're immune to the illness, or they may not think to check in with a doctor who specializes in travel medicine, said Dr. [Paul Arguin](#), chief of the domestic malaria unit at the CDC. People can develop some immunity to malaria after exposure to the disease, but they can still suffer mild illness, and their immunity fades over time.

"Some people just don't perceive their own risk," Arguin said. "When they're returning home, especially where they grew up, it's difficult to be aware of that risk."

Travelers doing charity or missionary work also can become infected. The regions most visited by people who contracted malaria in 2011 were West Africa, with about 500 cases, and India, with about 225 cases.

The increase in malaria in the U.S. is "a reflection of Americans wanting to travel, and traveling to more exotic places," said Dr. [Roland Gosling](#), head of the [Global Health Group](#)'s Malaria Elimination Initiative at UCSF. "For sure there are more people traveling to rural Africa, going out on these charitable missions."

Increased development and improved living conditions in many places where malaria has been prevalent for centuries has reduced rates of the disease globally, but that doesn't protect Americans if they're not taking proper precautions, Gosling said.

### **Danger for travelers**

Travelers may be more likely to suffer serious illness than locals, who may have built up some immunity.

"If you grew up in a malaria-endemic area, you don't die from it," Gosling said. "That's different from naive travelers. They're just people trying to do good, who go to Ghana, for example, and they get malaria and they're not taking any protection. They can definitely die."

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