



## A CUP OF HEALTH WITH CDC

### *Malaria: Prevention is the Best Defense*

*Malaria Surveillance—United States, 2005*

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*[Announcer] This podcast is presented by the Centers for Disease Control and Prevention. CDC – safer, healthier people.*

**[Matthew Reynolds]** Welcome to *A Cup of Health with CDC*, a weekly broadcast of the MMWR, the Morbidity and Mortality Weekly Report. I'm your host, Matthew Reynolds. You may not think of malaria as a health problem in the United States, but it does happen. It's a very serious illness that can be deadly. If you're traveling to a country where malaria is common, there are medicines you can take to prevent malaria and other safety measures you can use to protect your health. Today, I'll be talking with Dr. Julie Thwing, a research physician with the CDC Malaria Branch. Dr. Thwing is the lead author of a recently published article about when and how often malaria is reported in the United States, and she's here to tell us more about that. Welcome to the show, Dr. Thwing.

**[Dr. Julie Thwing]** Thanks so much for having me. It's great to be here.

**[Matthew Reynolds]** Dr. Thwing, we don't hear much about malaria in the United States. Can you describe what it is and how many people in the U.S. are affected by it each year?

**[Dr. Julie Thwing]** Malaria is basically a disease caused by a blood parasite. It's very serious and can be fatal, and in the U.S. somewhere between 1,300 and 1,500 people are reported to the CDC each year as being diagnosed with it.

**[Matthew Reynolds]** Are there groups of people, the young or elderly, for example, who are at greater risk of contracting malaria?

**[Dr. Julie Thwing]** Well, actually, unlike most of the diseases that we talk about and are concerned about at the CDC, malaria is an equal opportunity offender. It really strikes people in the prime of their lives, as well as the young and the elderly. It's really anyone who travels to an area where malaria is common is at risk for it.

**[Matthew Reynolds]** So how is someone infected with malaria and what are the symptoms?

**[Dr. Julie Thwing]** Well, the way that you develop malaria is, if you go to a country where malaria is common and an infected mosquito bites you, it injects the parasite into your blood stream. The parasite then goes straight to your liver, where it spends about 8-14 days developing. After it's finished developing, it then exits the liver and goes into your red blood cells, which is when you get symptoms. The symptoms of malaria are

chiefly very high spiking fevers and shaking chills. Most people also get body aches, head aches, neck stiffness, sometimes vomiting, belly pain – it really feels like a horrible flu.

**[Matthew Reynolds]** The July 2007 issue of National Geographic brings attention to rise of malaria and details the efforts among scientists over the years to find a vaccine. Is there hope on the horizon for a cure?

**[Dr. Julie Thwing]** That's a really great question. Actually, the CDC was started back during World War II in effort to control malaria in the U.S. Malaria was a big problem in the U.S., especially in the South, until about the 1950s. Fortunately, it has since been eradicated in the U.S., and the only malaria we see is malaria being brought in from other parts of the world. Scientists have been working, actually for over a century, to find medicines against malaria and for many decades now to find a vaccine. There have been a lot of strategies attempted in efforts to find a vaccine for malaria. None has really been completely successful yet, but there are a lot of potentially promising candidates out there. So, I think we're still a long ways away from a vaccine, but there are definitely a lot of people working on it, and making headway. As far as curing an individual episode of malaria, even though there is increasing resistance to the drugs that we use, we still have a lot of medicines at our disposal, and scientists are working to develop more medicines.

**[Matthew Reynolds]** What's your advice to someone traveling to a country where malaria is common?

**[Dr. Julie Thwing]** Well, the most important thing to do is to go see a doctor and to find out what you need to do to prepare for that travel. As far as preventing malaria, the first thing to do is to take preventive medicines. There are several very good options for preventive medicine that can be taken while you're traveling that will, if taken properly, prevent almost every episode of malaria. You can also do things such as wear long-sleeved shirts if the mosquitoes are thick, use insect repellent, and sleep under a net. These will all prevent exposure to mosquito bites. When the traveler gets back to the U.S., if they do get sick, it's very important to seek medical attention and let the doctor who is treating you know that you've been to a malarious area.

**[Matthew Reynolds]** Where can our listeners get more information about malaria?

**[Dr. Julie Thwing]** Well, the CDC publishes *The Yellow Book* with health information for travelers. It's available on the CDC web site for travelers, along with other important information about travel to other countries. You can call 1-800-CDC-INFO or go to the web site, which is [www.cdc.gov/travel/](http://www.cdc.gov/travel/), to find out if the places where you're going present a risk of malaria.

**Matthew:** Dr. Thwing, thank you for sharing this information with our listeners today.

**[Dr. Julie Thwing]** Thanks so much, Matthew. It was my pleasure to be here.

**[Matthew Reynolds]** That's it for this week's show. Don't forget to join us next week. Until then, be well. This is Matthew Reynolds for *A Cup of Health with CDC*.

*[Announcer] To access the most accurate and relevant health information that affects you, your family and your community, please visit [www.cdc.gov](http://www.cdc.gov).*