

26 Things You Probably Don't Know About Malaria

You may know that malaria is transmitted from person to person by mosquitoes. And that it is a problem in Africa. You may even know that it has been with us since Biblical times. But there's a lot you may not know about malaria. With its soaring mortality rates and growing resistance to currently available drugs, this infection has always defined life and history in areas where it is endemic—and it continues to do so today. Here are some of the things you may not know about this dreaded disease:

Did you know . . .

... that malaria is a major worldwide killer, particularly for children?

- Malaria is endemic in more than 100 countries and territories.¹
- About 300-500 million people are infected with malaria annually.²
- Every day, more than 2,500 die from malaria and every year, more than 1,000,000 people die from the disease.³
- In Africa, malaria is the biggest killer of children under the age of five.⁴

... that malaria has a long and checkered history?

- As early as 2700 BC, ancient Chinese documents note a disease marked by high fever and an enlarged spleen—likely malaria.⁵
- Malaria has played a major role in history, from stopping Attila the Hun's invading armies in Rome; to decimating British troops in Holland in 1809, leading to a victory for Napoleon; to causing the deaths of 60,000 U.S. troops (one out of seven deaths) during World War II.⁶
- The fever caused by malaria is so high that it was used as a treatment for advanced syphilis from the late 1920s until the 1950s: Syphilis bacteria are temperature-sensitive and cannot survive the high fever malaria induces. ⁷

... that malaria has been a major health problem in the U.S.?

- One of the first military expenditures of the Continental Congress, around 1775, was \$300 to buy quinine to protect General Washington's troops from malaria.
- In the 1800s, malaria occurred as far north as the Dakotas, as far south as Louisiana, and along the Eastern Seaboard, stretching from Florida to Massachusetts.⁹
- In 1938, it was reported that malaria infected more than 2 million people in the U.S. annually.¹⁰
- The government agency that is now known as the Centers for Disease Control and Prevention (CDC) was established in 1946 to control malaria. The center was located in Atlanta because the South was the area of the country with the highest rate of malaria transmission.

... that malaria is still a major problem for U.S. troops?

- Six of the last seven U.S. troop deployments have been to malaria regions.¹¹
- Today, malaria is the most significant infectious disease threat to U.S. troops worldwide.¹²

... that malaria traveled to the U.S., and the mosquitoes are still here?

- The mosquitoes that carry malaria were brought to the U.S. on ships. Mosquitoes carrying malaria came with the English in the ships landing at Jamestown and with slave ships from Africa.¹³
- There is a risk that malaria could re-emerge in the U.S. Today, there are still anopheles mosquitoes (the type of mosquito that carries malaria) throughout the continental United States, particularly in the South.¹⁴
- The scientific community generally agrees that global temperatures will increase
 in the coming decades. Even slight increases in average temperatures—about 0.5
 degrees Celsius—could translate into a 30 percent to 100 percent jump in mosquito
 populations.¹⁵

... that malaria could travel here again?

- Malaria could re-enter the U.S. through trade and travel. A type of mosquito that can carry diseases such as dengue and yellow fever was introduced to the U.S. through tires imported from Asia.¹⁶
- In a phenomenon known as "airport malaria," infected mosquitoes can also be transported to the U.S. by aircraft coming from malaria-endemic countries.¹⁷

... that malaria has an impact on economic development wherever it is a problem?

- A council of experts assembled by President Franklin Roosevelt concluded that malaria reduced the industrial output of the southern states by one-third.¹⁸
- Without malaria, the GDP of some African countries would be almost 30 percent greater than it is today. Malaria reduces the overall GDP of Africa by \$12 billion a year.¹⁹

... what is happening in the fight against malaria?

- In March 2007, Sanofi-aventis and the nonprofit Drugs for Neglected Diseases *initiative* jointly announced the creation of a new therapy for malaria—a combination of two well-known drugs.²⁰ This new drug regimen is easier to follow than previous treatments.
- Even with new treatments, however, resistance to anti-malarial drugs is a growing problem. The lack of a vaccine is still an enormous obstacle in the fight against malaria.

... what the U.S. is contributing to the fight against malaria?

- In 2006, U.S. government spending for malaria vaccine research through the nation's major medical research agency, the National Institutes of Health (NIH), was \$35 million for the year. ²¹ Two years earlier, more than that amount was spent over four days for the President's inaugural festivities. ²²
- In 2006, NIH spent just 0.3 percent (\$98 million) of its total budget on malaria research.²³ In the same year, the U.S. spent 50 times that amount on Halloween costumes and related festivities.²⁴
- Between 1990 and 2002, the worldwide child death rate from malaria roughly doubled.²⁵
- From 2005 to 2006, NIH's inflation-adjusted spending on malaria research decreased by 10 percent.²⁶

The U.S. needs to—and can— do more.

Visit Families USA's Web site to learn more and to help us fight for global health research:

www.familiesusa.org/globalhealth.

Endnotes

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