

Fight the Bite:

Prevent Mosquito-Related Illness



Mosquito-borne illnesses remain a significant public health concern in both the United States and around the world. According to the CDC, West Nile virus is the most common mosquito-borne disease threat in the continental U.S., while other domestic risks include Eastern Equine Encephalitis and La Crosse Encephalitis. For travelers, mosquito-borne diseases such as Dengue, Malaria, and Zika may pose additional risks depending on destination. Understanding these diseases—and how to prevent mosquito bites—is an important step in protecting your health.

Common Mosquito-Borne Diseases

There are more than 200 mosquito species in the United States although only about 12 species are known to transmit disease. Most mosquitoes are nuisance species, meaning they bite people but do not spread illness.

West Nile virus is the most common mosquito-borne illness in North America. In the Northern Hemisphere, mosquito populations are highest from late spring through early fall, especially when temperatures exceed 70°F. Dengue is the most common mosquito-borne disease globally, with over 14 million cases reported worldwide in 2024. In some cases, these infections may cause significant illness and death.

Disease	What is it?	Symptoms
Dengue	Viral disease; symptoms begin 3-14 days after infection	High fever, headache, vomiting, joint pain, rash
Malaria	Parasitic disease, rare in the United States, most cases are travel-associated.	Fever, chills, headache, nausea, vomiting
Chikungunya	Viral disease; joint pain can last months or even years	Fever, joint/muscle pain, rash, fatigue
Yellow Fever	Viral disease; usually of short duration	Fever, chills, back pain, fatigue, vomiting
West Nile Virus	Viral disease	Often none; may include fever, body aches, rash
Zika	Viral disease; with symptoms similar to dengue	Fever, rash, conjunctivitis, joint pain. Infection during pregnancy can result in microcephaly and other problems in the child

How Transmission Happens

Mosquito-borne diseases are transmitted when an infected mosquito bites a human.



1.

A mosquito bites an infected person or animal



2.

The pathogen develops inside the mosquito

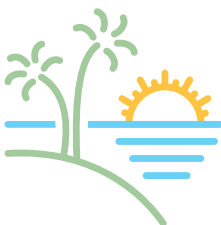


3.

The now infected mosquito bites another person or animal and transmits the infection

Peak Activity Conditions:

Mosquitoes are most active during dawn and dusk, when lower light levels, cooler temperatures, and higher humidity create ideal conditions for feeding.



People most at risk

- Travelers to **tropical or subtropical regions**
- Individuals living in warm, humid climates
- Outdoor workers
- Communities with limited mosquito control or prevention resources
- Individuals living near standing water or in flood-prone areas
- People at risk for more severe infections include pregnant individuals, infants and young children, and older adults

Treatment

Treatment depends on the specific disease. Malaria can be effectively treated with anti-parasitic medications, while most viral infections are managed with supportive care such as rest, fluids, and medications to reduce fever and pain, such as acetaminophen. Severe symptoms such as intense pain, pain, uncontrolled vomiting, bleeding, and difficulty breathing should always receive prompt medical attention.

Protection from Mosquito Bites

- **Use Environmental Protection Agency (EPA) registered insect repellants when in high-risk areas or situations:**
EPA registered repellants are proven to be safe and effective when used as directed.
- **Wear protective clothing:**
Wear light-colored clothing with long-sleeves and long pants and tuck in clothing for less skin exposure.
- **Install or repair window and door screens:**
Window screens and bed nets can prevent mosquitoes from entering your home.
- **Eliminate any standing water:**
Standing water, including non-draining areas and buckets with sitting water are breeding grounds for mosquitoes.
- **Avoid peak biting times:**
Stay indoors during dawn and dusk.