



# INSECTS AND BUGS



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Stinging or biting insects can cause a range of reactions to those who are bitten; from mild discomfort of pain to a lethal reaction for those who are allergic to the insect's venom.<sup>1</sup> Furthermore, some insects and bugs can transmit diseases such as West Nile Virus, Dengue Fever, Lyme Disease, and many other serious infections.<sup>2</sup> Bees, wasps, hornets, mosquitos, and ticks are most abundant in the warmer months.<sup>1,6</sup> While there is risk of an insect bite or sting at any time of day, mosquitoes primarily bite at night from sundown to sun-up.<sup>7</sup>

From 1999 to 2013, nearly 40,000 people in the United States were reported as getting sick with West Nile Virus, a disease transmitted by mosquitoes that causes fever and sometimes neurologic illness.<sup>3</sup> Of those, more than 17,000 were seriously ill and more than 1,600 died.<sup>3</sup> Another disease transmitted by mosquitos is Dengue Fever, which causes high fever, severe headache, and pain throughout the body.<sup>4</sup> Around the world there are an estimated 100 million Dengue Fever infections every year, mostly concentrated in tropical urban areas like Hawaii.<sup>4</sup> Lyme Disease is transmitted by ticks and results in fever, headache, fatigue, and a skin rash.<sup>5</sup> For the past 20 years, the number of confirmed Lyme Disease cases in the United States has steadily increased each year, with a peak number of 29,959 cases in 2009.<sup>6</sup>

## Prevention Tips

To prevent becoming ill from insect and bug bites, follow these tips from the Centers for Disease Control and Prevention:

- ▶ Use and properly apply insect and tick repellent. Repellent should contain DEET, picaridin, IR3535, and oil of lemon eucalyptus to be long-lasting. Be sure to follow application directions and reapply as appropriate.<sup>3</sup>
- ▶ Avoid cologne and perfume, as well as perfumed soaps, shampoos, and deodorants. Insects are attracted to the sweet smell.<sup>1</sup>
- ▶ Sweat may anger bees, so wear clean clothing and bathe every day.<sup>1</sup>
- ▶ Avoid tick-infested areas including wooded, bushy, and tall, grassy areas. When you're in these environments, walk in the center of trails.<sup>7</sup>
- ▶ Insects and bugs thrive in areas where humans throw away food, so make sure to keep outdoor areas clean of trash and debris.<sup>1</sup>

<sup>1</sup> Insects and Scorpions. Centers for Disease Control and Prevention. [www.cdc.gov/niosh/topics/insects](http://www.cdc.gov/niosh/topics/insects). Updated February 2012. Accessed March 2015.

<sup>2</sup> Division of Vector-Born Diseases (DVBD). Centers for Disease Control and Prevention. [www.cdc.gov/ncezid/dvbd](http://www.cdc.gov/ncezid/dvbd). Updated February 2015. Accessed March 2015.

<sup>3</sup> West Nile Virus and Preventing Mosquito Bites. Centers for Disease Control and Prevention. [www.cdc.gov/features/StopMosquitoes](http://www.cdc.gov/features/StopMosquitoes). Updated June 2014. Accessed March 2015.

<sup>4</sup> Dengue: Frequently Asked Questions. Centers for Disease Control and Prevention. [www.cdc.gov/Dengue/faqFacts/index.html](http://www.cdc.gov/Dengue/faqFacts/index.html). Updated September 2012. Accessed March 2015.

<sup>5</sup> Lyme Disease. Centers for Disease Control and Prevention. <http://www.cdc.gov/lyme/>. Updated 20 March 2015. Accessed April 2015.

<sup>6</sup> Lyme Disease: Reported Cases of Lyme Disease by Year, United States, 1995 - 2013. Centers for Disease Control and Prevention. [www.cdc.gov/lyme/stats/chartstables/casesbyyear.html](http://www.cdc.gov/lyme/stats/chartstables/casesbyyear.html). Updated March 2015. Accessed March 2015.

<sup>7</sup> Preventing Tick Bites. Centers for Disease Control and Prevention. [www.cdc.gov/ticks/avoid/on\\_people.html](http://www.cdc.gov/ticks/avoid/on_people.html). Updated April 2014. Accessed March 2015.

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