

Mosquitoes 101

Why do mosquitoes bite?

Only female mosquitoes bite. Female mosquitoes require a blood meal to acquire the protein needed to produce eggs. Females lay multiple batches of eggs during their lifespan, and a new blood meal is needed to produce each batch. Different mosquito species prefer different host species; some mosquitoes will seek blood meals from birds, others from mammals—and some are generalists.



Why do mosquitoes seem to bite some people, but not others?

This phenomenon is not completely understood. Mosquitoes are attracted by the carbon dioxide that we—and other animals—exhale. They may also be attracted by various odors—perfume, perspiration, lactic acid, detergents—that combine in unique ways to make one victim more attractive than another as a meal. Because dark colors absorb heat and lighter colors tend to reflect heat, mosquitoes also tend to be more attracted to victims dressed in darker clothes.

Where do mosquitoes breed?

Mosquitoes breed in wet, swampy areas, where they lay their eggs. The eggs hatch in the water, and the young mosquitoes spend their pupal stages in the water. Mosquitoes lay eggs in both fresh and polluted water, and seek still waters such as those found in small puddles, ditches, and ponds. Even a small amount of standing water—say, in the bottom of a flower pot—will provide sufficient habitat for mosquito eggs. These eggs usually hatch about 5 days after they are laid. A key factor in mosquito prevention is the *elimination of standing water* in your area.

What is the average lifespan of a mosquito?

Like most insects, mosquitoes are a prime food source for birds, amphibians, and spiders. Between predators and extreme weather events such as drought and harsh rains, most mosquitoes live for an average of about two weeks in their adult form. If they manage to escape predators, females from some mosquito species live to about two to three months of age. Those females who enter adult form late in the season may go into hibernation as cooler weather approaches, and can emerge the following spring to lay eggs. In many species, eggs laid before the onset of cold weather can also survive through a winter, even without water, re-hydrating in spring rains to go through larval, pupal, and adult stages.

Will winter bring an end to West Nile-carrying mosquitoes?

Yes and no. Like snakes and amphibians, insects are cold-blooded, and cannot regulate their own body temperatures. Because they are dependent upon their environment to maintain a sufficient body temperature, mosquitoes "disappear" in regions subject to cold winters. Female mosquitoes that survive into the onset of winter can go into hibernation; if they mated in the fall, they can emerge ready find the first available blood meal, and then lay their eggs, in the spring. Some mosquito species can lay eggs which survive extreme weather, such as cold, ice, and drought. Moisture produced by spring rains and melting snow and ice will cause these eggs to hatch, and the mosquitoes will progress through larval, pupal, and finally adult stages to begin the cycle anew. In the warm and humid climates of the Southeast and Gulf Coast, mosquitoes can thrive year-round.

How many types of mosquitoes are there?

According to the American Mosquito Control Association, there are more than 2500 species of mosquitoes world-wide; about 200 of these species occur in the U.S. According to the National Pesticide Information Center, 36 species occurring in the U.S. have tested positive as carriers of West Nile Virus. The most common carrier of West Nile is the *Culex pipiens* (Northern house) mosquito. Other carriers include *Culex restuans*, *Aedes albopictus*, *Culex quinquefasciatus* (Southern house mosquito), and *Aedes vexans*.

Information provided by the [National Biological Infrastructure](#), U.S. Geological Survey