

Mosquito Control Information



So why are they such a problem? Simple: Your yard can make a perfect habitat and breeding ground for swarms of biting mosquitoes!

Almost everyone has had the unpleasant experience of being bitten by a mosquito.

Mosquito bites can cause skin irritation through an allergic reaction to the mosquito's saliva - this is what causes the red bump and itching. But a more serious consequence of some mosquito bites may be transmission of certain serious diseases such as malaria, dengue fever and several forms of encephalitis, including

West Nile virus.

Not only can mosquitoes carry diseases that afflict humans, but they also can transmit several diseases and parasites that dogs and horses are very susceptible to.

These include dog heart worms, eastern equine encephalitis and West Nile virus.

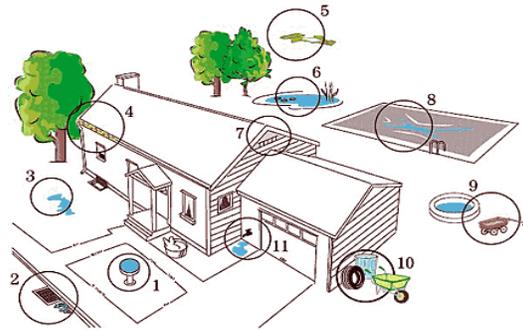
There are about 200 different species of mosquitoes in the United States, all of which live in specific habitats, exhibit unique behaviors and bite different types of animals. Despite these differences, all mosquitoes share some common traits, such

as a four-stage life cycle.

Different species of mosquitoes prefer different types of standing water in which to lay their eggs. The presence of beneficial predators such as fish and dragonfly nymphs in permanent ponds, lakes and streams usually keep these bodies of water relatively free of mosquito larvae.

However, portions of marshes, swamps, clogged ditches and temporary pools and puddles are all prolific mosquito breeding sites. Other sites in which some species lay their eggs include:

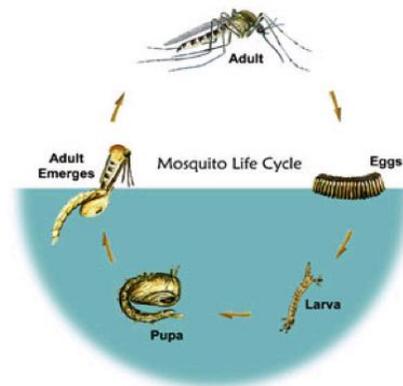
- tree holes,
- old tires,
- buckets,
- toys,
- potted plant trays and saucers,
- plastic covers or tarpaulins and even places as small as bottle caps!



Some of the most annoying and potentially dangerous mosquito species, such as the Asian tiger mosquito, come from these sites.

Mosquito Life Cycle

Knowing the different stages of the mosquito's life will help you prevent mosquitoes around your home and also help you choose the right pesticides for your needs, if you decide to use them. All mosquito species go through four distinct stages during their life cycle:



- egg - hatches when exposed to water larva - (plural: larvae) "wiggler" lives in water; molts several times; most species surface to breathe air
- pupa - (plural: pupae) "tumbler" does not feed; stage just before emerging as adult
- adult - flies short time after emerging and after its body parts have hardened. The first three stages occur in water, but the adult is an active flying insect. Only the female mosquito bites and feeds on the blood of humans or other animals.
- After she obtains a blood meal, the female mosquito lays the eggs directly on or near water, soil and at the base of some plants in places that may fill with water. The eggs can survive dry conditions for a few months.

- The eggs hatch in water and a mosquito larva or "wiggler" emerges. The length of time to hatch depends on water temperature, food and type of mosquito.
- The larva lives in the water, feeds and develops into the third stage of the life cycle called, a pupa or "tumbler." The pupa also lives in the water but no longer feeds.
- Finally, the mosquito emerges from the pupal case after two days to a week in the pupal stage.

The life cycle typically takes up two weeks, but depending on conditions, it can range from 4 days to as long as a month.

The adult mosquito emerges onto the water's surface and flies away, ready to begin its lifecycle.

The threat of West Nile and other mosquito borne diseases could potentially affect everyone in your family, including your pets. These harmful pests take away enjoyment of your outdoor activities - grilling, lounging, gardening, etc., and keep your children from playing comfortably in the yard.



Diseases that can be Transmitted by Mosquitoes

West Nile Virus (WNV) West Nile virus can cause infection in animals and people. The virus is similar to the St. Louis encephalitis virus and produces similar symptoms. Like EEE, WNV is spread to humans by the bite of infected mosquitoes. A mosquito is infected when it bites a bird that is carrying the virus. The virus is not spread from person to person or directly from birds to people under normal circumstances.

Anyone can become infected with WNV. Most people who are infected with the virus will have no symptoms (80%) or may experience mild illness (20%), before fully recovering. However, a small portion of people (1%), particularly the elderly or persons with compromised immune systems, become seriously ill when infected. In some individuals, the virus affects the central nervous system - the brain and spinal cord. At its most serious, it can cause permanent neurological damage and can be fatal. Onset of symptoms generally occurs 3 to 14 days following the bite of an infected mosquito. Symptoms may range from a slight fever, headache, body aches, rash, nausea and swollen lymph nodes to the rapid onset of severe headache, high fever, stiff neck, disorientation, muscle weakness, coma and, rarely, death.

There is no vaccine, or cure for WNV or St. Louis encephalitis though treatment can reduce the severity of the symptoms.

The WNV season in Connecticut extends from July through early October but the greatest risk of human infection occurs from August through September

Eastern equine encephalitis (EEE).

Eastern equine encephalitis is a rare but serious disease caused by a virus that is spread by adult mosquitoes. On average there are 5 cases each year in the United States. There has never been a documented human case of EEE in Connecticut, but the virus is found in birds and bird-biting mosquitoes that live near wetland habitats along the eastern seaboard from New England to Florida. In some years, high numbers of birds get infected favoring spread to the types of mosquitoes that bite both mammals and birds. These mosquitoes can then infect people and horses. EEE is not spread by people and horses with the disease. The risk of getting EEE is highest from late July through September.

In humans, symptoms of EEE appear from three to 10 days after being bitten by an infected mosquito. Some infected people may not develop illness. For those who become ill, the clinical symptoms may include high fever (103 to 106 degrees F), stiff neck, headache and lack of energy. Inflammation of the brain, encephalitis, is the most dangerous. The disease gets worse quickly and some patients go into a coma within a week. Once symptoms develop, treatment for EEE is supportive and aimed at reducing the severity of the symptoms. As many as one-third of people who get the disease die from it and of those who survive approximately one-half will have permanent neurologic damage. Presently, there is no available vaccine for use in humans.