

## Mosquito Control Tips

- Dispose of any tires. Tires can breed thousands of mosquitoes.
- Drill holes in the bottom of recycling containers.
- Clear roof gutters of debris.
- Clean pet water dishes regularly.
- Check and empty children's toys.
- Repair leaky outdoor faucets.
- Change the water in bird baths at least once a week.
- Canoes and other boats should be turned over.
- Avoid water collecting on pool covers.
- Empty water collected in tarps around the yard or on woodpiles.
- Plug tree holes.
- Even the smallest of containers that can collect water can breed hundreds to thousands of mosquitoes. They don't need much water to lay their eggs, (bottles, barrels, buckets, overturned garbage can lids, flower pots, cups, pop cans, etc.)
- Keep swimming pools clean, aerated and chlorinated.
- Aerate artificial ponds.
- Avoid the temptation to mass aquatic plants together excessively in artificial ponds.

### Random Mosquito Facts -

- Even though they seem to move quickly, the average mosquito can only fly up to 1.5 miles per hour.
- Mosquitoes cannot fly too high; they fly somewhere between 25 and 40 feet up in the air.
- Most mosquitoes species can only fly about 300 feet before they need to rest.

For more  
information  
call . . .

Nuisance<sup>TM</sup>  
News!



Fact Sheet

Your Company Name

Address

City , State Zip

Phone Number(s)



## Mosquitoes

Worldwide, mosquito-borne  
diseases kill more people  
than any other single factor.

# Mosquito



There are over 3,000 species of mosquitoes worldwide.

Mosquitoes are largely aquatic with most of their development occurring in or near stagnant water.

Only female

mosquitoes feed on or “bite” humans to obtain protein necessary for egg laying.

Mosquitoes are cold-blooded creatures and do not generally bite in temperatures below 50 F.

Mosquitoes can live as long as 2-3 months and adults that hibernate can live as long as 6-8 months.

## Do Mosquitoes Transmit Diseases to Humans & How?

How they “bite”: First of all they can’t bite, nor can they even open their jaw. They sting. First they pierce the skin with a stylet. This may take many tries. Then a chemical called salivaria is released to prevent the blood from clotting. Then the blood is sucked up. Finally it flies away.

Mosquitoes are known to transmit many diseases to man such as encephalitis, malaria, west nile virus, yellow fever and heartworm in dogs. These transmissions can occur because either the disease can multiply inside the mosquito or the disease can survive on the insect’s biting parts. When the infected mosquito next bites, the disease is passed into the person’s or animal’s body, causing that person or animal to become infected.

## Is AIDS Transmitted By Mosquitoes?

The human immunodeficiency virus (HIV) which causes acquired immunodeficiency syndrome (AIDS) is very fragile. Exposure to conditions other than those found in the human body almost always causes the virus to die. Experiments in which mosquitoes were artificially fed with high concentrations of HIV-infected blood have shown that the AIDS virus does not multiply or survive in insects. Even under ideal laboratory conditions scientists have been unable to cause transmission of AIDS virus by insects.

80% of HIV infected people have no detectable levels of virus in their blood. The amount of HIV circulating in the blood of an infected person is very small - less than 10 infectious units per milliliter (A milliliter is

approximately 1/5 of a teaspoon). A mosquito’s biting parts hold less than one one-hundred thousandths (1/100,000) of a milliliter of blood (one five hundred thousandths of a teaspoon!)

## West Nile Virus -

West Nile Virus (WNV) is one of a group of disease-causing viruses spread by mosquitoes. It first appeared in the US in 1999. The virus is transmitted to humans and animals through the bite of an infected mosquito. Mosquitoes become infected with WNV when they feed on infected birds.



Most people who are bitten by a mosquito with WNV will not get sick. People who do become ill may experience flu-like symptoms such as a fever, headache and body ache. Approximately, one in five people bitten by an infected mosquito will become ill. Less than one percent of infected individuals require hospitalization. The elderly and the immune-compromised are most susceptible to illness caused by WNV.

## What are the symptoms of WNV?

Studies have shown that only a small percentage of infected humans show symptoms of disease. Symptoms of West Nile Fever, resulting from infection with WNV, include fever, headache, rash and aches. In severe cases, encephalitis, meningitis, may occur. Severe symptoms may include high fever, disorientation, tremors, coma, paralysis and death. The time between the mosquito bite and the onset of illness, known as the incubation period, ranges from 5-15 days in humans.

## Is there a cure for WNV?

There is no current vaccine or cure for West Nile Fever. Please contact your physician if you think you or a family member may have been exposed to WNV.

## Why is it important to report a dead bird?

Certain species of birds, especially crows, jays, hawks, ravens, gulls, pigeons, ducks, owls, sparrows and finches are highly susceptible to WNV. Dead birds can be the first indication of virus transmission in an area. If you find a bird that has recently died with no obvious cause, please call your local health department.



## Encephalitis -

encephalitis in various forms such as St. Louis, Western Equine, La Crosse, Eastern Equine and West Nile, which was recently discovered in the Northeast is endemic

to the US and increasing in incidence. Although extremely rare, Eastern Equine Encephalitis has a 30% - 60% mortality rate once contracted. Severe damage to the central nervous system occurs in those that survive the illness.

Eastern Equine Encephalitis (EEE) is maintained in nature through a cycle between the *Culiseta melanura* mosquito and birds that live in freshwater swamps. Although *Culiseta melanura* do not bite humans, some mosquitoes will “cross bite”; i.e., bite an infected bird and then bite a human or animal (horse, emu and other exotic birds), thereby spreading the disease. These mosquitoes are also known as “bridge vectors”. A vector is a species that transmits a disease from one host to another. These bridge vectors may take a meal from a bird and later take another meal from a mammal.

Symptoms usually occur within 2 to 10 days after being bitten by an infected mosquito. These symptoms include high fever, stiff neck, headache, confusion and lethargy. Encephalitis, swelling of the brain, is the most dangerous symptom.

## Malaria -

Malaria is caused by a parasite that is transmitted from person to person by the bite of an *Anopheles* mosquito. *Anopheles* bite during the nighttime and are present in almost all countries in the tropics and subtropics.

Symptoms of malaria include fever, chills, headache, muscle ache and malaise. In its early stages it can resemble the onset of the flu. These symptoms can develop 6-8 days after being bitten by an infected mosquito or as late as several months after the traveler has left the area.

Malaria can sometimes be prevented by the use of antimalarial drugs and protection against mosquito bites. Some estimates place 40% of the world’s population at risk for malaria. It is estimated that worldwide, malaria claims over one million lives annually.