

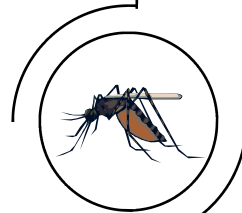
# BUG OFF:

## How to take the bite out of mosquitoes

*Be aware of the risks*

*Eliminate mosquito breeding sites*

*Protect yourself*



Vector Control and Environmental  
Services Division  
2242 Carroll Road  
Fort Wayne, IN 46818-9509

Phone: 260-449-7459  
Fax: 260-449-7460

Fort Wayne-AlLEN County  
Department of Health

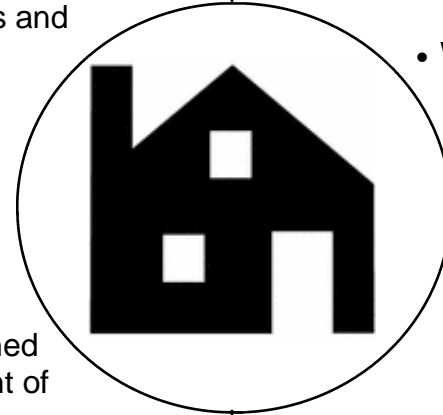
Tel: 260-449-7459

www.allencountyhealth.com

## Steps to reduce your risk of mosquito-borne disease....

### MOSQUITO-PROOF YOUR HOME

- Eliminate standing water on your property.
- Clean out bird baths and pools regularly
- Clean clogged roof gutters
- If you have a pond, put in mosquito fish which can be obtained from the Department of Health.
- Properly dispose of tires
- Fix or install window and door screens
- Remove tall weeds and grass
- Do not use a bug zapper. It will kill the good bugs, too.



### PROTECT YOURSELF

- Cover up. Wear light-colored clothing, long sleeves, long pants and socks.
- Wear insect repellent\* at all times outside. Look for one of these ingredients:
  - ◆ 1 to 50 percent **DEET** (N,N-diethyl-m-toluamide)
  - ◆ **PICARIDIN** (KBR 3023)
  - ◆ **OIL OF LEMON EUCALYPTUS** [p-methane 3,8-diol(PMD)]
  - ◆ **PERMETHRIN** (use on clothing, shoes, but not skin)
- \* When using repellent, always follow label directions.
- Limit time spent outdoors during peak mosquito biting times.
- Report dead birds and standing water. Call (260) 449-7459 to report a dead bird, then dispose of the bird by burying it or bagging it twice and placing in the trash.

# BE AWARE OF THE RISK

## WHY DO MOSQUITOES BITE?

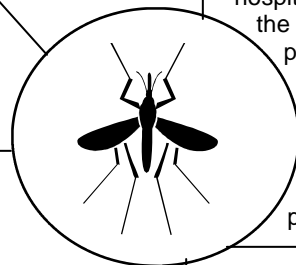
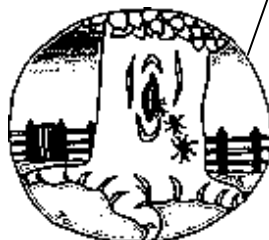
Not all mosquitoes are blood-suckers. Male mosquitoes do not bite humans or animals. The female mosquito bites because she needs the protein in the blood to produce eggs. When the female sticks her needle-like mouthpart into a human's arm, it releases saliva into the hole. Antibodies react to the saliva. This is what causes mosquito bites to itch and also how viruses are transmitted.

## WHY GET RID OF MOSQUITOES?

Mosquitoes are not just a nuisance. Some carry diseases and pass them on to humans and animals. Mosquitoes can also infect domestic animals with dog heartworm. It is important that pets receive heartworm medicine especially if they are around mosquitoes.

## Common Mosquito Breeding Sites

- BIRD BATHS
- CONTAINERS
- TIRES
- DITCHES
- PONDS / ABANDONED POOLS
- MARSHES/ WETLANDS/ LOW AREAS
- OPEN DRAINAGE PIPES
- CLOGGED GUTTERS
- TREE HOLES



## Eastern Equine Encephalitis (EEE)

**Vector:** *Aedes* or *Culex* species. Mosquitoes become infected by feeding on birds infected with the EEE virus.

**Incubation period:** 3 to 10 days

**Illness:** Many persons infected with EEE virus have no apparent illness. In those persons who do develop illness, symptoms range from mild flu-like illness to EEE (inflammation of the brain), coma and death. Mortality rate is about one-third, making it one of the deadliest mosquito-borne disease in the United States. There is no specific treatment for EEE; optimal medical care includes hospitalization and supportive care. About half of the people who survive will have mild to severe permanent neurological damage.

**Case rate:** About 5 cases reported annually in the United States

**Most at risk:** Persons in endemic areas and people over 50 and under age 15



## St. Louis Encephalitis (SLE)

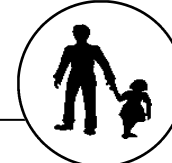
**Vector:** *Culex* species. Mosquitoes become infected by feeding on birds infected with the SLE virus.

**Incubation period:** 5 to 15 days

**Illness:** Mild infections occur without apparent symptoms other than fever with headache. More severe infection is marked by headache, high fever, neck stiffness, stupor, disorientation, coma, tremors, occasional convulsions (especially in infants) and spastic (but rarely flaccid) paralysis.

**Case rate:** 130 cases reported annually in U.S.

**Most at risk:** Elderly and persons who work outdoors



## West Nile virus (WNV)

**Vector:** Mainly *Culex* species, but a few *Aedes* species also. Mosquitoes become infected when they feed on infected birds. WNV can also be spread by blood transfusions, transplants, and from mother-to-child through breast milk.

**Incubation period:** 3 to 14 days

**Illness:** Most people (about 4 out of 5) who are infected will not have any symptoms or very mild symptoms such as fever, headache, body aches, swollen lymph glands or a skin rash. A small number of people infected with WNV will develop severe illness. The severe symptoms can include high fever, headache, neck stiffness, stupor, disorientation, coma, tremors, convulsions, muscle weakness, vision loss, numbness and paralysis. Symptoms may last several weeks, and neurological effects may be permanent. There is no specific treatment for WNV, except supportive care for severe cases.

**Case rate:** Varies

**Most at risk:** People age 50 or older



## LaCrosse Encephalitis (LAC)

**Vector:** *Aedes triseriatus* (tree hole mosquito). Mosquitoes become infected by feeding on invertebrate hosts such as chipmunks and squirrels infected with the LAC virus.

**Incubation period:** 5 to 15 days

**Illness:** Clinical features are frank encephalitis progressing to seizures, coma; majority of infections are sub-clinical or result in mild illness. There is no specific treatment for LAC.

**Case rate:** About 70 cases reported annually in the U.S.

**Most at risk:** Children (who are less than 16 years old; live, play or work near a woodland habitat; or, have tree holes or artificial containers around their home) are most at risk for LAC.