

Preventing Mosquito Bites and Arboviruses: Tips for Michigan Residents

The most effective way to avoid arboviruses is to prevent mosquito bites. Be aware of the West Nile virus and other arbovirus activity in your area and take action to protect yourself and your family.

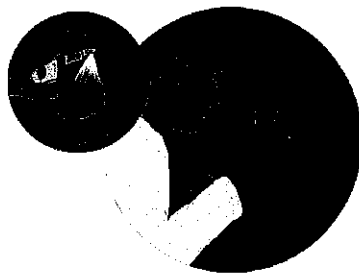


Use Insect Repellent

Use Environmental Protection Agency (EPA)-registered insect repellents with one of the active ingredients below. When used as directed, EPA-registered insect repellents are proven safe and effective, even for pregnant and breastfeeding women.

- DEET
- Picaridin
- IR3535
- Oil of lemon eucalyptus (OLE) or para menthane-diol (PMD)
- 2-undecanone

Find the insect repellent that's right for you by using [EPA's search tool](#)



Tips for Babies & Children

- Always follow instructions when applying insect repellent to children.
- Do not use insect repellent on babies younger than 2 months old.
- Do not apply insect repellent onto a child's hands, eyes, mouth, and cut or irritated skin.
 - Adults: Spray insect repellent onto your hands and then apply to a child's face.
- Do not use products containing oil of lemon eucalyptus (OLE) or para-menthane-diol (PMD) on children under 3 years old.



Take steps to control mosquitoes inside and outside your home

- Use screens on windows and doors. Repair holes in screens to keep mosquitoes outside.
- Once a week, eliminate potential breeding areas for mosquitoes. Check inside and outside your home. Mosquitoes lay eggs on or near water:
 - Discard old tires, tin cans, ceramic pots or other containers that can hold water
 - Repair failed septic systems
 - Drill holes in the bottom of recycling containers left outdoors
 - Keep grass cut short and shrubbery trimmed
 - Clean clogged roof gutters, particularly if leaves tend to plug up the drains
 - Frequently replace the water in pet bowls
 - Flush ornamental fountains and birdbaths periodically; aerate ornamental pools, or stock them with predatory fish.

For Up-to-Date Information Visit Michigan's Emerging Diseases Website

www.michigan.gov/westnile

or the Centers for Disease Control and Prevention Website

www.cdc.gov/westnile

Arbovirus* Activity, Including EEE and West Nile Virus:


Weekly Summary, Michigan 2019

*Arboviruses are viruses transmitted by mosquitoes or other insects

Updated: September 30, 2019

15 

Michigan counties with reported EEE activity

33 

Animals testing positive for EEE infection

16 

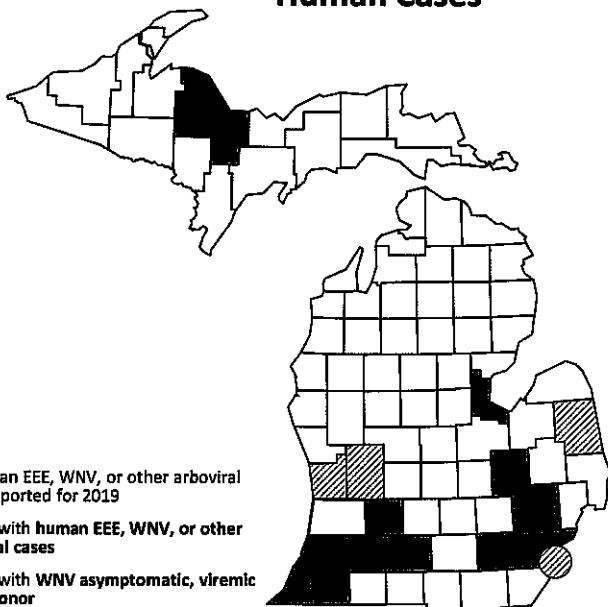
Human cases of EEE and other arboviruses reported




2019 Michigan Arbovirus Surveillance <i>(click links below to see cases by county)</i>	
Human Eastern Equine Encephalitis cases reported	9
Animal Eastern Equine Encephalitis cases reported	33
West Nile virus Positive Mosquito Pools	54
Total Number of Mosquito Pools Tested	1,532
Total Number of Mosquitoes Tested	31,606
Human WNV cases	5
Human California Group virus cases	2
WNV asymptomatic, viremic blood donor	5
Equine/Other Animal WNV cases reported	0
Avian WNV cases reported	13

Highlights

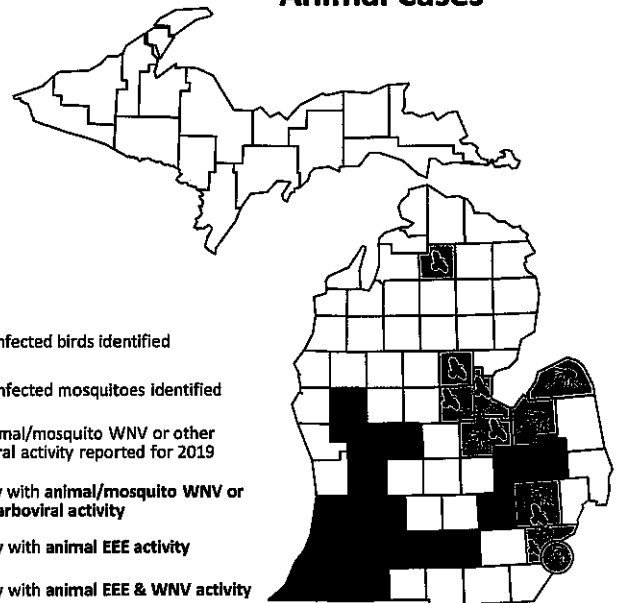
- **The mosquitoes that spread EEE are still active and were caught in traps set 9/26/2019 in southwest Michigan.**
- This year, Eastern Equine encephalitis virus (EEE) infected 9 Michigan residents (1 Barry, 2 Berrien, 1 Calhoun, 1 Cass, 3 Kalamazoo, and 1 Van Buren) with 3 fatalities.
- EEE has also infected 33 animals (1 Allegan, 5 Barry, 1 Berrien, 3 Calhoun, 3 Cass, 1 Genesee, 2 Jackson, 7 Kalamazoo, 1 Kent, 1 Lapeer, 1 Livingston, 1 Montcalm, 1 Newaygo, 3 St. Joseph, and 2 Van Buren).
- West Nile virus (WNV) has sickened 5 Michigan residents (1 Bay, 1 Genesee, 1 Marquette, 1 Oakland, and 1 Wayne) and routine testing of the blood supply identified WNV in 5 Michigan blood donors (1 city of Detroit, 1 Kent, 1 Oakland, 1 Sanilac, and 1 Ottawa).
- Additionally, 2 Michigan residents (1 Genesee and 1 Washtenaw) were infected with a California group virus.







Human Cases



-  No human EEE, WNV, or other arboviral cases reported for 2019
-  County with human EEE, WNV, or other arboviral cases
-  County with WNV asymptomatic, viremic blood donor

Animal Cases



-  WNV infected birds identified
-  WNV infected mosquitoes identified
-  No animal/mosquito WNV or other arboviral activity reported for 2019
-  County with animal/mosquito WNV or other arboviral activity
-  County with animal EEE activity
-  County with animal EEE & WNV activity

For more information

www.michigan.gov/eee



Michigan Department of Health & Human Services
Bureau of Epidemiology & Population Health
Emerging & Zoonotic Infectious Diseases (EZID) Section

