Arbovirus* Activity, Including West Nile Virus and Eastern Equine Encephalitis:

Year-End Summary, Michigan 2020

*Arboviruses are viruses transmitted by mosquitoes or other insects

Mosquito pools testing positive for West Nile virus infection

Animals testing positive for Eastern Equine Encephalitis

virus infection

Human cases of West Nile virus, Eastern Equine Encephalitis, or

other arboviruses reported

Updated: July 7, 2021

2020 Michigan Arbovirus Surveillance

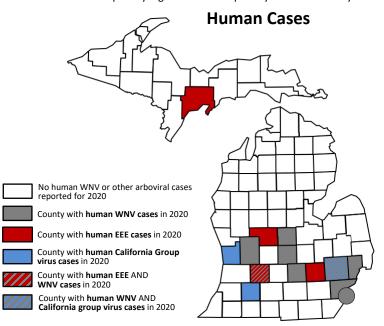
(click links below to see map** of cases by county)

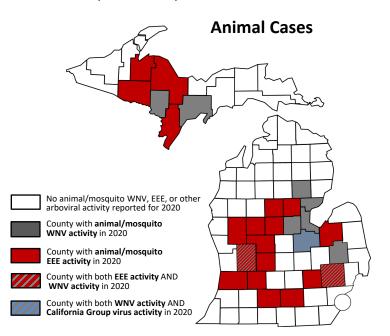
(click links below to see map** of cases by county)	
West Nile virus Positive Mosquito Pools	74
Total Number of Mosquito Pools Tested	1,937
Total Number of Mosquitoes Tested	15,969
Human WNV cases	32
Human California Group virus cases	3
WNV asymptomatic, viremic blood donor	2
Equine/Other Animal WNV cases reported	0
Avian WNV cases reported	10
Human Eastern Equine Encephalitis cases reported	4
Animal Eastern Equine Encephalitis cases reported	41

^{**}data in linked maps may lag behind this report by 1-2 business days.

Highlights

- In 2019, Eastern Equine encephalitis virus (EEE) infected four Michigan residents (Barry, Delta, Montcalm and Livingston counties), including two fatalities.
- Eastern equine encephalitis (EEE) was also reported in 41 animals across 19 counties.
 - (1 Allegan, 1 Baraga, 1 Barry, 1 Calhoun, 5 Clare, 1 Gladwin, 3 Ionia, 1 Iron, 1 Isabella, 2 Jackson, 4 Kent, 2 Livingston, 1 Marquette, 1 Mecosta, 1 Menominee, 8 Montcalm, 2 Newaygo, 4 Oakland, and 1 Tuscola).
- Thirty-two human cases of West Nile Virus (WNV) were reported.
 - (1 Barry, 2 Clinton, 1 Gratiot, 2 Ingham, 4 Kent, 2 Macomb, 8 Oakland, 7 Wayne, and 5 City of Detroit)
- WNV was reported in 10 birds (Bay, Delta, Dickinson, Lapeer, Oakland, Ogemaw, and Saginaw), and 74 mosquito pools (Arenac, Bay, Kent, Lapeer, Midland, Oakland, and Saginaw).
- Three human cases of Jamestown Canyon virus (a California Group virus) were reported from Kalamazoo, Oakland, and Ottawa counties.







For more information

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-menthanediol (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