

Arbovirus* Activity, Including West Nile Virus and Eastern Equine Encephalitis: Year-End Summary, Michigan 2022

*Arboviruses are viruses transmitted by mosquitoes or other insects


Updated: January 20, 2023

89 

Mosquito pools testing positive for arbovirus virus infection

19 

Animals testing positive for West Nile virus infection

3 

Horses testing positive for Eastern Equine encephalitis

13 

Human cases of West Nile virus or other arboviruses reported

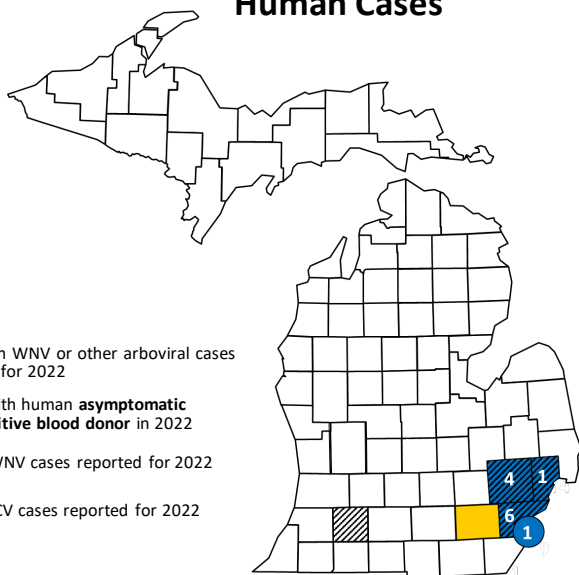
2022 Michigan Arbovirus Surveillance





Jamestown Canyon Virus Positive Mosquito Pools	12
West Nile Virus Positive Mosquito Pools	77
LaCrosse Encephalitis Virus Positive Mosquito pools	1
Total Number of Mosquito Pools Tested	4,584
Total Number of Mosquitoes Tested	67,752
Animal WNV cases	19
Animal EEE cases	4
Human WNV cases	12
Human JCV cases	1
Human asymptomatic WNV-positive blood donors	3

Highlights

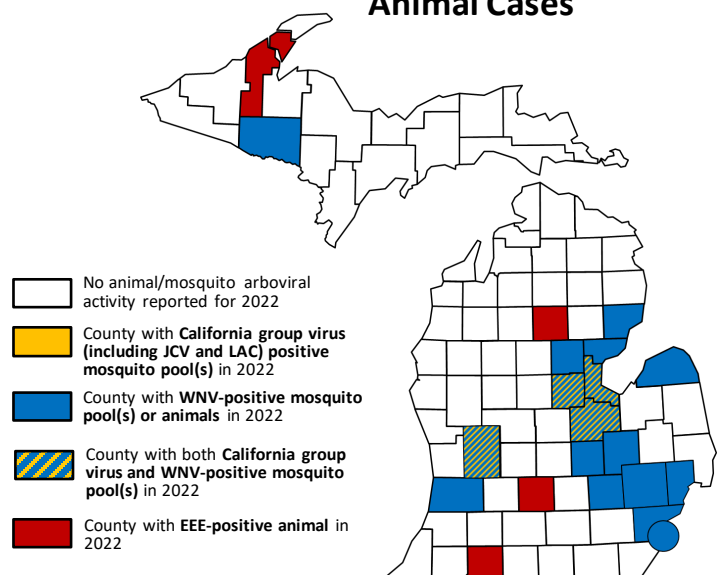
- Three horses from Eaton, Roscommon and St. Joseph counties, and one bird from Houghton County have died from Eastern Equine encephalitis (EEE).
- One Detroit resident, one Macomb County resident, four Oakland County residents and six Wayne County residents have been sickened with West Nile Virus (WNV). One Washtenaw County resident has contracted Jamestown Canyon Virus. Four asymptomatic blood donors from Kalamazoo, Macomb, Oakland, and Wayne counties have also tested positive for WNV.
- One horse from Livingston County, eighteen birds from Allegan, Bay, Iron, Macomb, Saginaw, Shiawassee, and Wayne counties, and 77 mosquito pools from Arenac, Bay, Genesee, Gladwin, Huron, Iosco, Kent, Macomb, Midland, Oakland, Saginaw, and Wayne counties have tested positive for WNV.
- One mosquito pool from Saginaw County has tested positive for LaCrosse (LAC) encephalitis virus, and twelve mosquito pools from Bay, Kent, Midland, and Saginaw counties have tested positive for Jamestown Canyon virus (JCV).






Human Cases



-  No human WNV or other arboviral cases reported for 2022
-  County with human **asymptomatic WNV-positive blood donor** in 2022
-  Human WNV cases reported for 2022
-  Human JCV cases reported for 2022

Animal Cases



-  No animal/mosquito arboviral activity reported for 2022
-  County with **California group virus (including JCV and LAC) positive mosquito pool(s)** in 2022
-  County with **WNV-positive mosquito pool(s) or animals** in 2022
-  County with both **California group virus and WNV-positive mosquito pool(s)** in 2022
-  County with **EEE-positive animal** in 2022

For more information

www.michigan.gov/westnile



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



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