Protect yourself and your family from mosquito bites that spread the virus:

- All it takes is one bite from an infected mosquito to get EEE
- Be aware of your risk: anyone can get sick (young children and people age 50+ are at highest risk)
- Use mosquito repellent while outdoors
- Know that peak biting hours are from dusk to dawn
- Cover-up with long sleeves and pants
- Support community-based mosquito control programs
- Vaccinate horses against EEE and West Nile virus

For more information visit:
www.michigan.gov/emergingdiseases
OR
www.cdc.gov/eee
Arbovirus Activity, Including West Nile Virus and Eastern Equine Encephalitis: Weekly Summary, Michigan 2020

14 Mosquito pools testing positive for West Nile virus infection
19 Horses testing positive for Eastern Equine Encephalitis virus infection
9 Human cases of West Nile virus or other arboviruses reported

2020 Michigan Arbovirus Surveillance (click links below to see map** of cases by county)

<table>
<thead>
<tr>
<th>Category</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>West Nile virus Positive Mosquito Pools</td>
<td>14</td>
</tr>
<tr>
<td>Total Number of Mosquito Pools Tested</td>
<td>500</td>
</tr>
<tr>
<td>Total Number of Mosquitoes Tested</td>
<td>5190</td>
</tr>
<tr>
<td>Human WNV cases</td>
<td>7</td>
</tr>
<tr>
<td>Human California Group virus cases</td>
<td>2</td>
</tr>
<tr>
<td>WNV asymptomatic, viremic blood donor</td>
<td>0</td>
</tr>
<tr>
<td>Equine/Other Animal WNV cases reported</td>
<td>0</td>
</tr>
<tr>
<td>Avian WNV cases reported</td>
<td>2</td>
</tr>
<tr>
<td>Human Eastern Equine Encephalitis cases reported</td>
<td>0</td>
</tr>
<tr>
<td>Animal Eastern Equine Encephalitis cases reported</td>
<td>19</td>
</tr>
</tbody>
</table>

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

Highlights
- **Eastern equine encephalitis (EEE)** has been reported in nineteen horses across seven counties (1 Barry, 5 Clare, 1 Isabella, 1 Jackson, 1 Kent, 1 Mecosta, 6 Montcalm, 2 Newaygo, and 1 Oakland).
- Seven human cases of West Nile Virus (WNV) have been reported from Barry, Clinton, Ingham, Kent, Oakland and Wayne counties.
- WNV has been reported in 2 birds from Lapeer and Oakland counties, and mosquito pools in Arenac, Kent, Lapeer, Oakland, and Saginaw counties.
- Two human cases of Jamestown Canyon virus(a California Group virus) have been reported in residents of Kalamazoo and Ottawa counties.
- In 2019, Michigan experienced its largest ever outbreak of EEE. Ten Michigan residents were infected, with 6 fatalities; 50 EEE-positive animals were also reported.

For more information
www.michigan.gov/westnile
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
Mosquitoes breed in standing water. To reduce the mosquito population around your home and property, eliminate all standing water and debris.

1. Pool cover that collects water, neglected swimming pool or child's wading pool
2. Bird bath (change water weekly) and garden pond (stock with fish)
3. Any toy, garden equipment, or container that can hold water
4. Flat roof with standing water
5. Clogged rain gutter (home and street)
6. Trash and old tires; Drill drain holes in bottom of tire swings
7. Tree rot hole, hollow stump or rain puddle
8. Repair missing, damaged, or improperly installed screens
9. Uncovered boat or boat cover that collects water
10. Leaky faucet (repair) or pet bowl (change water daily)

Learn more about how to protect yourself from mosquito bites! Visit www.michigan.gov/emergingdiseases
LOCAL SITES WHERE MOSQUITOES BREED

All mosquitoes need standing water to begin their life cycle. Locate all sites that hold water.

Drain, Fill, or Get Rid of Areas that Hold Water

- Containers that hold water
- Swimming Pools — maintain with proper chemicals, cover or drain if not in use
- Plastic sheeting or tarps used to cover yard items — pull tight so water won’t pool
- Shallow edges of ponds — clear of plants and weeds
- Clogged ditches and pipes — clean out leaves, dirt, and debris so water flows freely
- Low places, tire ruts or puddles — fill with dirt or sand
- Tree holes and hollow stumps — pack with dirt or sand
- Leaky pipes and outdoor faucets — repair
- Small areas of water that can’t be drained — treat with larvicides, follow label instructions

Protect Yourself from Biting Mosquitoes

- Screens on windows, doors and porches — install or keep in good repair
- Car windows and garage doors — keep closed at night
- Overgrown shrubs, grass, weeds, vines and ground cover — trim or remove overgrown plants that provide cool/dark/damp areas where adult mosquitoes rest
- Scented products — avoid using products that smell like fruit or flowers
- Protective clothing — wear long sleeves, long pants and socks
- Treat clothing and gear — use permethrin products on clothing, boots, tents or purchase pre-treated items
- Light-colored clothing — wear light colors, mosquitoes are attracted to dark colors
- Insect repellent — use EPA-registered insect repellent containing DEET, IR3535, Oil of Lemon Eucalyptus, or Picaridin according to label direction

Contact your Local Health Department with questions.
Protect and Prevent.