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**Aerial treatment planned to combat deadly  
mosquito-borne disease in 10 counties**  
*Treatment scheduled to start the night of Sept. 16*

**LANSING, Mich.** – In an effort to prevent spread of Eastern Equine Encephalitis (EEE), the Michigan Department of Health and Human Services (MDHHS) has announced plans to conduct aerial mosquito control treatment in certain high-risk areas of Michigan.

As of Sept. 13, EEE has been confirmed in 22 horses in 10 counties in Michigan. Additional animal cases are under investigation. This is twice as many animal cases as the same time last year. To date, no human cases have been identified. There is an EEE vaccine available for horses, but not for people.

In order to prevent the loss of life and protect public health, MDHHS has determined a targeted aerial treatment plan is necessary. When there are high rates of animal infections, humans are just as at risk.

EEE is one of the most dangerous mosquito-borne diseases in the United States, with a 33 percent fatality rate in people who become ill. People can be infected with EEE from one bite of a mosquito carrying the virus. Persons younger than age 15 and over age 50 are at greatest risk of severe disease following infection. More than 25 percent of the nation's EEE cases last year were diagnosed in Michigan.

"We are taking this step in an effort to protect the health and safety of Michiganders in areas of the state where we know mosquitos are carrying this potentially deadly disease," said Dr. Joneigh Khaldun, MDHHS chief medical executive and chief deputy for health. "As people are spending more time outdoors because of COVID-19, they also need to be protecting themselves from mosquito bites."

Signs of EEE infection include the sudden onset of fever, chills, body and joint aches which can progress to a severe encephalitis, resulting in headache, disorientation, tremors, seizures and paralysis. Anyone who thinks they may be experiencing these symptoms should contact a medical provider. Permanent brain damage, coma and death may also occur in some cases.

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Treatment is scheduled to occur starting the evening of Wednesday, Sept. 16. However, treatment can only take place under certain weather conditions, so the schedule may need to change. Residents are encouraged to visit [Michigan.gov/EEE](http://Michigan.gov/EEE) for up-to-date information.

The Michigan Department of Agricultural and Rural Development (MDARD) has issued an [emergency rule](#) temporarily amending the rule on notification and participation for community pesticide applications for aerial spraying treatment across affected counties. This means mosquito control treatment will be required for those areas that are identified by the aerial treatment plan with exception of federal properties and tribal lands.

“As recent history has shown us, EEE can strike fast and it can be deadly to humans and animals,” said MDARD Director Gary McDowell. “MDARD fully supports the work and commitment of MDHHS to protect public health, which is why we have removed an obstacle that might have prevented them from taking action quickly.”

Treatment areas are selected based on occurrence of cases. Treatment is scheduled for the 10 impacted counties: Barry, Clare, Ionia, Isabella, Jackson, Kent, Mecosta, Montcalm, Newaygo and Oakland. Additional areas may be selected for treatment if new human or animal cases occur outside of the currently identified zones.

Aerial treatment is conducted by specialized aircraft, beginning in the early evening and continuing up until the following dawn. State-certified mosquito control professionals will apply an approved pesticide as an ultra-low volume (ULV) spray. ULV sprayers dispense very fine aerosol droplets that stay suspended in the air and kill adult mosquitoes on contact. This is a method many other states have also used to combat EEE. Aerial treatment is provided by Clarke from St. Charles, Ill., which provides mosquito control to protect public health. Clarke pioneers, develops and delivers environmentally responsible products and services to help prevent vector-borne disease, control nuisance and create healthy water bodies.

Treatment will be conducted using Merus 3.0, the same product used in 2019. Merus 3.0 is registered with the US Environmental Protection Agency and MDARD, and is labeled for public health use over residential areas. It contains 5 percent pyrethrins, a botanical insecticide extracted from chrysanthemum flowers. Pyrethrins are commonly used to control mosquitoes, fleas, flies, moths, ants and many other pests, and are approved for use in organic agriculture as well.

In general, health risks are not expected during or after spraying. No special precautions are recommended; however, residents and individuals who have known sensitivities to pyrethrins can reduce potential for exposure by staying indoors during treatment. Aerial treatment is not expected to have any impacts on surface water or drinking water. Monitoring in 2019 when more than 557,000 Michigan acres were treated found no increased human, animal or insect adverse effects associated with aerial treatment.

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Aerial treatment will be conducted in the nighttime hours as this is when mosquitos are more active. It is also when fish are less likely to be at the surface feeding and honeybees are most likely to be in their hives. However, owners should cover small ornamental fishponds during the night of spraying. While it is not necessary to bring animals indoors during treatment, concerned pet owners can choose to bring animals inside during this time.

To reduce the potential for people to be bitten by mosquitoes, MDHHS is continuing to encourage local officials in the affected counties to consider postponing, rescheduling or cancelling outdoor activities occurring at or after dusk, particularly activities involving children. This would include events such as late evening sports practices or games or outdoor music practices. The recommendation is being made out of an abundance of caution to protect the public health and applies until the first hard frost of the year.

Although the aerial treatment is considered necessary to reduce human risk, it will not eliminate it. Residents must continue to protect themselves from mosquito bites by:

- Avoid being outdoors from dusk to dawn when mosquitoes carrying the EEE virus are most active.
- Applying insect repellents containing the active ingredient DEET, or other U.S. Environmental Protection Agency-approved product to exposed skin or clothing, and always follow the manufacturer's directions for use.
- Wearing long-sleeved shirts and long pants when outdoors. Apply insect repellent to clothing to help prevent bites.
- Maintaining window and door screening to help keep mosquitoes outside.
- Emptying water from mosquito breeding sites around the home, such as buckets, unused kiddie pools, old tires or similar sites where mosquitoes may lay eggs.
- Using nets and/or fans over outdoor eating areas.

Additional information about aerial treatment and other health-related information is available in a Frequently Asked Questions document at [Michigan.gov/EEE](https://www.michigan.gov/EEE). You can also call the MDHHS hotline, which will now take calls for general questions about both COVID and EEE, at 1-888-535-6136. The hotline is open from 8 a.m. to 5 p.m., Monday through Friday.

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