**Eastern Equine Encephalitis (EEE) Talking Points**

**What is the number of cases?**

As of Sept. 18, the Indiana Department of Health has reported a lab-confirmed case of EEE virus in a LaPorte County resident. The state Board of Animal Health (BOAH) has recorded probable EEE disease cases in two horses in LaGrange County, one horse in LaPorte County and one horse in Kosciusko County. The Indiana Board of Animal Health (BOAH) suspects EEE in three additional horses in LaGrange County.

**When did the person become sick? What other case information can you give?**

No additional case information will be available due to privacy laws.

**How severe is EEE?**

Eastern equine encephalitis is fatal to a third of the people who become infected and has a 90 percent fatality rate among infected horses.

**Are there likely to be any more cases?**

We cannot predict whether additional cases will occur, which is why we are urging residents to take all precautions to protect against mosquito bites and taking other steps to reduce the risk of transmission.

**How many cases does Indiana typically have in a year?**

EEE is rare, but in 2019, northern Indiana experienced a significant outbreak of EEE virus activity, resulting in 14 horse cases, one fatal human case and one positive mosquito sample.

**Is there a vaccine to prevent the virus?**

While there is a vaccine to prevent EEE in horses, there is no human vaccine.

**Will the danger be over when temperatures come down?**

Due to the increased risk for EEE, the Indiana Department of Health is working with each affected county to conduct targeted mosquito control around known breeding areas. Mosquito activity is also reduced by the colder temperatures, but the threat remains until the first hard frost.

**What are you doing to address the situation?**

State health officials plan targeted aerial application of a pesticide to help protect residents from EEE beginning Tuesday evening and continuing Wednesday if needed as weather permits.

**What chemical will be used?**

Mosquito control professionals will apply an approved pesticide, Dibrom, 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. Dibrom has been registered by the U.S. Environmental Protection Agency (EPA) since 1959 for use in the United States.

**Is it safe for animals?**People who wish to minimize exposure may choose to stay indoors for several hours, beginning at dusk on the treatment dates. People may also choose to bring animals indoors and cover their ornamental fishponds prior to the spraying. Evening application of Dibrom is not expected to be harmful to bees, but beekeepers may choose to cover their hives overnight and prevent bees from exiting during the application as a precaution.

**What counties are being sprayed?**

Spraying will occur over approximately 375,000 acres in portions of Elkhart, Kosciusko, LaGrange, LaPorte, Marshall and Noble counties.

**How did you decide where to spray?**

This virus is spread by mosquitoes that breed in wetlands (e.g., swamps, bogs, and marshes). The spray areas were defined by drawing a 5-mile radius around each location where the virus has been detected in mosquitoes and horses and then targeting the areas inside the radius with the greatest density of wetlands.

**How much will spraying cost?**

The total cost is expected to be about $1 million.

**Why are the counties spraying to kill the mosquitoes?**

While eastern equine encephalitis is relatively rare, it is extremely serious, causing death in about one-third of those who become ill. It will still be several weeks before the first hard freeze that will eliminate most mosquito activity, so we wanted to take this step now to protect public health.

**Why was this being done at night?**

The program is being done after sundown because that is when most mosquitoes are most active, making the spraying the most effective. Sunlight also makes the chemical less effective.

**Who is doing the spraying?**

An applicator that has been certified for aerial pesticide application by the State Chemist’s Office will be completing the spraying.

**What else should people know?**

We encourage everyone to take personal protective measures, such as:

* Avoid being outdoors when mosquitoes are active (especially late afternoon, dusk to dawn and early morning).
* Use an EPA-registered insect repellent containing DEET, picaridin, IR3535, oil of lemon eucalyptus or para-menthane-diol on clothes and exposed skin.
* Cover exposed skin by wearing a hat, long sleeves and long pants in places where mosquitoes are especially active, such as wooded areas.
* Install or repair screens on windows and doors to keep mosquitoes out of your home.
* Eliminate standing water that could provide mosquito breeding sites.

**What should someone do if they suspect they have EEE?**

It takes 4 to 10 days after the bite of an infected mosquito to develop symptoms of EEE. Symptoms of EEE virus disease include chills, fever, body aches and joint pain. Some people develop a more severe form of the disease that affects the nervous system and causes encephalitis (inflammation of the brain). People who are younger than 15 years and older than 50 years are at the greatest risk of severe disease if infected with EEE virus. People who think they may have EEE virus disease should see a healthcare provider.

**Where else can people go for more information?**

To see the latest results of the state Department of Health’s mosquito surveillance program, go to <https://gis.in.gov/apps/ISDH/Arbo/>. To learn more about EEE virus, visit the Indiana Department of Health website at <https://www.in.gov/isdh/28258.htm>.

**What is the risk to other wildlife?**

Mosquito control professionals will apply an approved pesticide, Dibrom, 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.

The chemical only stays in the air for about 45 minutes, so that is the limit of the exposure. Since this is being done after sundown, the impact on other insects, such as bees, will be minimized. We also are contacting area beekeepers so they can take steps to protect their hives.

When applied as a ULV spray according to label instructions, Dibrom is not expected to adversely impact the health of fish or waterways.

**Can this virus affect deer? Hunting season is beginning.**

Yes, it can impact deer, although we’ve not seen it in Indiana. We are working with the Indiana Department of Natural Resources. DNR could answer other related questions.

**How effective is the pesticide?**

The spraying is expected to kill at least 90 percent of active adult mosquitoes in the spray area.

**Why did you choose Dibrom? Aren’t there other options available?**

Yes, there are other options available, but they are less effective, which is why they aren’t being used. The priority for this activity is to kill as many mosquitoes as possible that could be carrying EEE virus. Dibrom has been registered by the U.S. Environmental Protection Agency since 1959 for use in the United States.