

# Fact Sheet for Animal Owners

## Eastern Equine Encephalitis Virus (EEEV)

This Fact Sheet is intended for owners, custodians and/or handlers of horses or other animals that have been diagnosed with EEEV infection by a veterinarian. For questions about your health, please contact your health care provider.

### What is Eastern equine encephalitis virus?

Eastern equine encephalitis virus (EEEV) is a virus spread by mosquitoes. Infection with the EEEV can result in a case of eastern equine encephalitis (EEE). The virus has been found in North and South America. In North America, EEEV is found mostly in areas east of the Mississippi River in the United States (although infected horses have occurred in Texas), and in southeastern Canada.

### How is EEEV spread? Can I get EEEV from my animal or someone who is infected?

EEEV is spread between birds by mosquitoes that mainly bite birds. Mosquitoes that become infected from biting birds can sometimes bite humans or horses and spread EEEV infection to them.

You cannot get EEEV from an infected animal or someone else who has EEEV. As well, a mosquito cannot become infected from biting a human or horse that has EEEV.

### What is the risk of EEEV in the area?

EEEV infection can occur in humans, mosquitoes and horses in Ontario, although this is very rare. Only one human case of EEE has ever been reported in Ontario. It is possible that more horses and people will become infected with EEEV in the future.

For more information on EEEV in Ontario, see Public Health Ontario's report at:  
<https://www.publichealthontario.ca/-/media/documents/eeev-report.pdf?la=en>

### Where is the greatest risk of acquiring EEEV?

The primary mosquito that carries EEEV (*Culiseta melanura*) prefers wild, forested areas, not cities. Therefore, the greatest risk to people would be around flooded/swampy hardwood forest areas during the mosquito season (summer and early fall).

### Is there a vaccine available for people and animals?

There is no vaccine available for people. There is a vaccine available for horses.

If you are interested in having your horse vaccinated, contact your local veterinarian.

## How can I protect myself from getting infected with EEEV?

To protect yourself from getting EEEV:

- use insect repellent,
- wear long-sleeve light-colour clothing,
- avoid being outdoors during times of the day when mosquitoes are most active (usually dusk to dawn), and
- avoid areas where mosquitoes are known to occur.

For further information on personal protection against mosquitoes, see Ministry of Health resources at: <https://www.ontario.ca/page/west-nile-virus>

## What are the symptoms that I need to look out for?

Some people who are infected with EEEV will not develop symptoms. Symptoms may develop, within 4 to 10 days after the bite of an infected mosquito. Symptoms consist of fever, chills, and/or muscle and joint pain. Illness can progress to a severe form that affects the nervous system. About 1 in 3 people with the severe form of EEE die.

If you are concerned about your health, please contact your health care provider.

## Is there treatment or medication that I can take for EEE?

There is no specific treatment for EEE. People with EEE receive supportive treatment.

## What is being done to track and control the possible spread of the virus?

In Ontario, the mosquitoes that spread EEEV are captured and tested for EEEV. Cases of EEE in people are monitored. Cases of EEE in horses are reported to the Ontario Ministry of Agriculture, Food and Rural Affairs. Public education on how to prevent mosquito bites and EEEV infection is provided.

## Why are there more horse cases than human cases of EEEV infection?

Horses are typically outside more than humans and would have a greater chance of exposure. EEE can be prevented in horses through vaccination.

## Why is this information important to me?

As there is evidence of local transmission of EEEV in the area, it is important to know what this virus is and what you can do to protect yourself and others.

## Where can I get more information?

Please contact your local public health unit:

<http://www.health.gov.on.ca/en/common/system/services/phu/locations.aspx>

For further information on EEEV in horses, please see:

<http://www.omafra.gov.on.ca/english/livestock/horses/westnile.htm>

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