



## HEARTLAND VIRUS DISEASE

### What is Heartland virus disease?

Heartland virus is an emerging tick-borne virus in the genus *Phlebovirus*. It was first reported in 2009 in two male patients from northwestern Missouri. These patients were bitten by Lone star ticks (*Amblyomma americanum*) from which the virus was then isolated. This was the first phlebovirus identified from the Western Hemisphere. As of September 2022, more than 60 cases of Heartland virus disease have been reported from the Midwestern, Northeastern, and Southern United States. Heartland virus disease is not currently a nationally notifiable disease, but states can report cases to the Centers for Disease Control and Prevention (CDC) voluntarily.

### Who gets Heartland virus disease?

The CDC reports that all residents of and visitors to areas where Heartland virus activity has been identified are at risk of Heartland virus infection, particularly people who engage in outdoor work and recreational activities. Most people who get sick with Heartland virus disease become ill during the spring and summer months (May through September), when ticks are most active.

### How is Heartland virus disease spread?

Recent studies have shown that the Lone star tick (*Amblyomma americanum*) can transmit the virus, but it is not known if other species of ticks might also transmit the disease. The Lone star tick is Delaware's most common species of tick.

### What are the symptoms of Heartland virus disease?

Symptoms of Heartland virus disease are similar to those of other tickborne illnesses and can include fever, fatigue (feeling tired), decreased appetite, headache, nausea, diarrhea, and muscle or joint pain. Some people also have lower than normal counts of white blood cells and platelets, and/or increased levels of liver enzymes.

### How soon do symptoms appear?

The time from infected tick bite to feeling sick (incubation period) ranges from a few days to two weeks.

### Should an infected person be excluded from work or school?

An infected person does not need to be excluded from work or school.



## **How is Heartland virus disease diagnosed?**

Health care providers diagnose Heartland virus infection based on signs and symptoms, history of living in or traveling to an area where Heartland virus is found, history of possible exposure to the ticks that can carry Heartland virus, and blood tests. Additional testing guidance is listed in the resources section at the end of this document.

## **What is the treatment for Heartland virus disease?**

There are no medicines or treatments for Heartland virus disease. Rest, fluids, and over-the-counter pain medications may relieve some symptoms.

## **What can a person or community do to prevent the spread of Heartland virus disease?**

The most important way to prevent infection with Heartland virus is to prevent tick bites:

- Wear light-colored clothing when outdoors.
- Tuck pant legs into socks so ticks cannot crawl up the inside of the pants.
- Use Environmental Protection Agency (EPA) registered insect repellents containing DEET, picaridin, or oil of lemon eucalyptus (OLE).
- Treat clothing and gear with products containing 0.5% permethrin. Permethrin can be used to treat boots, clothing, and camping gear and it remains protective through several washings. Alternatively, you can buy permethrin-treated clothing and gear.
- When outdoors, stay on the center of trails. Ticks crawl on the tips of grasses and shrubs and crawl on people and animals when they brush against the vegetation.

## **Resources**

Centers for Disease Control and Prevention, <https://www.cdc.gov/heartland-virus/index.html>

Testing guidance from Louisiana Dept. of Health, <https://ldh.la.gov/assets/oph/Center-PHCH/Center-CH/infectious-epi/EpiManual/HeartlandBourbonBackgroundTesting.pdf>