

# Ehrlichiosis



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## What is ehrlichiosis?

In Indiana, the lone star tick (*Amblyomma americanum*) is the primary tick species that transmits ehrlichiosis. Ehrlichiosis is the general name used to describe diseases caused by the bacteria *Ehrlichia chaffeensis*, *E. ewingii*, or *E. muris eauclairensis* in the United States. The majority of reported cases are due to infection by *E. chaffeensis*.

## What are the symptoms of ehrlichiosis?

Symptoms of ehrlichiosis usually appear within 1-2 weeks after the bite of an infected tick. People in the early stages of illness can experience flu-like symptoms, such as:

- Fever and chills
- Severe headache
- Muscle aches
- Confusion
- Nausea, vomiting, diarrhea, or loss of appetite
- Rash (more common in children)

Untreated ehrlichiosis can rapidly progress to a serious and life-threatening illness. Older people and those with weakened immune systems due to HIV infection, splenectomy or immunosuppressive therapies (e.g. corticosteroids, chemotherapy, long term immunosuppressive therapy following organ transplant) are more likely to develop serious illness.

## How is ehrlichiosis diagnosed and treated?

Diagnosis of ehrlichiosis is based upon the presence of signs and symptoms, a history of possible exposure to ticks, and appropriate laboratory testing. Early recognition of symptoms is important. A commonly prescribed antibiotic, doxycycline, is the treatment of choice for adults and children of all ages with suspected ehrlichiosis. Treatment is most effective at preventing severe complications and death if it is started early in the course of illness and should never be delayed while waiting for laboratory results. If you think you have ehrlichiosis, contact your healthcare provider right away.

## How to prevent ehrlichiosis?

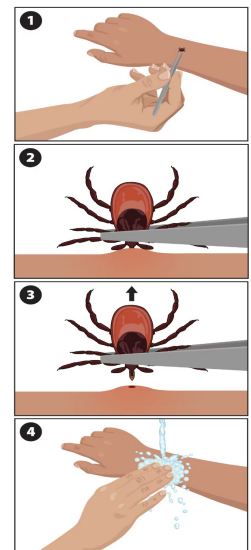
Lone star ticks are most often encountered in brushy areas, are aggressive feeders, and will typically pursue their hosts. These ticks are most active in the spring and summer months. Wearing an EPA-registered insect repellent, reducing the amount of exposed skin, and checking your body for ticks daily are important steps in preventing tick bites. The best way to prevent ehrlichiosis is to avoid tick bites. Visit the [IDOH tick prevention page](#) for more information.

## What should be done after a tick bite?

People who have removed an attached tick sometimes question if it should be tested for tick-borne diseases. Some laboratories offer this testing, but IDOH does not recommend it. If the tick tests positive, it does not necessarily indicate the individual is infected; if the tick tests negative, it may provide a false security as the individual could've been unknowingly bitten by a different infected tick.

In instances where you notice an attached tick, follow the steps below for proper removal.

1. Use clean, fine-tipped tweezers for tick removal. In instances where tweezers are not available shield your fingers with a paper towel, tissue, or gloves.
2. Grasp the tick as close to the skin's surface as possible.
3. Pull upward with steady even pressure. Don't twist or jerk the tick; this can cause the mouth-parts to break off and remain in the skin. If this happens, remove the mouth-parts with tweezers. If you cannot remove the mouth easily with tweezers, leave alone and let the skin heal.
4. After removing the tick, thoroughly clean the bite area and your hands with rubbing alcohol or soap and water.



## More Information

For more information on ehrlichiosis, visit the IDOH ehrlichiosis webpage.

