



Tick-Borne Diseases

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PRECAUTIONS AGAINST TICK DISEASES

- Avoid tall grass and brushy areas
- Hike in the middle of a trail
- Keep grassy areas well mowed
- Use repellents such as 20% DEET on adults and 10% on children
- Check for ticks frequently, especially on children
- Shower within 2 hrs. of coming indoors to prevent ticks from attaching
- Remove any ticks promptly and carefully

TICKS in OHIO

In 2010, there were over 848 ticks submitted to the Ohio Department of Health. The American dog tick, the lone star tick and the black-legged tick or deer tick are the three species of greatest public health importance with known transmission of diseases to humans. All of these ticks are active in Ohio from early spring until late autumn.

The **American dog tick** is most active from April through July and is the primary carrier of **Rocky Mountain Spotted Fever (RMSF)**. This tick will bite and feed on any available mammal, including humans. Ohio reported 15 human cases of RMSF in 2010. These were in the counties of Clermont, Franklin, and Lucas county.

Symptoms of RMSF include sudden onset of fever, headache and flu-like symptoms, followed by the characteristic spotted rash. The rash first appears at the wrist and ankles and may spread to the torso, palms, and soles of the feet. If not treated with antibiotics, the disease has a fatality rate of 4%.

In 2010, Ohio reported 43 cases of **Lyme disease**. This disease is carried by the **black-legged tick or deer tick**. Although this tick was once considered quite rare in Ohio, recent increases in submissions to the ODH suggest that this tick is becoming more common in the state.

The first sign of Lyme disease infection is the characteristic "bull's-eye" rash. The rash develops at the tick attachment. Muscle aches,

general tiredness, fever, swollen glands, headache and joint pain are other symptoms. Patient's treated in the early stages of the disease with antibiotics usually recover rapidly and completely.

Ehrlichiosis is a tick borne disease transmitted by the **lone star tick**. **Anaplasmosis** is transmitted by the **black-legged tick**, which is also the carrier of Lyme disease.

Initial symptoms of both diseases may include fever, headache, and muscle aches. Both diseases may cause severe illness, especially if left untreated, and about half of all patients require hospitalization. Antibiotics are used to treat both diseases. Mortality rate is 2-3%.

REMOVING TICKS

- Use tweezers, grasp the tick close to the skin, pull straight back, and avoid crushing the tick's body
- Save the tick for possible identification by a doctor or local health department in a secure container

MOSQUITO-BORNE DISEASES

Mosquitoes transmit many diseases. All mosquito-borne diseases in Ohio are diseases of animals that can be transmitted to people. Normally, these diseases can only be transmitted by the bite of an infected mosquito. In Ohio six of the sixty three species of mosquitoes known to occur in Ohio can transmit disease agents.

Diseases that people can get from mosquitoes in Ohio include:

- West Nile Fever
- St. Louis Encephalitis
- La Crosse Encephalitis
- Eastern Equine Encephalitis

In 2010, there were 5 cases

of the West Nile virus in Ohio in the counties of Allen, Hamilton, Montgomery and Putnam .

Ohio lead the nation with 24 out of 78 reported cases of La Crosse Encephalitis in 2010. One fatal case was reported on a 6 year old child in Summit County.