

Montana Health Alert Network

DPHHS HAN

ADVISORY

Cover Sheet



DATE

May 20, 2025

SUBJECT

Blacklegged Ticks Identified in Montana

INSTRUCTIONS

DISTRIBUTE to your local HAN contacts. This HAN is intended for general sharing of information.

- Time for Forwarding: **As Soon As Possible**
- **Remove this cover sheet before redistributing and replace it with your own**

**For LOCAL HEALTH
DEPARTMENT reference only**

DPHHS Subject Matter Resource for more information regarding this HAN, contact:

DPHHS PHSD

**Epidemiology Section
1-406-444-0273**

For technical issues related to the HAN message contact the Emergency Preparedness Section at 1-406-444-0919

DPHHS HAN Website:

<https://dphhs.mt.gov/publichealth/phep/han>

REMOVE THIS COVER SHEET BEFORE REDISTRIBUTING AND REPLACE IT WITH YOUR OWN

Please ensure that DPHHS is included on your HAN distribution list.

hhshan@mt.gov

Categories of Health Alert Messages:

Health Alert: conveys the highest level of importance; warrants immediate action or attention.

Health Advisory: provides important information for a specific incident or situation; may not require immediate action.

Health Update: provides updated information regarding an incident or situation; unlikely to require immediate action.

Information Service: passes along low level priority messages that do not fit other HAN categories and are for informational purposes only.

Please update your HAN contact information on the Montana Public Health Directory

DPHHS HAN

Information Sheet



DATE

May 20, 2025

SUBJECT

Blacklegged Ticks Identified in Montana

BACKGROUND

The Montana Department of Public Health and Human Services (DPHHS) is announcing the identification of *Ixodes scapularis* (the “deer tick” or “blacklegged tick”) within the state. This is the first time a blacklegged tick has been identified in the state through active surveillance. Blacklegged ticks are the primary vector responsible for transmitting diseases such as Lyme disease, Powassan virus disease, ehrlichiosis, babesiosis, anaplasmosis, and hard tick relapsing fever. Blacklegged ticks are present throughout much of the Northeast U.S., though in recent years, blacklegged ticks have expanded west, reaching as far as North Dakota. There are no known previous records of blacklegged ticks in Montana, though other non-human-feeding *Ixodes spp.* ticks had been documented in previous research surveys.

In total, three female blacklegged ticks have been identified in two different eastern Montana counties. One tick collected in Dawson County was Rocky Mountain Laboratories (RML) confirmed the identification of one to be a blacklegged tick by Rocky Mountain Laboratories (RML) in 2024.¹ DPHHS, along with the Centers for Disease Control and Prevention (CDC), confirmed in the fall of 2024 that two blacklegged ticks found in Sheridan County were blacklegged ticks. These two ticks were tested by CDC and no pathogens that can cause illness in humans were detected, including Lyme disease.

Lyme disease, spread by the bacterial spirochetes *Borrelia burgdorferi* or *B. mayonii*, is one of the most well-known diseases spread by blacklegged ticks. Lyme disease is characterized by multiple stages of illness, including early-stage illness with flu-like symptoms often accompanied by a large “bullseye” shaped erythema migrans rash at the site of the tick bite. If untreated, symptoms can progress to late-stage illness, with more severe symptoms including potential neurological complications (e.g., facial paralysis) and cardiac manifestations (e.g., Lyme carditis). Early-stage Lyme disease typically appears within three to 30 days after a tick bite, and symptoms for late-stage illness appear within days to months after untreated early-stage symptoms.

Blacklegged ticks are also responsible for spreading forms of babesiosis, anaplasmosis, and ehrlichiosis. These acute tickborne illnesses can result in symptoms such as fever, headache, chills, body aches, and nausea. Powassan virus, a rare tickborne flavivirus spread by blacklegged ticks, can cause fatal encephalitis and/or meningitis.

INFORMATION

Over 500 ticks of public health significance were collected in 2024 through DPHHS-sponsored tick surveillance, and of these, only two were identified as blacklegged ticks. Both blacklegged ticks were confirmed via morphological and molecular identification by the CDC.

The first identification of blacklegged ticks in Montana has prompted a multi-jurisdictional response. Public health officials are conducting further investigation to determine whether these ticks are found elsewhere in Montana and

whether they are establishing their habitat in the state. DPHHS will continue to monitor tick activity in select locations throughout the state and will adjust guidance as needed if blacklegged ticks become established.

RECOMMENDATIONS

Despite the discovery of three blacklegged ticks in Eastern Montana, tickborne diseases such as Rocky Mountain spotted fever, Colorado tick fever, soft tick relapsing fever, and tularemia remain the most likely diseases to infect Montanans after a tick bite, because they are spread by the tick species that are most common and established in the state.

The early symptoms of tickborne illnesses are often similar, and include fever, persistent headaches, and body aches. It is recommended to consider testing for the most common tickborne illnesses endemic to Montana for patients with a recent tick bite history in the state and generalized symptoms. Increased awareness of the potential for individuals with recent travel to Dawson and Sheridan Counties to be exposed to pathogens spread by blacklegged ticks is warranted. However, at this time there is no evidence of an increased risk for illnesses spread by blacklegged ticks in Montana residents without an out-of-state travel history.

Clinicians

- Current clinical guidance regarding diagnosis and management of tickborne illnesses have not changed.
 - Antibiotic treatment is recommended for patients who present with compatible signs and symptoms and recent or likely exposure to a tick. Rocky Mountain spotted fever may progress to a deadly infection within as little as 7 days of symptom onset.
 - Tickborne disease testing is recommended and available through the Montana Public Health Laboratory and/or commercial laboratories; however, providers should not delay initiating treatment pending testing results.
- Providers caring for a patient with suspected Lyme disease, anaplasmosis, babesiosis, or other illnesses spread by blacklegged ticks should assess the [pretest probability of Lyme disease](#) before testing. If Lyme disease infection is suspected or confirmed, travel history within 30 days should be obtained from the patient.
 - If you have a patient with lab-confirmed Lyme disease and no out-of-state travel history, please alert your local or tribal health department.
 - Following the epi consult, DPHHS may request to survey for ticks at the location(s) of the patient's recent outdoor activity.

Local Health Departments

- Investigations of illnesses spread by blacklegged ticks (such as Lyme disease) that meet the confirmed or probable case definition should include verification of 1) high clinical suspicion from the patient's health care provider, and 2) a patient interview asking for travel history within 30 days prior to symptom onset. Patients who have no documented travel outside of the state may need to be evaluated for the possibility of in-state exposure to a blacklegged tick, and further investigation may be necessary following consultation with the state vectorborne disease epidemiologist.
- "Tick kits" are pre-assembled packets that residents may use to submit ticks they have found to the state's passive tick surveillance program for speciation. If your department is interested in sharing tick kits with residents, please contact Devon Cozart with the Communicable Disease Epidemiology Section at DPHHS (devon.cozart@mt.gov). Community members may also submit ticks directly to the DPHHS through an online tick surveillance survey [here](#).

RESOURCES

For more information on tick surveillance, see the new dashboard on the DPHHS [website](#).

CDC has additional information about tickborne diseases for clinicians linked below:

- [Lyme disease resources](#)
- [Clinical Testing and Diagnosis for Lyme Disease](#)

- [About Ticks and Tickborne Disease](#)
- [Data on ticks, tick bites, and tickborne diseases](#)
- [Chronic Symptoms and Lyme Disease](#)

1. Stewart, P. E., Lack, J. B., Rolston, M., Virtaneva, K., Beare, P. A., Martens, C. M....Schwan, T. G. (2025). *Ixodes scapularis* Tick Parasitizing Dog in Dawson County, Montana, USA, 2023. *Emerging Infectious Diseases*, 31(2), 404-406. <https://doi.org/10.3201/eid3102.241308>