

**May 2016**

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# CHELAN-DOUGLAS PUBLIC HEALTH



## Current Conditions of Interest

*"Always Working for a Safer and Healthier Community"*

**TO REPORT A  
NOTIFIABLE  
CONDITION:**

Phone (509) 886-6400

Fax (509) 886-6478

**After hours call:**  
(509) 886-6499

## Tick Identification and Tick Testing for Washington State

### Identifying Ticks

Neither the Washington State Public Health Laboratories (PHL) nor the CDC routinely tests ticks for disease. The PHL can, however, identify ticks to species. Because different tick species transmit different disease pathogens, knowing the tick species may help a healthcare provider diagnose an illness that could be associated with a tick bite.

Healthcare providers and local health departments investigating a possible human tick-borne disease case should submit a tick for identification using the [Microbiology Submission Form \(PDF\)](#). Mark "Parasitology" and indicate the tick exposure location under the "Comments" section.

Ticks found on you, a family member, or a pet can be submitted for identification using the [Tick Identification Submission Form \(PDF\)](#).

### Testing Ticks

If you are interested in having your tick tested, see the [Laboratory of Medical Zoology, University of Massachusetts](#). For a service fee, the laboratory will test for presence of pathogens common to the determined tick species, and get test results to you within three to five days. The laboratory is a non-profit organization.

**Relapsing Fever**

Each year in Washington State an average of 6 cases are reported. Most people are infected while vacationing in rural, mountainous areas during the summer months, between May and September. However, cases do occur year-round and sometimes are infected within people's primary homes, not just rustic cabins.



The lab also has a database to search to see what ticks have been submitted from a particular state or zip code. <https://www.tickreport.com/stats>

**Resources:**

- [Tickborne Diseases of the United States: A Reference Manual for Health Care Providers, Second Edition.](#)



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District Web Pages](#)



# CHELAN-DOUGLAS PUBLIC HEALTH

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## Diseases Spread by Ticks in Washington State

Washington has relatively few tick-borne disease cases reported each year in comparison to some areas of the United States. If you think you have symptoms of a tick-borne disease, contact your doctor. Doctors are asked to notify local health departments of suspected or confirmed cases of tick-borne disease (see [Notifiable Conditions](#)). The following diseases can be transmitted by a tick bite in Washington. <http://www.doh.wa.gov/CommunityandEnvironment/Pests/Ticks>

### Lyme Disease

The first sign of Lyme disease is usually an expanding circular rash which starts at the site of the tick bite. The rash may have a target shape or "bull's-eye" appearance. Fever, headache, muscle aches, and joint pain may also occur. If left untreated, later symptoms can include recurring joint pain, heart disease, and nervous system disorders. Lyme disease is the most common tick-borne disease in the United States, but is rare in Washington. Only zero to three Lyme disease cases per year are reported to be infected in Washington. Lyme disease is caused by the *Borrelia burgdorferi* bacteria, which can be transmitted through the bite of a western black-legged tick, *Ixodes pacificus*. Western black-legged ticks pick up the bacteria after feeding on infected rodents. These ticks live in forested or brushy areas of western Washington. Learn more about [Lyme disease](#).

### Tick-borne Relapsing Fever

Symptoms include relapsing (recurrent) periods of fever lasting for two to seven days, disappearing for about four to fourteen days, and then reoccurring. One to 12 cases of tick-borne relapsing fever are reported each year in Washington. Most people become infected while staying in rural, mountainous cabins of eastern Washington during the summer months. The soft tick, *Ornithodoros hermsi*, typically feeds on rodents, which is where they pick up the *Borrelia hermsii* bacteria. The infected tick can then transmit the bacteria by feeding on a person for short periods of time while they are sleeping. Since these ticks are associated with rodent burrows and nests, it's important to keep rodents out of cabins and other sleeping areas. Learn more about [tick-borne relapsing fever](#).

### Rocky Mountain Spotted Fever

Initial symptoms of Rocky Mountain spotted fever may include fever, nausea, vomiting, muscle pain, lack of appetite, and severe headache. A rash generally, but not always, appears a few days later. Abdominal pain, joint pain, and diarrhea can also occur. Each year, zero to three cases of Rocky Mountain spotted fever are identified in Washington. Some of the cases are infected in Washington, some are infected elsewhere. The bacteria that causes Rocky Mountain spotted fever is transmitted by the bite of an infected American dog tick, *Dermacentor variabilis*, or Rocky Mountain wood tick, *D. andersoni*. These ticks are found throughout the state and prefer woodland areas, medium height grasses and shrubs between wetlands and woods, and sunny or open areas around woods. They are especially common in eastern Washington. Learn more about [Rocky Mountain Spotted Fever, CDC](#).



## Diseases Spread by Ticks in Washington State

### Tick Paralysis

Tick paralysis is caused by a neurotoxin from an attached tick. This condition is characterized by a progressive paralysis that usually starts in the legs with muscle weakness, loss of coordination, numbness, and difficulty standing or walking. The symptoms progress upwards to the abdomen, back, and chest. If the tick is not removed, paralysis of the chest muscles can lead to respiratory failure and death within 24 to 48 hours after symptoms begin. Prompt removal of the tick usually leads to a complete recovery. Twelve cases of tick paralysis have been reported in Washington from 1990 through 2011. Ticks associated with tick paralysis include *Ixodes* and *Dermacentor* species that live in forested and brushy areas or along edges between open grassy areas and woods. See [Tick Paralysis Case Report, CDC](#).

### Tularemia

A tick bite is one way people can get tularemia. Symptoms of tularemia following a tick bite include sudden fever, headache, swollen lymph nodes, and a skin ulcer near the bite. One to 10 cases of tularemia are reported each year in Washington - only some of these are due to tick bites and some cases are acquired in other states. Ticks that can transmit tularemia in Washington are the American dog tick, *Dermacentor variabilis*, and the Rocky Mountain wood tick, *D. andersoni*. These ticks are found throughout the state and prefer woodland areas, medium height grasses and shrubs between wetlands and woods, and sunny or open areas along the edge of woods. Find out more at [Tularemia, CDC](#).

### Anaplasmosis

Symptoms of anaplasmosis include headache, fever, chills, and muscle aches. No human cases have been reported in Washington; however, anaplasmosis has been diagnosed in numerous dogs in our state. Western black-legged ticks, *Ixodes pacificus*, can carry the bacteria that cause anaplasmosis and are found living in forested or brushy areas in the western part of the state. Learn more about [Anaplasmosis, CDC](#).

### Babesiosis

Symptoms of babesiosis include fever, chills, fatigue, muscle pain, and anemia. Since 1990, only cases have been reported as contracting the disease in Washington. The western black-legged tick, *Ixodes pacificus*, is considered the vector of this disease in Washington. This tick is found in forested or brushy areas of western Washington. See [Babesiosis, CDC](#).

*A message from Washington State Department of Health*

### Protect yourself against tick bites

Tick-borne diseases such as Lyme disease, though not common, do occur in Washington. You may encounter ticks while camping and hiking. Keep yourself and your family safe from tick bites. It's the best way to avoid getting a tick-borne disease.

### Wear repellent

- Use insect repellents that contain DEET.
- Wear clothing that has been treated with permethrin.



### Found an attached tick?



Remove the tick within 24 hours. This greatly reduces your chances of getting a tick-borne disease.

Disinfect the bite area and wash your hands.

Call your healthcare provider if you get a fever or rash.

### After your hike

### Check for Ticks

Check yourself and your family for ticks and shower soon after your hike. Be sure to check your dog too!

Some tick species carry diseases. The Department of Health monitors ticks to understand which species are where. This helps us determine what the risks are for tick-borne disease in our state.

**Send us your tick!** Place it in a container with a few blades of grass. Go to [www.doh.wa.gov](http://www.doh.wa.gov) and search for "ticks" to learn how to submit your tick for identification.

