

Rocky Mountain Spotted Fever



What is Rocky Mountain Spotted Fever?

Rocky Mountain Spotted Fever is a disease caused by the bacteria *Rickettsia rickettsii* carried in some dog ticks.

Where has this disease been found?

The disease has been found in Canada, the United States, Central and South America. It is considered endemic in most parts of the United States, in particular the south eastern and south central states.

How is the parasite transmitted?

Transmission usually occurs through the bite of an infected tick. The tick usually has to be attached to the person for at least four to six hours for the bacteria to be transmitted. The bacteria can also infect people who crush ticks while removing them with their bare fingers.

What the symptoms?

Rocky Mountain Spotted Fever is characterized by the sudden onset of a moderate to high fever, usually persisting for two to three weeks in untreated cases. Other possibly symptoms include:

- Rash (spreading from wrists and ankles)
- Headache
- Muscle pain
- Chills
- Confusion
- Nausea, vomiting, or diarrhea

When do symptoms appear?

Symptoms usually develop 2-14 days after the bite. The rash usually starts a few days after the fever.

How is Rocky Mountain Spotted Fever diagnosed?

When a person presents symptoms that appear related to Rocky Mountain Spotted Fever in conjunction with epidemiological considerations (e.g. tick exposure), the healthcare provider should collect blood specimens and/or skin biopsies for testing. However, serological evidence of infection may not show if the test is conducted less than 2 weeks after the onset of the illness. Depending on the circumstances, a person may be given treatment based on symptoms before the laboratory results are returned.



What is the treatment?

Appropriate antibiotics will treat Rocky Mountain Spotted Fever.



How can I prevent being exposed to Rocky Mountain Spotted Fever?

For yourself:

- Don't walk barelegged in tall grass, wooded areas, or marshlands.
- Try to stay in the centre of a cleared trail to avoid contact with overgrown grass, brush, and leaf litter.
- Wear long sleeves, slacks and fully-closed boots or shoes when walking in grassy or wooded areas.
- Tuck your pant legs into your socks.
- Conduct a "tick check" on yourself, your family, and your pets after exposure to tick habitat.
- Wear light-coloured clothing to make the ticks easier to find.
- Insect repellents containing DEET (N,N-diethyl-meta-toluamide) are useful and can be sprayed onto clothing, especially pants and socks. Please read the label when using any repellents, in particular when using them on young children. For safety tips on using personal insect repellents containing DEET, visit the following website: www.hc-sc.gc.ca and search "insect repellents."

For your pets:

- Check your pets for ticks daily, especially after they spend time out-doors..
- If you find a tick on your pet, remove it right away.
- Ask your veterinarian to conduct a tick check at each exam.
- Talk to your veterinarian about tickborne diseases in your area.
- Reduce tick habitat in your yard.
- Talk with your veterinarian about using tick preventive products on your pet.

For your yard:

- Remove ideal tick habitat from your property, such as brush and leaf litter.
- Keep your lawn short (<16cm).
- Place a 3-ft wide barrier of wood chips or gravel between lawns and wooded areas and around patios and play equipment. This will restrict tick migration into recreational areas.
- Keep tables, swing sets, play equipment, etc. away from woods, shrubs and tall grass. Place in a sunny location, if possible.
- Remove possible rodent habitats around your property (e.g. stack wood neatly in dry areas away from house).

Tick Removal

- Prompt removal of ticks from your skin will help prevent infection, since transmission of the disease agent
- Using fine-tipped tweezers, carefully grasp the tick as close to your skin as possible. Pull it straight out, gently but firmly.
- Don't squeeze it. Squeezing the tick can cause the disease agent to be accidentally introduced into your body.
- Don't put anything on the tick, or try to burn the tick off.
- Thoroughly cleanse the bite site with rubbing alcohol and/or soap and water.

Tick Identification

- After the tick has been removed, place it in screw-top bottle (e.g. pill vial), and take it to your doctor. They can send it to the Ontario Public Health Laboratory for identification.
- Establishing the type of tick may help to assess your risk.
- It is important to remember where you most likely acquired the tick. It will help public health workers to identify areas of higher risk.

Note: Tick identification only is available. Ticks submitted will not be tested for *Rickettsia rickettsii*.