

Rocky Mountain Spotted Fever

What is Rocky Mountain Spotted Fever?

Rocky Mountain Spotted Fever (RMSF) is an illness caused by the bacteria *Rickettsia rickettsia* that is passed to humans through the bite of an infected tick. RMSF is the most reported tickborne illness in Oklahoma. In addition, Oklahoma has one of the highest rates of RMSF in the United States.

How is RMSF contracted?

RMSF nearly always results from the bite of an infected tick. In Oklahoma, the tick most often associated with RMSF is the American dog tick. It is possible, however, to be infected with RMSF bacteria if the body fluids of an infected tick contact broken skin or the portion of the skin under the nail bed. This can occur if a tick is “popped” or squeezed while being removed from a human or animal. RMSF is not spread from one person to another person.

Who is at risk for RMSF infection?

All persons are susceptible to RMSF, but persons who spend long amounts of time outdoors are more likely to be bitten by infected ticks. In addition, persons who remove ticks from their pets are at an increased risk for RMSF. There is a seasonal risk for becoming infected with RMSF because American dog ticks are most active and numerous from May through August. Personal tick bite prevention precautions should be taken before undergoing summer activities, especially during the spring and summer months.

What are the symptoms of RMSF?

The symptoms of RMSF generally include a sudden onset of headache, fever (often greater than 100.5°F), and muscle aches. A fine, bumpy, red rash often appears on the extremities including the palms of the hands and soles of the feet, before spreading to other parts of the body. However, not everyone with RMSF develops a rash. Nausea, vomiting, and abdominal pain are also frequently reported.

How soon would symptoms appear after removing an infected tick?

Symptoms of RMSF can appear as soon as three days and as long as 14 days after the bite of an infected tick. If symptoms of illness appear within 14 days of the tick bite, immediately inform your healthcare provider of your tick bite exposure and the date on which the tick was removed.

What is the treatment for RMSF?

Treatment for RMSF with certain antibiotics, such as doxycycline, is very effective in treating the disease. Overall, 3% to 5% of people with RMSF die due to the disease without prompt treatment with the appropriate antibiotics. Although RMSF can be severe, preventative antibiotic therapy in persons who are not ill following a tick bite is not recommended.

What is the best protection from RMSF?

Avoiding tick bites is the best way to reduce your risk of developing RMSF or other tickborne illnesses. Personal tick bite prevention precautions include:

- Wear light colored clothing to make ticks easier to see.
- Wear long-sleeved shirts and long pants tucked into socks to deprive ticks of attachment sites.

- Wear closed-toe shoes, not sandals.
- Hikers and bikers should stay in the center of trails to avoid grass and brush.
- Check for ticks AT LEAST once per day; particularly along waistbands, in the armpits, and groin area. Don't forget the back and the hair.
- Use a tick repellent with DEET on skin and clothing according to directions.
- Use a tick repellent with permethrin ON CLOTHING ONLY and as directed by the label.

How should an attached tick be removed?

Any tick should be removed as soon as possible. The best way is to use tweezers to grab the tick as close to the skin as possible and pull it straight out. Do not squeeze the tick's body when removing it. Do not handle ticks with bare hands. Wash hands thoroughly after removing a tick.