



## SPOTTED FEVER RICKETTSIOSIS (SFR)

### What is Spotted Fever Rickettsiosis?

Spotted Fever Rickettsiosis (SFR) are a group of potentially deadly bacterial tick-borne illnesses that spread through the bite of an infected tick or mite. SFR includes Rocky Mountain spotted fever (RMSF), Rickettsialpox, and *Rickettsia parkeri* rickettsiosis, Pacific Coast tick fever, and others caused by spotted fever group rickettsioses. If left untreated, SFR can be deadly. SFR cases occur throughout the United States but are most commonly reported from North Carolina, Tennessee, Missouri, Arkansas, and Oklahoma.

### Who gets SFR?

Anyone can get SFR but people who are exposed to tick-infested areas are at higher risk. Children and adults can get Rocky Mountain spotted fever from exposure to tick-infested habitats or exposure to infested pets. In spite of the name, few cases are reported from the United States' Rocky Mountain region.

### How is SFR spread?

SFR is not spread person to person but through an infected tick. RMSF is spread by several species of ticks, including the American dog tick, the Rocky Mountain wood tick, and the brown dog tick. *Rickettsia parkeri* rickettsiosis is spread by an infected Gulf Coast tick. Pacific Coast tick fever is caused by the bite of an infected Pacific Coast tick and found along the western coastline.

### What are the symptoms of SFR?

Many spotted fevers are generally accompanied by a dark scab at the site of the tick or mite bite, called an eschar. Other symptoms include fever, headache, rash, and muscle aches. An eschar, a dark scab, can appear at the site of the bite site a few days to a week following a bite from an infected tick or mite.

### How soon do symptoms appear?

Eschar usually develops a few days to a week after the bite. Symptoms can develop several days after the eschar scab.

### Should an infected person be excluded from work or school?

No exclusions from work or school are necessary.

### What is the treatment for SFR?

Doxycycline is the recommended antibiotic for all spotted fevers, including RMSF in adults and children of all ages.



# Frequently Asked Questions

## **What can a person or community do to prevent the spread of SFR?**

Persons exposed to tick-infested habitats should follow these recommendations to avoid disease:

- After coming indoors, promptly and carefully inspect your body and clothes for ticks and remove any attached ticks. It may take several hours of attachment before microorganisms are transmitted from the tick to the person.
- When outdoors in tick-infested habitat, wear light-colored clothing when outdoors.
- Tuck pants legs into socks so ticks cannot crawl up the inside of the pants.
- Apply repellents to discourage tick attachment to skin using EPA registered insect repellent containing DEET, picaridin, IR3535, Oil of Lemon Eucalyptus, or 2-undecanone.
- Treat clothing and gear with products containing permethrin.
- Frequently mow lawns, meadow trails, and outside fences to reduce tick populations. Ticks crawl on the tips of grasses and shrubs and crawl on a human or animal when it brushes against the vegetation.
- Stay on trails without tall grasses or brush piles.
- Shower immediately after being outdoors.
- Treat cats and dogs with a tick preventive medicine recommended by veterinarians.

Remove a tick from your skin using the following steps:

- Grasp the tick with tweezers or forceps as close as possible to the attachment (skin) site and pull upward and out with firm and steady pressure. If tweezers are not available, use fingers shielded with tissue paper or rubber gloves.
- Do not handle ticks with bare hands. Be careful not to squeeze, crush, or puncture the body of the tick, as it may contain infectious fluids.
- After removing the tick, thoroughly disinfect the bite site and wash your hands.
- Consult a physician if there is concern about incomplete tick removal. It is important that a tick be completely removed as soon as it is discovered.

## **Resources**

Centers for Disease Prevention and Control,  
<https://www.cdc.gov/other spotted fever/index.html>

**Office of Infectious Disease Epidemiology**  
**24/7 Emergency Contact Number: 1-888-295-5156**

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