



Indiana State
Department of Health
Epidemiology Resource Center

ROCKY MOUNTAIN SPOTTED FEVER QUICK FACTS

Rocky Mountain spotted fever (RMSF) is an infection caused by the bacterium *Rickettsia rickettsii*, which is transmitted in Indiana by the bite of an infected American dog tick (*Dermacentor variabilis*). RMSF is one of several diseases caused by a group of bacteria in the spotted fever family. These diseases have similar signs and symptoms, but RMSF is the most severe disease of the group. RMSF can be deadly if not treated early, especially in children. Please visit the ISDH RMSF page for more information (<https://www.in.gov/isdh/28012.htm>).

TRANSMISSION

The RMSF bacterium is transmitted in Indiana by the American dog tick (*Dermacentor variabilis*).

SIGNS AND SYMPTOMS

Signs and symptoms of RMSF usually appear within 3–12 days of a bite from an infected tick. People in the early stages of illness can experience flu-like symptoms, such as:

- Fever
- Headache
- Nausea
- Vomiting
- Stomach pain
- Muscle aches
- Loss of appetite

Rash is a common sign in people who are sick with RMSF. Rash usually develops 2-4 days after fever begins. The look of the rash can vary widely over the course of illness. Some rashes can look like red splotches and some look like pinpoint dots. While almost all patients with RMSF will develop a rash, it often does not appear early in illness, which can make RMSF difficult to diagnose.

Untreated RMSF can rapidly progress to a serious and life-threatening illness.



DIAGNOSIS

Diagnosis of RMSF is based upon the patient's signs and symptoms, a history of possible exposure to ticks, and appropriate laboratory testing. Early recognition of symptoms is important for prompt diagnosis and treatment. If you think that you have RMSF, contact your health care provider right away.

People who have removed an attached tick sometimes wonder if they should have it tested for tick-borne diseases. Although some laboratories offer this testing, ISDH does not recommend it. If the tick tests positive, it does not necessarily mean that you have been infected; if the tick tests negative, it may provide a false sense of security because you may have been unknowingly bitten by a different tick that was infected.

TREATMENT

Doxycycline is the treatment of choice for adults and children of all ages with suspected RMSF. Doxycycline is most effective at preventing severe complications and death if it is started within the first five days of symptoms. Treatment should be started for anyone with suspected RMSF and should never be delayed while waiting for laboratory test results.

PREVENTION

The best way to prevent RMSF is to avoid tick bites. Please see our tick prevention page (<https://www.in.gov/isdh/20491.htm>) for more information.

For more information about RMSF, please visit the CDC RMSF webpage (<https://www.cdc.gov/rmsf/index.html>).

STATISTICS

For RMSF statistics in Indiana, please visit our RMSF Statistics page (<https://www.in.gov/isdh/28013.htm>).

National statistics for RMSF can be found at the CDC RMSF Epidemiology and Statistics webpage (<https://www.cdc.gov/rmsf/stats/index.html>).