

# IDRS Infectious Disease Reporting System

Disease Reporting 24 Hours a Day

Columbus Public Health and Franklin County Public Health

## ROCKY MOUNTAIN SPOTTED FEVER

Rocky Mountain spotted fever (RMSF) is an infectious disease caused by the bacteria *Rickettsia rickettsii*, which is carried by ticks. RMSF does occur in Ohio, although most cases occur in North Carolina and Oklahoma.

### Symptoms

Symptoms usually appear within 5 to 10 days of a tick bite:

- Early symptoms are fever, nausea, body aches, severe headache, loss of appetite, and vomiting
- Later the ill person may have abdominal pain, joint pain and diarrhea.
- Most people develop a rash starting on the palms and feet beginning 2-5 days after the start of the fever. It often begins as small, flat, pink, non-itchy spots. Not all patients develop the rash.
- RMSF can be fatal or require hospitalization even in previously healthy people. The bacteria attack the cells lining blood vessels throughout the body and can involve the lungs, brain or kidneys.

### Transmission

- Rocky Mountain spotted fever is transmitted to humans from tick bites. The most common tick in Ohio, the American dog tick, is the main carrier for this disease. Peak season for these ticks is in May and June.
- Humans cannot infect other humans. Dogs can carry RMSF bacteria, but cannot infect people directly.
- People who spend time in the outdoors in tick-infested environments especially woodlands and brushy areas are at an increased risk of exposure. Dogs or other pets may also bring infected ticks home.

### Treatment

- A diagnosis of Rocky Mountain spotted fever is based on a combination of clinical signs and symptoms and specialized confirmatory laboratory tests. These may take longer, so a health care provider might prescribe an antibiotic first based on symptoms only.
- Antibiotics, usually doxycycline, are given to treat Rocky Mountain spotted fever. Treatment is most effective if started in the first five days of symptoms.
- Previous infection is thought to provide long lasting immunity against re-infection.

### Prevention

- Most people will be exposed to tick-infested environments (woods, brushy areas, fields with high grass) at some point. Therefore, prevention measures should be aimed at personal protection:
  - Wear light-colored clothing — this will allow you to see ticks that are crawling on your clothing.
  - Tuck your pant legs into your socks so that ticks cannot crawl up the inside of your pant legs.
  - Apply insect repellent containing permethrin or DEET according to the product's directions.
  - Conduct "tick checks" on yourself and children every hour or two. Use a mirror to search all parts of your body. Remove any tick you find on your body. Check pets as well before allowing them indoors.
- Keep yard and play areas well mowed to discourage ticks.

### Additional Information

To remove an attached tick, grasp it with tweezers (NOT bare hands) as close as possible to the skin and pull with firm, steady pressure straight out. Do not twist or jerk the tick, as the mouthparts may break off. If tweezers are not available, protect fingers with rubber gloves or tissue paper. After removing the tick, disinfect the bite area and wash your hands. Contact your local health department for tick identification and testing.

**All information is general in nature and is not intended to be used as a substitute for appropriate professional advice.**



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