Rocky Mountain spotted fever (RMSF)

- Treat early: RMSF can be rapidly fatal. Treatment is most effective if started within the first 5 days of symptoms.
- Doxycycline is the treatment of choice in persons of all ages.*
- Early signs and symptoms: fever, headache, myalgia, fatigue (non-specific and can mimic other illnesses).
- Later signs and symptoms: petechial rash, multi-organ failure, septic shock, meningoencephalitis, necrosis of digits or limbs, severe thrombocytopenia, hyponatremia.
- Do not wait for a rash to occur to suspect RMSF.
  - Rash occurs in approximately 90% of cases, however rash does not typically appear until 2-4 days following fever onset.
- Fewer than 60% of people report history of a tick bite.
- Treatment is based on clinical suspicion, and should not rely on diagnostic test results or the appearance of rash.
- RMSF is most commonly confirmed by looking for serum antibodies using paired samples (one taken from the first week of illness and the second 2-4 weeks later).
### Recommended treatment for suspected RMSF

<table>
<thead>
<tr>
<th>Age category</th>
<th>Drug</th>
<th>Dosage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adults and children ≥ 45 kg</td>
<td>Doxycycline</td>
<td>100 mg, twice per day</td>
</tr>
<tr>
<td>Children &lt; 45 kg*</td>
<td>Doxycycline</td>
<td>2.2 mg/kg, twice per day</td>
</tr>
</tbody>
</table>

*The dose and duration of doxycycline used to treat suspected RMSF has NOT been shown to cause dental staining in children. This dose is recommended by the American Academy of Pediatrics and CDC to safely treat children of any age.

- **Duration of treatment for uncomplicated cases**: 5-7 days (at least 3 days after the fever subsides and until there is evidence of clinical improvement).
- Consult an infectious disease physician for suspected RMSF in pregnant women or people with life-threatening tetracycline allergies. Doxycycline may still be indicated in some circumstances.
- Chloramphenicol is the only alternative drug that has been used to treat RMSF, however it is associated with an increased risk of death.

For more information, [www.cdc.gov/rmsf](http://www.cdc.gov/rmsf)