



Canine Rocky Mountain Spotted Fever Reporting Instructions

Suspect Cases

Common Clinical Signs: **Fever**, lethargy, anorexia/weight loss, conjunctivitis, scleral/intraocular/retinal hemorrhages, petechiae of mucus membranes, focal edema, cough, abdominal pain, vomiting, diarrhea, melena, lymphadenomegaly, polyarthritis, seizures or vestibular signs.

Common Laboratory Findings: **Thrombocytopenia**, leukocytosis OR leukopenia, anemia, hypoalbuminemia, or elevated liver enzymes. In advanced stages, azotemia may be present.

Common History: Recent tick or flea infestation. Other dogs or people in house ill with similar symptoms.

Reporting of Suspected Cases Required

Please report suspected cases even if no samples are submitted. The free sample testing program is expected to last 12 months. Samples submitted to this free testing program are tested in batches and results may not be available for 2 or 4 weeks. ***Please perform diagnostic testing and treat suspected cases without waiting for these results.*** Veterinarians may submit whole blood, paired serum samples, ticks, fleas or all four types of samples. See requirements for each type of sample below. For this testing program, **ACUTELY ILL DOGS** are those who have had tick exposure and signs of RMSF for 10 days or fewer. Acute samples may be taken from dogs already on doxycycline therapy if fewer than 3 days on medication have passed.

Serum samples

Please collect serum samples from acutely ill dogs (see above) and plan for collection of convalescent serum 2-3 weeks later. Serum samples will be tested for antibodies against *Rickettsia rickettsii* and related *Rickettsia*. Serum samples will NOT be tested until BOTH the acute and convalescent (2-3 weeks later) serum sample have been received.

Whole blood (EDTA/Lavender top samples)

Please collect whole blood/EDTA samples from acutely ill dogs (see above). Whole blood (lavender top) samples are tested by PCR for *R. rickettsii* and other pathogens that are transmitted by ticks and may cause similar clinical illness.

Ticks and Fleas

Ectoparasite submissions are useful for PCR testing. Veterinarians are encouraged to submit fleas as well as ticks from acutely ill dogs (see above) – rickettsial agents other than *R. rickettsii* may be identified. Only ticks removed from an acutely ill dog or its immediate environment should be submitted. Place ticks and fleas in dry, sterile, tightly-sealed red-top or plastic tubes.

Testing Protocol

1. **Identify cases.** Select only dogs that are ACUTELY ILL (see definition above), having at least fever, thrombocytopenia, and a recent history of tick exposure.
2. **Discuss with client.** Discuss the testing program with client, give them client information handout. Explain that samples submitted will take 2-4 weeks to return. Schedule visit for a convalescent serum blood draw 2-3 weeks later.
3. **Sample collection.** Collect samples for the testing program from acute ill dog as explained above, including:
 - a. Whole blood in full lavender top.
 - b. Blood in serum separator tube (spin down).
 - c. Collect any live ticks or fleas off of dog or its environment, put in well-sealed sterile vial with NO preservative.
 - d. Refrigerate all samples.
4. **Fill out, fax in form.** Complete the 2-page Rocky Mountain Spotted Fever Case Report Form. Fax completed form along with all relevant available laboratory results (cbc, chemistries, UA, RMSF titers, other tick-borne disease titers, etc).
5. **Put form copy with samples.** Put copy of Case Report Form with blood samples and ticks and/or fleas from dog. We will come to collect your samples when we receive your faxed report.

Please call our office if you have drawn samples in addition to faxing in the Case History Form – we will come to collect the samples from your office.