# Extracted Content from https://ndc.services.cdc.gov/case-definitions/rocky-mountain-spotted-fever-2004/

Rocky Mountain Spotted Fever (RMSF) (Rickettsia rickettsii) 2004 Case Definition | CDC  
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Rocky Mountain Spotted Fever (RMSF) (  
Rickettsia rickettsii  
)  
2004 Case Definition  
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Rickettsia rickettsii  
)  
2004 Case Definition  
NOTE:  
A surveillance case definition is a set of uniform criteria used to define a disease for public health surveillance. Surveillance case definitions enable public health officials to classify and count cases consistently across reporting jurisdictions. Surveillance case definitions are not intended to be used by healthcare providers for making a clinical diagnosis or determining how to meet an individual patient’s health needs.  
Clinical Description  
Rocky Mountain spotted fever (RMSF) is an illness caused by  
Rickettsia rickettsii  
, a bacterial pathogen transmitted to humans through contact with ticks.  
Dermacentor  
species of ticks are most commonly associated with infection, including  
Dermacentor variabilis  
(the American dog tick) and  
Dermacentor andersoni  
(the Rocky Mountain wood tick). Disease onset averages one week following a tick bite. Age specific illness is highest for children. Illness is characterized by acute onset of fever, and may be accompanied by headache, malaise, myalgia, nausea/vomiting, or neurologic signs; a macular or maculopapular rash is reported in most patients, and a rash is often present on the palms and soles. RMSF is fatal in approximately 20% of untreated cases, and severe fulminant disease is possible.  
Laboratory Criteria For Diagnosis  
Serological evidence of a significant change in serum antibody titer reactive with  
Rickettsia rickettsii  
antigens between paired serum specimens, as measured by a standardized assay conducted in a commercial, state, or reference laboratory.  
Demonstration of  
R. rickettsii  
antigen in a clinical specimen by immunohistochemical methods.  
Detection of  
R. rickettsii  
DNA in a clinical specimen by the polymerase chain reaction (PCR assay).  
Isolation of  
R. rickettsii  
from a clinical specimen in cell culture.  
Note: For confirmed cases, a significant change in titer must be determined by the testing laboratory; examples of commonly used measures of significant change include, but are not limited to, a four-fold or greater change in antibody titer as determined by indirect immunoflourescent antibody (IFA) assay or an equivalent change in optical density measured by enzyme-linked immunosorbent assay (EIA or ELISA).  
Case Classification  
Probable  
A person with a clinically compatible illness and serologic evidence of antibody reactive with  
R. rickettsii  
in a single serum sample at a titer considered indicative of current or past infection (cutoff titers are determined by individual laboratories).  
Confirmed  
A person with a clinically compatible illness that is laboratory confirmed.  
Related Case Definition(s)  
Rocky Mountain Spotted Fever (RMSF) (  
Rickettsia rickettsii  
) | 2008 Case Definition  
Rocky Mountain Spotted Fever (RMSF) (  
Rickettsia rickettsii  
) | 1996 Case Definition  
Rocky Mountain Spotted Fever (RMSF) (  
Rickettsia rickettsii  
) | 1990 Case Definition  
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