

California Department of Public Health
 Center for Infectious Diseases
 Division of Communicable Disease Control
 Infectious Diseases Branch
 Surveillance and Statistics Section
 MS 7306, P.O. Box 997377
 Sacramento, CA 95899-7377

Local ID Number _____

(Please use the same ID Number on the preliminary and final reports to allow linkage to the same case.)

Report Status (check one)

Preliminary Final

Q FEVER CASE REPORT

PATIENT INFORMATION						
Last Name	First Name	Middle Name	Suffix	Primary Language <input type="checkbox"/> English <input type="checkbox"/> Spanish <input type="checkbox"/> Other: _____		
Social Security Number (9 digits)		DOB (mm/dd/yyyy)	Age	<input type="checkbox"/> Years <input type="checkbox"/> Months <input type="checkbox"/> Days	Ethnicity (check one) <input type="checkbox"/> Hispanic/Latino <input type="checkbox"/> Non-Hispanic/Non-Latino <input type="checkbox"/> Unk	
Address Number & Street - Residence			Apartment/Unit Number			
City/Town			State	Zip Code		
Census Tract	County of Residence		Country of Residence			
Country of Birth		If not U.S. Born - Date of Arrival in U.S. (mm/dd/yyyy)				
Home Telephone		Cellular Phone/Pager		Work/School Telephone		
E-mail Address		Other Electronic Contact Information				
Work/School Location		Work/School Contact				
Gender <input type="checkbox"/> Male <input type="checkbox"/> Female <input type="checkbox"/> Other: _____						
Pregnant? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unk		If Yes, Est. Delivery Date (mm/dd/yyyy)				
Medical Record Number		Patient's Parent/Guardian Name				
Occupation Setting (see list on page 9)		Other Describe/Specify				
Occupation (see list on page 9)		Other Describe/Specify				
CLINICAL INFORMATION						
Physician Name - Last Name			First Name		Telephone Number	

*Comment: self-identity or self-reporting
 The response to this item should be based on the patient's self-identity or self-reporting. Therefore, patients should be offered the option of selecting more than one racial designation.

First three letters of patient's last name:

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SIGNS AND SYMPTOMS					
Symptomatic? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unk	Onset Date (mm/dd/yyyy)			Date First Sought Medical Care (mm/dd/yyyy)	
Signs and Symptoms	Yes	No	Unk	If Yes, Specify as Noted	
Fever				<i>Highest temperature (specify °F/°C)</i>	
Myalgia					
Rigors, shaking chills					
Malaise					
Rash				<i>Location</i>	
Cough					
Severe retrobulbar headache					
Splenomegaly					
Hepatomegaly					
Pneumonia					
Hepatitis					
Endocarditis					
Osteomyelitis, osteoarthritis					
Abdominal pain					
Abnormal chest x-ray				<i>Findings</i>	
Elevated liver enzyme levels				<i>Specify</i>	
Thrombocytopenia					
<i>Other signs / symptoms (specify)</i>					
PAST MEDICAL HISTORY					
Immunocompromised? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unk	<i>If Yes, specify condition</i>				
Valvular heart disease? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unk					
Prior Q fever diagnosis? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unk	<i>If Yes, specify date</i>				
Chronic kidney disease? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unk	<i>If Yes, specify condition</i>				
Pregnancy? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unk					
<i>Other (specify)</i>					

First three letters of
patient's last name:

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HOSPITALIZATION					
<i>Did patient visit emergency room for illness?</i> <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unk		<i>Was patient hospitalized?</i> <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unk		<i>If Yes, how many total hospital nights?</i>	
<i>If there were any ER or hospital stays related to this illness, specify details below.</i>					
HOSPITALIZATION - DETAILS					
<i>Hospital Name 1</i>	<i>Street Address</i>			<i>Admit Date (mm/dd/yyyy)</i>	
	<i>City</i>			<i>Discharge / Transfer Date (mm/dd/yyyy)</i>	
	<i>State</i>	<i>Zip Code</i>	<i>Telephone Number</i>	<i>Medical Record Number</i>	<i>Discharge Diagnosis</i>
<i>Hospital Name 2</i>	<i>Street Address</i>			<i>Admit Date (mm/dd/yyyy)</i>	
	<i>City</i>			<i>Discharge / Transfer Date (mm/dd/yyyy)</i>	
	<i>State</i>	<i>Zip Code</i>	<i>Telephone Number</i>	<i>Medical Record Number</i>	<i>Discharge Diagnosis</i>
TREATMENT / MANAGEMENT					
<i>Received treatment?</i> <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unk		<i>If Yes, specify the treatments below.</i>			
TREATMENT / MANAGEMENT DETAILS					
<i>Treatment Type 1</i> <input type="checkbox"/> Antibiotic <input type="checkbox"/> Other	<i>Treatment Name</i>		<i>Date Started (mm/dd/yyyy)</i>	<i>Date Ended (mm/dd/yyyy)</i>	
<i>Treatment Type 2</i> <input type="checkbox"/> Antibiotic <input type="checkbox"/> Other	<i>Treatment Name</i>		<i>Date Started (mm/dd/yyyy)</i>	<i>Date Ended (mm/dd/yyyy)</i>	
OUTCOME					
<i>Outcome?</i> <input type="checkbox"/> Survived <input type="checkbox"/> Died <input type="checkbox"/> Unk		<i>If Survived, Survived as of _____ (mm/dd/yyyy)</i>			<i>Date of Death (mm/dd/yyyy)</i>
LABORATORY INFORMATION					
LABORATORY RESULTS SUMMARY - SERUM					
<i>Specimen Type 1</i> <input type="checkbox"/> Serum (acute) <input type="checkbox"/> Serum (convalescent)	<i>Type of Test</i> <input type="checkbox"/> IFA <input type="checkbox"/> CF <input type="checkbox"/> ELISA <input type="checkbox"/> MAT		<i>Test Phase</i> <input type="checkbox"/> Phase I <input type="checkbox"/> Phase II	<i>Antibody Type</i> <input type="checkbox"/> IgM <input type="checkbox"/> IgG	<i>Collection Date (mm/dd/yyyy)</i>
	<i>C. burnetii Quantitative Result</i>		<i>Specify Result Unit</i> <input type="checkbox"/> Titer <input type="checkbox"/> O.D.	<i>Interpretation</i> <input type="checkbox"/> Positive <input type="checkbox"/> Negative <input type="checkbox"/> Equivocal	
	<i>Laboratory Name</i>			<i>Telephone Number</i>	
<i>Specimen Type 2</i> <input type="checkbox"/> Serum (acute) <input type="checkbox"/> Serum (convalescent)	<i>Type of Test</i> <input type="checkbox"/> IFA <input type="checkbox"/> CF <input type="checkbox"/> ELISA <input type="checkbox"/> MAT		<i>Test Phase</i> <input type="checkbox"/> Phase I <input type="checkbox"/> Phase II	<i>Antibody Type</i> <input type="checkbox"/> IgM <input type="checkbox"/> IgG	<i>Collection Date (mm/dd/yyyy)</i>
	<i>C. burnetii Quantitative Result</i>		<i>Specify Result Unit</i> <input type="checkbox"/> Titer <input type="checkbox"/> O.D.	<i>Interpretation</i> <input type="checkbox"/> Positive <input type="checkbox"/> Negative <input type="checkbox"/> Equivocal	
	<i>Laboratory Name</i>			<i>Telephone Number</i>	
<i>Specimen Type 3</i> <input type="checkbox"/> Serum (acute) <input type="checkbox"/> Serum (convalescent)	<i>Type of Test</i> <input type="checkbox"/> IFA <input type="checkbox"/> CF <input type="checkbox"/> ELISA <input type="checkbox"/> MAT		<i>Test Phase</i> <input type="checkbox"/> Phase I <input type="checkbox"/> Phase II	<i>Antibody Type</i> <input type="checkbox"/> IgM <input type="checkbox"/> IgG	<i>Collection Date (mm/dd/yyyy)</i>
	<i>C. burnetii Quantitative Result</i>		<i>Specify Result Unit</i> <input type="checkbox"/> Titer <input type="checkbox"/> O.D.	<i>Interpretation</i> <input type="checkbox"/> Positive <input type="checkbox"/> Negative <input type="checkbox"/> Equivocal	
	<i>Laboratory Name</i>			<i>Telephone Number</i>	

First three letters of patient's last name:

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LABORATORY RESULTS SUMMARY - OTHER

Specimen Type 1 <input type="checkbox"/> Blood <input type="checkbox"/> Clinical specimen	If Clinical specimen, specify Interpretation	Type of Test <input type="checkbox"/> Culture <input type="checkbox"/> PCR <input type="checkbox"/> Immunostain Laboratory Name	Collection Date (mm/dd/yyyy) Telephone Number
Specimen Type 2 <input type="checkbox"/> Blood <input type="checkbox"/> Clinical specimen	If Clinical specimen, specify Interpretation	Type of Test <input type="checkbox"/> Culture <input type="checkbox"/> PCR <input type="checkbox"/> Immunostain Laboratory Name	Collection Date (mm/dd/yyyy) Telephone Number

IMAGING SUMMARY

Anatomic Site	Date (mm/dd/yyyy)	Type of Imaging <input type="checkbox"/> X-ray <input type="checkbox"/> CT <input type="checkbox"/> MRI <input type="checkbox"/> Other: _____	
Result	Interpretation	Facility Name	Telephone Number

EPIDEMIOLOGIC INFORMATION

INCUBATION PERIOD: 2 MONTHS PRIOR TO ILLNESS ONSET

FOOD HISTORY

DID THE PATIENT EAT OR DRINK ANY OF THE FOLLOWING ITEMS DURING THE INCUBATION PERIOD?

Food Item	Yes	No	Unk	If Yes, Specify as Noted
Unpasteurized milk				Animal species and source
Other unpasteurized dairy product				Animal species and source
Other (specify)				

ANIMAL EXPOSURES

DID THE PATIENT HAVE CONTACT WITH ANY OF THE FOLLOWING ANIMALS DURING THE INCUBATION PERIOD?

Exposure	Yes	No	Unk	If Yes, Specify as Noted
Birthing animals or birth products				Animal species and location
Cattle				Exposure and geographic location
Sheep				Exposure and geographic location
Goats				Exposure and geographic location
Pigeons				Exposure and geographic location
Rabbits				Exposure and geographic location
Cats				Exposure and geographic location
Other (specify animal exposure and location)				

First three letters of patient's last name:

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OCCUPATIONAL / RECREATIONAL EXPOSURES

WAS PATIENT EMPLOYED IN (OR SPEND SIGNIFICANT TIME IN) ANY OF THE FOLLOWING ACTIVITIES DURING THE INCUBATION PERIOD?

Exposure	Yes	No	Unk	If Yes, Specify as Noted
Wool or felt plant				<i>Location</i>
Tannery or rendering plant				<i>Location</i>
Veterinary medicine				<i>Animal species and location</i>
Medical research				<i>Animal species and location</i>
Animal research				<i>Animal species and location</i>
Microbiology laboratory				<i>Location</i>
Dairy				<i>Animal species and location</i>
Slaughterhouse				<i>Animal species and location</i>
Animal farm / ranch				<i>Animal species and location</i>
Live in household with person occupationally related to above				<i>Occupation</i>

Other (specify exposure and geographic location)

TRAVEL HISTORY (INCUBATION PERIOD IS 2 MONTHS PRIOR TO ILLNESS ONSET)

Did patient travel **outside county of residence** during the **incubation period**? *If Yes, specify all locations and dates below.*
Yes No Unk

TRAVEL HISTORY - DETAILS

Location (city, county, state, country)	Date Travel Started (mm/dd/yyyy)	Date Travel Ended (mm/dd/yyyy)

ILL CONTACTS

Any contacts with similar illness (including household contacts)? *If Yes, specify details below.*
Yes No Unk

ILL CONTACTS - DETAILS

Name 1	Age	Gender	Telephone Number	Type of Contact / Relationship	Date of Contact (mm/dd/yyyy)
	Street Address			Exposure Event	Illness Onset Date (mm/dd/yyyy)
	City	State	Zip Code	Date First Reported to Public Health (mm/dd/yyyy)	

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First three letters of patient's last name:

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ILL CONTACTS - DETAILS (continued)					
<i>Name 2</i>	<i>Age</i>	<i>Gender</i>	<i>Telephone Number</i>	<i>Type of Contact / Relationship</i>	<i>Date of Contact (mm/dd/yyyy)</i>
<i>Street Address</i>			<i>Exposure Event</i>	<i>Illness Onset Date (mm/dd/yyyy)</i>	
<i>City</i>		<i>State</i>	<i>Zip Code</i>	<i>Date First Reported to Public Health (mm/dd/yyyy)</i>	
NOTES / REMARKS					
REPORTING AGENCY					
<i>Investigator Name</i>	<i>Local Health Jurisdiction</i>	<i>Telephone Number</i>		<i>Date (mm/dd/yyyy)</i>	
<i>First Reported By</i> <input type="checkbox"/> Clinician <input type="checkbox"/> Laboratory <input type="checkbox"/> Other (specify): _____					
EPIDEMIOLOGICAL LINKAGE					
<i>Epi-linked to known case?</i> <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unk	<i>Contact Name / Case Number</i>				
DISEASE CASE CLASSIFICATION					
<i>Disease Type (see case definition on page 7)</i> <input type="checkbox"/> Confirmed acute <input type="checkbox"/> Probable acute <input type="checkbox"/> Confirmed chronic <input type="checkbox"/> Probable chronic					
OUTBREAK					
<i>Part of known outbreak?</i> <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unk	<i>If Yes, extent of outbreak:</i> <input type="checkbox"/> One CA jurisdiction <input type="checkbox"/> Multiple CA jurisdictions <input type="checkbox"/> Multistate <input type="checkbox"/> International <input type="checkbox"/> Unk <input type="checkbox"/> Other (specify): _____				
<i>Mode of Transmission</i> <input type="checkbox"/> Point source <input type="checkbox"/> Person-to-person <input type="checkbox"/> Unk <input type="checkbox"/> Other: _____			<i>Vehicle of Outbreak</i>	<i>Pattern 1 ID number</i>	<i>Pattern 2 ID number</i>
STATE USE ONLY					
<i>State Case Classification</i> <input type="checkbox"/> Confirmed acute <input type="checkbox"/> Probable acute <input type="checkbox"/> Confirmed chronic <input type="checkbox"/> Probable chronic <input type="checkbox"/> Not a case <input type="checkbox"/> Need additional information					

CASE DEFINITION**Q FEVER (2010)****CLINICAL PRESENTATION****ACUTE INFECTION**

Acute fever usually accompanied by rigors, myalgia, malaise, and a severe retrobulbar headache. Fatigue, night-sweats, dyspnea, confusion, nausea, diarrhea, abdominal pain, vomiting, non-productive cough, and chest pain have also been reported. Severe disease can include acute hepatitis, atypical pneumonia with abnormal radiograph, and meningoencephalitis. Pregnant women are at risk for fetal death and abortion. Clinical laboratory findings may include elevated liver enzyme levels, leukocytosis, and thrombocytopenia. Asymptomatic infections may also occur.

Note: Serologic profiles of pregnant women infected with acute Q fever during gestation may progress frequently and rapidly to those characteristic of chronic infection.

CHRONIC INFECTION

Infection that persists for more than 6 months. Potentially fatal endocarditis may evolve months to years after acute infection, particularly in persons with underlying valvular disease. Infections of aneurysms and vascular prostheses have been reported. Immunocompromised individuals are particularly susceptible. Rare cases of chronic hepatitis without endocarditis, osteomyelitis, osteoarthritis, and pneumonitis have been described.

CLINICAL EVIDENCE**ACUTE Q FEVER**

Acute fever and one or more of the following: rigors, severe retrobulbar headache, acute hepatitis, pneumonia, or elevated liver enzyme levels.

CHRONIC Q FEVER

Newly recognized, culture-negative endocarditis, particularly in a patient with previous valvulopathy or compromised immune system, suspected infection of a vascular aneurysm or vascular prosthesis, or chronic hepatitis, osteomyelitis, osteoarthritis, or pneumonitis in the absence of other known etiology.

ACUTE Q FEVER LABORATORY EVIDENCE**LABORATORY CONFIRMED**

- Serological evidence of a fourfold change in immunoglobulin G (IgG)-specific antibody titer to *C. burnetii* phase II antigen by indirect immunofluorescence assay (IFA) between paired serum samples (CDC suggests one taken during the first week of illness and a second 3-6 weeks later, antibody titers to phase I antigen may be elevated or rise as well), or
- Detection of *C. burnetii* DNA in a clinical specimen via amplification of a specific target by polymerase chain reaction (PCR) assay, or
- Demonstration of *C. burnetii* antigen in a clinical specimen by immunohistochemical methods (IHC), or
- Isolation of *C. burnetii* from a clinical specimen by culture.

LABORATORY SUPPORTIVE

- Has a single supportive IFA IgG titer of $\geq 1:128$ to phase II antigen (phase I titers may be elevated as well).
- Has serologic evidence of elevated phase II IgG or IgM antibody reactive with *C. burnetii* antigen by enzyme-linked immunosorbent assay (ELISA), dot-ELISA, or latex agglutination.

Note: For acute testing, CDC uses in-house IFA IgG testing (cutoff of $\geq 1:128$), preferring simultaneous testing of paired specimens, and does not use IgM results for routine diagnostic testing.

CHRONIC Q FEVER LABORATORY EVIDENCE**LABORATORY CONFIRMED**

- Serological evidence of IgG antibody to *C. burnetii* phase I antigen $\geq 1:800$ by IFA (while phase II IgG titer will be elevated as well; phase I titer is higher than the phase II titer), or
- Detection of *C. burnetii* DNA in a clinical specimen via amplification of a specific target by PCR assay, or
- Demonstration of *C. burnetii* antigen in a clinical specimen by IHC, or
- Isolation of *C. burnetii* from a clinical specimen by culture.

LABORATORY SUPPORTIVE

- Has an antibody titer to *C. burnetii* phase I IgG antigen $\geq 1:128$ and $< 1:800$ by IFA.

Note: Samples from suspected chronic patients should be evaluated for IgG titers to both phase I and phase II antigens. Current commercially available ELISA tests (which test only for phase II) are not quantitative, cannot be used to evaluate changes in antibody titer, and hence are not useful for serological confirmation. IgM tests are not strongly supported for use in serodiagnosis of acute disease, as the response may not be specific for the agent (resulting in false positives) and the IgM response may be persistent. Complement fixation (CF) tests and other older test methods are neither readily available nor commonly used.

Serologic test results must be interpreted with caution, because baseline antibodies acquired as a result of historical exposure to Q fever may exist, especially in rural and farming areas.

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CASE DEFINITION (continued)**EXPOSURE**

Exposure is usually via aerosol, is broadly interpreted, and may be unknown (especially for chronic infection), but often includes the presence of goats, sheep, or other livestock, especially during periods of parturition. Direct contact with animals is not required, and variable incubation periods may be dose dependent.

CASE CLASSIFICATION

- **Confirmed Acute Q Fever:** A laboratory confirmed case that either meets clinical case criteria or is epidemiologically linked to a lab confirmed case.
- **Probable Acute Q Fever:** A clinically compatible case of acute illness (meets clinical evidence criteria for acute Q fever illness) that has laboratory supportive results for past or present acute disease (antibody to Phase II antigen) but is not laboratory confirmed.
- **Confirmed Chronic Q Fever:** A clinically compatible case of chronic illness (meets clinical evidence criteria for chronic Q fever) that is laboratory confirmed for chronic infection.
- **Probable Chronic Q Fever:** A clinically compatible case of chronic illness (meets clinical evidence criteria for chronic Q fever) that has laboratory supportive results for past or present chronic infection (antibody to Phase I antigen).

RACE DESCRIPTIONS	
Race	Description
American Indian or Alaska Native	Patient has origins in any of the original peoples of North and South America (including Central America).
Asian	Patient has origins in any of the original peoples of the Far East, Southeast Asia, or the Indian subcontinent (e.g., including Bangladesh, Cambodia, China, India, Indonesia, Japan, Korea, Malaysia, Nepal, Pakistan, the Philippine Islands, Thailand, and Vietnam).
Black or African American	Patient has origins in any of the black racial groups of Africa.
Native Hawaiian or Other Pacific Islander	Patient has origins in any of the original peoples of Hawaii, Guam, American Samoa, or other Pacific Islands.
White	Patient has origins in any of the original peoples of Europe, the Middle East, or North Africa.
OCCUPATION SETTING	
<ul style="list-style-type: none"> • Childcare/Preschool • Correctional Facility • Drug Treatment Center • Food Service • Health Care - Acute Care Facility • Health Care - Long Term Care Facility • Health Care - Other 	<ul style="list-style-type: none"> • Homeless Shelter • Laboratory • Military Facility • Other Residential Facility • Place of Worship • School • Other
OCCUPATION	
<ul style="list-style-type: none"> • Adult film actor/actress • Agriculture - farmworker or laborer (crop, nursery, or greenhouse) • Agriculture - field worker • Agriculture - migratory/seasonal worker • Agriculture - other/unknown • Animal - animal control worker • Animal - farm worker or laborer (farm or ranch animals) • Animal - veterinarian or other animal health practitioner • Animal - other/unknown • Clerical, office, or sales worker • Correctional facility - employee • Correctional facility - inmate • Craftsman, foreman, or operative • Daycare or child care attendee • Daycare or child care worker • Dentist or other dental health worker • Drug dealer • Fire fighting or prevention worker • Flight attendant • Food service - cook or food preparation worker • Food service - host or hostess • Food service - server • Food service - other/unknown • Homemaker • Laboratory technologist or technician • Laborer - private household or unskilled worker • Manager, official, or proprietor • Manicurist or pedicurist • Medical - emergency medical technician or paramedic • Medical - health care worker 	<ul style="list-style-type: none"> • Medical - medical assistant • Medical - pharmacist • Medical - physician assistant or nurse practitioner • Medical - physician or surgeon • Medical - nurse • Medical - other/unknown • Military • Police officer • Professional, technical, or related profession • Retired • Sex worker • Stay at home parent/guardian • Student - preschool or kindergarten • Student - elementary or middle school • Student - high school • Student - college or university • Student - other/unknown • Teacher/employee - preschool or kindergarten • Teacher/employee - elementary or middle school • Teacher/employee - high school • Teacher/instructor/employee - college or university • Teacher/instructor/employee - other/unknown • Unemployed - seeking employment • Unemployed - not seeking employment • Unemployed - other/unknown • Volunteer • Other • Refused • Unknown