<table>
<thead>
<tr>
<th>Event Name:</th>
<th>QF</th>
</tr>
</thead>
<tbody>
<tr>
<td>Event Time Period:</td>
<td>Lifelong immunity</td>
</tr>
</tbody>
</table>
| Clinical Description (CSTE 2009): | **Acute infection:** Clinical evidence of acute infection includes acute fever and one or more of the following: rigors, severe retrobulbar headache, acute hepatitis, pneumonia, or elevated liver enzyme levels. Fatigue, night-sweats, dyspnea, confusion, nausea, diarrhea, abdominal pain, vomiting, non-productive cough, and chest pain have also been reported. Severe disease can also include meningoencephalitis. Pregnant women are at risk for fetal death and abortion. Clinical laboratory findings may include 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:** Clinical evidence of chronic infection is considered: 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; chronic hepatitis; osteomyelitis; osteoarthritis; or pneumonitis; in the absence of other known etiology and that has persisted for at least 6 months. Potentially fatal endocarditis may evolve months to years after acute infection, particularly in persons with underlying valvular disease. Immunocompromised individuals are particularly susceptible. Rare cases of chronic hepatitis without endocarditis, osteomyelitis, osteoarthritis, and pneumonitis have been described. |

| CSTE Event Classification, ACUTE (2009): | **Confirmed** | A clinically compatible case with the following laboratory evidence OR an individual with the following laboratory evidence who is epidemiologically linked to a confirmed case:  

- serological evidence of a four-fold or greater change in immunoglobulin G (IgG)-specific antibody to *C. burnetii* phase II antigen by IFA between paired serum samples (CDC suggests one taken during the first week of illness and a second 3-6 weeks later), **OR**  

- detection of *C. burnetii* DNA in a clinical specimen via 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. |
|   | **Probable** | A clinically compatible case with either:  

- a single supportive IFA IgG titer of ≥ 1:128 to phase II antigen, **OR**  

- 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. |

* For acute testing, CDC uses in-house IFA IgG testing (cutoff of ≥1:128), preferring simultaneous testing of paired specimens, and does not use IgM results for routine diagnostic testing.
<table>
<thead>
<tr>
<th><strong>Q FEVER (continued)</strong></th>
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<tbody>
<tr>
<td><strong>CSTE Event Classification, CHRONIC (2009):</strong> **</td>
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<tr>
<td><strong>Confirmed</strong></td>
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<tr>
<td><strong>Probable</strong></td>
</tr>
<tr>
<td><strong>Massachusetts Event Classification (2015):</strong></td>
</tr>
</tbody>
</table>

** Samples from suspected chronic patients should be evaluated for IgG titers to both phase I and 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; baseline antibodies acquired as a result of historical exposure to Q fever may exist, especially in rural and farming areas.
## Q Fever (continued)

<table>
<thead>
<tr>
<th>Report Type</th>
<th>Test Type</th>
<th>Source</th>
<th>Result</th>
<th>New event or beyond report period?</th>
<th>Data Entry</th>
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<tbody>
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<td>New event SUSPECT</td>
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<td></td>
<td></td>
<td>No</td>
<td>Same event</td>
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