

Q Fever

Q Fever is an illness caused by bacteria called *Coxiella burnetii*. The main carriers of the disease are farm animals such as cattle, sheep and goats. In rural areas, kangaroos can also be carriers. A wide range of other animals can be infected including camels, llamas, alpacas, rodents, cats, dogs, birds, wallabies and other marsupials. The bacteria can survive harsh conditions and remain in the environment for long periods of time, so hay, dust and other small particles may also carry the bacteria.

Signs and Symptoms:

Many infected people have no or few symptoms. Those who become ill typically get high fever, chills, headache, extreme fatigue, muscle and joint pain and severe sweats. Some people have substantial weight loss. Symptoms usually persist for between two and six weeks.

Treatment:

If given early, antibiotics can reduce the time for which people have Q Fever. Some people require admission to hospital. Chronic disease may require more than a year of antibiotics.

Transmission:

Humans usually become infected through breathing in small particles with bacteria from animal body fluids such as blood, urine, faeces and birthing fluids. Handling birthing products and slaughtering animals are particularly high risk activities.

Prevention:

People who work with animals or materials that may carry the Q Fever bacteria should use appropriate protective equipment and be aware of measures required to stop the spread of the bacteria including:

- washing hands and arms thoroughly in soapy water after handling animals or carcasses
- washing animal urine, faeces, blood and other body fluids from the work site and equipment, and disinfecting equipment and surfaces where practicable
- minimising dust and rodents in slaughter and animal housing areas
- keeping yard facilities for sheep and cattle well away from domestic living areas
- removing protective and/or other clothing that may carry the bacteria before returning to the home environment
- properly disposing of animal tissues including birthing products through incineration or burial under a half to one metre of soil.

Unpasteurised milk should not be consumed.

An Australian Q Fever vaccine is available and recommended for people who work regularly with or are at risk of exposure from potentially infectious animals or materials. This includes abattoir workers, farmers, shearers, veterinary professionals, agricultural college staff and students, kangaroo shooters, tanners, tradesmen who visit abattoirs, laundry staff who clean clothing from abattoirs, and many others.

Workplaces where transmission of Q Fever is a recognized risk should have a vaccination program. Ideally, people commencing work in a high risk environment should obtain vaccination at least 15 days before starting work. Before vaccination, people must have skin and blood tests to check if they have previously been infected with Q Fever. This requires two visits to an accredited Q Fever provider, one week apart. If either of these tests are positive, you do not need to be immunised, as you already have immunity against the disease. Q Fever vaccine should only be administered by specially trained immunisation service providers listed on the Australian Q Fever Register. With a person's consent, this register records each Q Fever vaccination given.

Q Fever vaccine should not be given to:

- people who have previously had Q Fever
- people who are shown to be immune to the disease on their skin or blood tests
- people who have previously been immunised against Q Fever
- people with known hypersensitivity to egg proteins
- pregnant women
- anyone under 15 years.

Like all medications, vaccines may have side effects. Most side effects are minor, last a short time and do not lead to any long-term problems. Common side effects of the Q Fever vaccine may include redness and soreness where the injection is given. Other possible side effects are mild influenza-like symptoms such as headache, fever, chills and minor sweating. More serious side effects are rare and can include a severe local reaction at the injection site which can develop into an abscess. Severe reactions are mostly seen in people who have been previously infected or previously vaccinated with Q Fever. Pre-screening is designed to prevent this situation. Contact your immunisation provider or seek medical advice immediately if you have a reaction following vaccination which you consider serious or unexpected.

Health outcome:

Most people make a full recovery from Q Fever. However, in about 10 to 20% of people, chronic fatigue (post Q Fever fatigue syndrome) is still present after 12 months, affecting an individual's ability to work at full capacity. Occasionally, people develop chronic Q Fever disease which usually affects the heart (endocarditis). Individuals with heart conditions are particularly at risk of heart complications from Q Fever.

Other resources:

- [Australian Q Fever Register \(https://www.qfever.org/\)](https://www.qfever.org/) - general information about the disease, vaccination service providers and a register of Q Fever immune status of individuals
- [Queensland Health Q Fever guidelines \(https://www.health.qld.gov.au/cdcg/index/qfever\)](https://www.health.qld.gov.au/cdcg/index/qfever) for public health units
- 13 HEALTH (call 13 43 25 84)
- Immunise Australia (call 1800 671 811)

Related Content

- [Having a vaccination what to expect fact sheet \(http://conditions.health.qld.gov.au/HealthCondition/condition/14/119/70/Having-a-vaccination-what-to-expect\)](http://conditions.health.qld.gov.au/HealthCondition/condition/14/119/70/Having-a-vaccination-what-to-expect)

Help and assistance:

If you work with potentially infectious animals or materials, check with your employer to see if they have a Q Fever vaccination program. People requiring Q Fever immunisation will need to purchase the vaccine unless it is provided by their employer. To find out where you can be immunised against Q Fever, check providers listed on the [Australian Q Fever register \(http://www.qfever.org/\)](http://www.qfever.org/). For further assistance, please contact your doctor or nearest [public health unit \(https://www.health.qld.gov.au/system-governance/contact-us/contact/public-health-units\)](https://www.health.qld.gov.au/system-governance/contact-us/contact/public-health-units).

References

Heymann, D., ed. 2008. Control of Communicable Diseases Manual, 19th edition. Washington, DC: American Public Health Association.

Australian Government, 2013. The Australian Immunisation Handbook, 10th Ed.

Health Insite:

[Q fever](https://www.healthdirect.gov.au/q-fever) (<https://www.healthdirect.gov.au/q-fever>)