



Victorian Farmers Federation Livestock Group

Livestock Factsheet

» Q Fever

What is Q Fever?

Q fever is a flu-like disease carried by cattle, sheep and goats. The disease is also carried by various feral animals such as bandicoots and rodents. The causative bacterium, *Coxiella burnetii*, rarely causes clinical disease in livestock. Q fever is a zoonotic disease, meaning it is transmissible to humans.

Q fever is not a notifiable animal disease in Australia. However, it is a notifiable disease in humans.

How is it spread?

The bacterium is shed in the milk, faeces and urine of infected animals. The most potent source of the disease is spread in the foetus, placenta and birth fluids. The organism is able to persist in drying conditions, surviving in dust particles and dry faeces for months. Ticks may act as a spread method between livestock. Humans can become infected with Q fever by a number of ways, including:

- Ingestion of infected dust particles.
- Contact with infected animal waste products.
- Contact with soiled straw, wool or hair.
- Handling of infective placental tissue such as afterbirth.
- Consuming un-pasteurised milk

Who is at risk?

Although most Q fever cases have been known to occur in Queensland and New South Wales, the disease still occurs in Victoria. Introducing stock from interstate properties may increase the Q fever risk to your property and health. People who work with livestock have the greatest risk of contracting the disease. People most at risk include:

- Farmers
- Abattoir workers
- Meat Inspectors
- Veterinarians
- Livestock carriers
- Animal handlers

Clinical Signs

Although the disease is carried in animals, clinical signs are rarely observed in livestock. In some cases abortions in sheep and goats and occasionally cattle can occur as a result of Q fever. Humans infected with the disease generally exhibit 'flu-like' symptoms such as:

- Fever, which can last for extended periods of time.

- Chills, usually lasting 3-4 days.
- Severe headaches
- Muscle and joint pain
- Nausea and vomiting
- Diarrhoea
- Aversion to light
- Overwhelming fatigue
- Weight loss
- Endocarditis (inflammation of the heart valve) as a result of acute infection. This usually occurs in people with a pre-existing heart condition.

Q fever infection generally lasts around 2-6 weeks. In some cases serious infection can lead to prolonged affects, known as chronic Q fever. These affects can last for years, often impacting an individual's ability to work or undertake normal everyday tasks. On-going symptoms as a result of chronic Q fever include:

- Fatigue
- Muscle pain
- Intense headaches
- Fever
- Depression

Treatment

While Q fever, can severely impact human health, treatment and control strategies for livestock are rarely required. Q fever in humans is diagnosed by a blood test and is treated with appropriate antibiotics prescribed by a medical professional. Q fever symptoms, such as endocarditis will require further medical attention and possibly hospitalisation.

If you display flu-like symptoms and believe you have been in contact with infected stock, seek medical advice. When seeking medical attention, be sure to clearly state that you may have been in contact with livestock infected with Q fever. The disease is often misdiagnosed due to the similarity of symptoms with other illnesses.

Can you develop immunity?

Immunity against the disease can be achieved if you have:

- received the Q fever vaccination
- a blood test confirming you are immune, or
- have previously been infected with Q fever (confirmed by a doctor).

The Q fever vaccine is highly recommended for people working in the livestock industry. Before vaccination, you will need to have a skin and blood test to determine if you have previously been infected with the disease. You may have been unknowingly infected previously with a mild strain of the disease, which was not confirmed by a doctor as Q fever. If you have previously been infected with the disease, vaccination is unnecessary.

When you receive the vaccination you have the option to be on the Australian Q Fever Register. The register is a database storing information about the Q fever immune status of individuals. The register is voluntary and allows employers to quickly determine if you are protected against the disease before commencing work. This can save you the costs and inconvenience of unnecessary testing and safety against revaccination. If a person is already immune and is unnecessarily vaccinated this can cause some undesirable reactions.

To arrange for a Q fever vaccination contact your doctor or to apply for the Australian Q Fever Register contact 1300 733 837.



Prevention

Hygienic practices should always be part of on-farm safety precautions. However, people who work with animals that may be at risk of becoming infected with Q fever should carry out stringent hygienic practices, such as:

- Thoroughly washing hands and arms after handling animals, carcasses, birth material and contaminated feedstuff.
- Protection against inhalation of infective dust particles and covering any cuts or abrasions to prevent infectious fluids entering the body.
- Burning or burying infected birth material.
- Boiling milk before consumption.
- Consider receiving the Q fever vaccine as a preventative measure.

For further information, please contact the VFF Livestock Group on 1300 882 833 or by email to Jacinta Pretty at jpretty@vff.org.au

Further Links

Australian Q Fever Register

<http://www.qfever.org/downloads/FactSheet.PDF>

Q Fever Vaccine Providers in Victoria

<http://www.qfever.org/querylist.php>

Department of Health Victoria

<http://ideas.health.vic.gov.au/bluebook/qfever.asp>

Department of Primary Industries Queensland

http://www.daff.qld.gov.au/4790_11469.htm

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Take Home Messages

- Q fever is a flu-like disease carried by cattle, sheep and goats and is transmissible to humans.
- The bacterium is shed in the milk, faeces and urine, foetus, placenta and birth fluids of infected animals.
- Humans infected with the disease generally exhibit 'flu-like' symptoms.
- Vaccination is highly recommended for people working in the livestock industry.



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