NSW Health

Q fever and farms



Q fever is a disease that is spread to humans from animals, mainly infected cattle, sheep, goats. It can cause a severe flu-like illness. People who live, work on or visit a livestock farm are at risk. Vaccination of people is the best way to prevent infection. Everyone living or working on a livestock farm should talk to their doctor about Q fever vaccination. There are also practices on the farm that can reduce the risk of infection.

What is Q fever?

Q fever is a disease caused by bacteria that are spread to humans from animals. Infection can cause severe illness and for some people, Q fever can affect their health and ability to work for many years. Q fever is commonly found in livestock (cattle, sheep and goats) in Australia but other animals including domestic and feral dogs and cats, feral pigs, horses, rabbits, rodents, alpacas, camels, llamas, foxes, Australian native wildlife (notably kangaroos, wallabies and bandicoots), some birds and several species of ticks can also spread the bacteria to humans.

Who is at risk of getting Q fever on a farm?

Anyone who works or lives on a livestock farm is at risk of infection. In NSW, most Q fever infections occur in farmers. Infections have also been reported in other agriculture-related occupations including shearers, stockyard workers and livestock transporters. People who live on/near or visit (including tradespeople, fencers, labour hire workers and guests) a livestock farm are also at risk even if they do not handle animals.

How is Q fever spread on farms?

The bacteria are found in the placenta (afterbirth) and birth fluids (in very high numbers), urine, faeces, milk and blood of infected animals. The bacteria can spread to contaminate animal products, materials, air, soil and dust. The bacteria can survive in the soil and dust for years and can be spread over several kilometres by the wind.

On a farm, you can get infected with Q fever by:

- breathing in the bacteria that are in the air or dust:
 - while birthing, slaughtering or butchering animals (especially cattle, sheep and goats). These activities carry the highest risk of getting infected.
 - when handling infected animals, animal products or materials such as wool, hides, straw, manure fertiliser and clothing (e.g. clothing worn when birthing animals)
 - while mustering, shearing or transporting animals
 - while mowing areas contaminated with infected animal excretions
 - when working or living on or visiting a farm
- direct contact with infected animal tissue or fluids on broken skin (e.g. cuts or needlestick injuries when working with infected animals)
- drinking unpasteurised milk from infected cows, sheep and goats.



How do I protect myself?

Vaccination

The Q fever vaccine is the most effective way to prevent infection and is recommended for anyone working or living on a farm aged 15 years and older.

Other precautions

If you are not protected against Q fever (by vaccination or past infection) you should:

- avoid high-risk activities such as birthing, butchering or slaughtering cattle, sheep or goats or any other activity that puts you in contact with their birth products (e.g. handling newborns)
- wear personal protective clothing (e.g. coveralls, gloves and boots) and a properly fitted P2 mask (available from pharmacies and hardware stores)
- cover cuts and wounds with waterproof bandages when handling animal products, waste, placentas and aborted foetuses
- wear a properly fitted P2 mask when mowing areas contaminated with animal faeces
- wash your hands and arms thoroughly in soapy water after handling animals, animal products and potentially contaminated materials
- Do not eat, drink or smoke while handling animals or in animal processing areas.
- avoid handling or washing clothing, boots or equipment used during high-risk activities

How can I protect people in my household?

Encourage your household to get the Q fever vaccine. To protect those who are not immune you should:

- wash your hands and arms thoroughly in soapy water before returning home from the farm
- remove and wash dirty clothing, coveralls, boots and equipment in outdoor wash areas
- avoid taking dirty clothing, coveralls, boots or equipment home from the farm where possible. If you do take clothing home, bag and wash it separately (only handle if immune to Q fever)

Can I make my farm safer?

Employers such as farm owners have obligations under work health and safety legislation to protect farm workers.

All farm workers should be offered the Q fever vaccine. However, some individuals (such those who cannot be vaccinated or unvaccinated irregular visitors) may not be protected against Q fever infection.

The following measures can reduce the risk of Q fever exposure on the farm but are not a substitute for vaccination.

Farm design:

- Situate yard facilities for ruminants well away from residential domestic living areas, where possible
- Designate high-risk areas on the farm/property (e.g. animal housing areas, kill floors, yards and pens – particularly those where birthing occurs) where non-immune people are not allowed to enter
- When purchasing new equipment or structures, make sure it is designed to be easily cleaned
- Minimise dust and aerosols in animal housing, shearing and slaughter areas where possible. In intensive farms, this may require installation of ventilation or dust suppression systems.
- Provide washing and changing facilities in high-risk work areas to avoid cross-contamination

Farm practices:

- Wash animal urine, faeces, blood and other body fluids from work areas and disinfect equipment and surfaces where practicable.
- <u>Dispose</u> or decompose of animal carcasses and products appropriately, or call your local council for advice specific to your circumstance and location.
- Where possible, prevent animals from eating placental tissue. Avoid using animal placental tissue in compost.
- Be aware that animal manure can contain Q fever bacteria and handle cautiously e.g. delay the removal of manure for at least one month after the birthing season; compost manure (or alternatively store manure for three months) prior to spreading on farm land for fertilizer.
- Cover manure during storage and transport, and under-plough immediately (only by someone immune to Q fever) when spread on farm land.
- Provide information, instruction and training for workers including Q fever symptoms and treatment, and the control measures to prevent exposure. This includes supplying personal protective equipment (PPE) and instructions on how to use PPE correctly.

What are the symptoms?

Q fever usually causes a flu-like illness which can be severe. If you experience high fevers and chills, severe 'drenching' sweats, painful headaches or extreme tiredness you should see a doctor as soon as sickness begins and let them know if you have recently been on a livestock farm. Early treatment with antibiotics can get you better sooner and reduce your chance of longterm complications.

If you are diagnosed by your doctor with Q fever, you should tell your employer. They are required to provide a safe workplace, which includes controlling the risk of Q fever exposure. They must notify **SafeWork NSW** about Q fever infections in workers which may have been acquired in their workplace.

How do I know if animals are infected?

Animals that are infected usually do not appear to be sick. Rarely, Q fever infection in animals can cause abortions (particularly in goats), stillbirth, infertility, or pneumonia. A sharp increase in the number of abortions in your animals may be a sign that Q fever is on your farm. Contact your vet if your flock or herd is experiencing fertility problems.

Further information

See related factsheets **Q fever**, **Q fever** vaccination, and **Q fever for veterinary staff**.

For further information on managing Q fever exposure in the workplace including employer responsibilities see the SafeWork NSW **Q fever** guidance or contact **SafeWork NSW** on 13 10 50.

For further information please call your local public health unit on **1300 066 055**.

