Factsheet

Occupational Lung Disease – Q fever

safe work australia

Occupational lung diseases are conditions of the respiratory system caused by workplace exposure to dusts, gases, fumes, vapours, mists and microorganisms.

What is Q fever?

Q fever is a disease caused by the bacteria Coxiella burnetii. The bacteria can infect domestic and wild animals and can also be found in animal birth products, urine, and faeces of infected animals.

The bacteria can survive in the environment for long periods of time.

What causes Q fever?

Workers can develop Q fever by breathing in the Coxiella burnetii bacteria that is in the air or dust when they work around infected domestic and wild animals. Cattle, sheep and goats are the main sources of infection; however, a wide range of animals including domestic and feral dogs and cats, pigs, horses, rabbits, rodents, alpacas, camels, llamas, foxes and native Australian wildlife can spread the bacteria to humans.

Who is at risk of Q fever?

A wide range of workers may be exposed to Q fever such as livestock and dairy farmers and farm workers, abattoir and meat workers, shearers and wool classers, veterinarians and veterinary nurses, and animal breeders.

Workers may be at risk of Q fever if they:

- have contact with faeces, urine or birth products from infected animals
- breathe in air or dust from infected animals or contaminated materials
- have contact with contaminated wool or hides, or while slaughtering infected animals

What are the symptoms of Q fever?

The symptoms of Q fever vary and range from mild symptoms to a severe flu-like illness. Symptoms begin about 2-3 weeks after coming into contact with the bacteria. People may also develop:

- hepatitis (inflammation of the liver)
- pneumonia (lung infection)
- chronic infections such as endocarditis (inflammation of the lining of the heart)
- chronic-fatigue syndrome.

Infection during pregnancy may cause miscarriage or the baby being born prematurely.

What you should do as a PCBU?

PCBUs must eliminate the risks of Q fever or if this is not reasonably practicable, minimise the risks so far as is reasonably practicable.

The Q-vax vaccination provides a high level of protection against Q fever. It is recommended that workers at risk of contracting Q fever are immunised. PCBUs should provide workers at risk of infection with access to Q fever vaccination.

Note: before getting the vaccination, people must be tested to ensure they are not already immune to Q fever to avoid a reaction to the vaccination.

For those who are not immune (through vaccination or past infection), the following measures can reduce the risk of infection:

- wash hands and arms thoroughly in soapy water after any contact with animals
- wear a properly fitted P2 mask (available from pharmacies and hardware stores) and gloves and cover wounds with waterproof dressings when handling or disposing of animal products, waste, placentas, and aborted foetuses. This should not be considered a substitute for Q fever vaccination.
- wear a properly fitted P2 mask when working with dust containing animal products
- wash animal urine, faeces, blood and other body fluids from equipment and surfaces where possible
- remove and wash dirty clothing, coveralls and boots worn during high-risk activities on site. Avoid taking these items home to reduce the risk of infection to your household. If you do take them home, bag and wash them separately (should only be handled by those immune to Q fever).

Further information:

Under the model WHS Regulations, PCBUs have specific duties to eliminate the risks to health and safety so far as is reasonably practicable. If it is not reasonably practicable to do so, PCBUs must minimise those risks so far as is reasonably practicable. This includes the risks of contracting diseases caused by microorganisms, including the bacteria that causes Q fever. Contact your WHS regulator to find out the laws that apply in your state or territory.

References:

https://www.health.nsw.gov.au/Infectious/factsheets/Pages/q-fever.aspx

https://www.betterhealth.vic.gov.au/health/conditionsandtreatments/q-fever