	Engineering Guidance Paper	Document AITA-15-0015	Page 1/1
	Health and Safety Guidance Note Q Fever	Rev. Date 22-Dec-2015	Rev A

What Is Q Fever?

Q fever is a bacterial disease caused by *Coxiella burnetii*. It occurs naturally in domestic and wild animals, and is deposited into the environment via their faeces, urine, and birth products. The highest source of bacteria is in birth products.

Cattle, sheep and goats are the main sources of human infection in Australia. The animals may not show symptoms of infection.

C burnetii is very tough and persists in the environment in the air, soil water and dust. It may also be spread on wool, hides, straw, clothing and packing materials. It does not survive pasteurisation temperatures.

Q Fever as an Illness

In at least half of the cases of Q fever there are no symptoms. The period from exposure to the onset of symptoms is usually 2 - 3 1/2 weeks but there is a wide range around this.

The most common symptoms are a rapid onset of high fever, rigors, profuse sweating, extreme fatigue, muscle and joint pain, severe headache and sensitivity to light (photophobia). If left untreated the illness lasts one to three weeks and is often accompanied by significant weight loss. Time off work varies from a few days to several weeks, but if complications occur people may be ill for up to six months.

In some cases there is an infection of the heart muscle which may take some time to appear.

Infection in early pregnancy (or before conception) can reappear at the end of the pregnancy and may cause foetal damage.

In 10 – 15% of cases where the person has acute Q fever symptoms a post Q fever fatigue syndrome (QFS) can occur. This can present as muscle aches, sweating and fatigue and may persist for up to five years.

Q fever is a notifiable disease in all states and territories of Australia.


Q Fever Risk

For the FLT industry the main risk of exposure is via dust and dirt from areas where animals are concentrated – stockyards, abattoirs and warehouses that deal with the products from these animals. Truck operators and service personnel are exposed.

There is a risk for service personnel where FLTs are transported away from the work site without being adequately cleaned.

Q Fever Risk Management

Where FLTs are deployed in high risk environments there are a number of actions that can be taken to reduce the risk of contracting Q fever:

	Engineering Technical Bulletin	Document AITA-15-0015	Page 2/1
	Health and Safety Guidance Note Q Fever	Rev. Date 22-Dec-2015	Rev A

Vaccination of Exposed Personnel

All personnel working on the inspection repair or service of FLT's working in high risk environments should be vaccinated against Q fever.

- There are effective vaccines available for Q fever and the Australian Government Department of Health recommends vaccination for at risk personnel over 15 years of age.
- Vaccination is not recommended for personnel who have been previously infected or who have been previously vaccinated. (In this case there can be severe side effects to the vaccine)
- Because more than 50% of infection have no symptoms, testing for exposure is required before vaccination.
 - Testing requires both a skin and a blood test.
 - Tests need to be interpreted by experienced medical practitioners. Where they are unclear they may need to be repeated.
 - An interview to determine possible past exposure and infection is frequently carried out. It is important that personnel understand the importance of this interview and cooperate as much as possible.
- The safety of Q fever vaccine during pregnancy has not been established. Vaccination is not recommended during pregnancy or while breast feeding.
- Local tenderness and swelling at the vaccination site is common.
- It takes about 2 weeks from the time of vaccination to the development of immunity.
- Vaccination is not required for Pig abattoirs.
- Vaccinated personnel should be recorded in the Q fever register so that their immune status is recorded.

Worksite Hygiene

- Machines should be appropriately cleaned before they undergo service or repair.
- Service and repair areas must be kept clean and free of dust and dirt.
- Machines that have been used in high risk sites should undergo thorough cleaning before being brought back to central service and repair areas where they will be worked on by unvaccinated personnel. Where appropriate for the machine this cleaning should include steam cleaning to assist with pasteurising the machine.

Sources

Australian Government Department of Health – Australian Immunisation Handbook section 4.15 Q Fever. www.qfever.com.au – Q Fever Fact Sheet; Q Fever Disease and Vaccination Guide.
