What is Brucellosis

Introduction

Fiji has seen the re-emergence of brucellosis in cattle which is currently centred around the Wainivesi area in Tailevu North. This disease had been present in Fiji before and was successfully eradicated in the late 80’s. A survey to establish the extent of current spread of the disease is currently being undertaken. Public support is vital for tracebacks and quick resolution of this problem.

What is Brucellosis?

Brucellosis is a contagious disease of livestock with significant economic impact. The disease is caused by various bacteria of the genus Brucella, which tend to infect specific animal species. However, most species of Brucella are able to infect other animal species as well including Cattle, pigs, sheep, goats, dogs, horses and humans. The disease is characterised by abortions, reproductive failures or drop in production especially in dairy cows. While animals typically recover, and will be able to have live offspring following the initial abortion, they may continue to shed the bacteria. This disease is a notifiable disease in Fiji.

How is Brucellosis transmitted and spread?

Brucellosis is typically spread when an infected animal aborts or gives birth. High levels of bacteria are found in the birth fluids, afterbirths and discharges associated with an infected animal. The bacteria can survive outside the animal in the environment for several months, particularly in cool moist conditions. They remain infectious to other animals which become infected by ingesting the bacteria whilst grazing etc. The bacteria also infects the udder and can contaminate the milk. Breeding bulls can also be infected and can transmit the disease to other cows during mating. The disease can also infect animals and humans through cuts in the skin, or through mucous membranes. Humans can also be infected by consuming infected raw milk derived from infected cows. Brucellosis is an important disease in wildlife, infecting feral animals (e.g, pigs and cattle) which can act as reservoirs of the disease, thus complicating eradication efforts.

What is the associated Public Health Risk?

Brucellosis is a zoonotic disease that is highly infectious for humans causing a disease often called undulant fever. A zoonosis is an animal disease that has the potential to infect humans also. Signs and symptoms in humans include intermittent or irregular fever (undulating fever), headache, weakness, profuse sweating, chills, weight loss, muscle pains and general body aches. Infections of organs including the liver and spleen may also occur but very rarely. Veterinarians, farmers, farmhands and other abattoir and meat workers are
especially at risk to infections because of the nature of their work.

**What are the necessary steps to be taken for public safety and prevention of spread of the disease in animals?**

Human brucellosis is best prevented by controlling the infection in animals. Pasteurisation of milk from infected animals is also an important way to prevent infection in humans.

**General advice:**
1. Not to panic but cooperate with the eradication team, as we have a strategy in place to eradicate this disease as quickly as possible.

**Measure to be undertaken:**
- Identification of the disease- investigation, and testing
- Confirmation of the disease
- Quarantine of infected premises
- Test and Slaughter of infected animal
- Surveys to determine spread of disease
- Control Options- Vaccination
- Retesting of infected premises
- Declaration of freedom
- Monitoring

2. To observe hygiene rules at all the times. Basic hygienic practices such as:
   a) Washing of hands regularly with soap and water
   b) Cleaning/disinfecting boots after being on a dairy farm) Practice good personal hygiene
   c) Disinfecting vehicles and equipment after visiting infected areas/farms etc.

3. To report to a medical doctor as soon as symptoms of the disease listed above are noticed.

4. To avoid unnecessary movements within the infected area – the Red zone.

5. To refrain from moving animals from declared quarantined areas without consent from the Director of Biosecurity, or his/her delegate.

6. To avoid eating meat from carcasses slaughtered outside registered slaughter houses. If necessary, an officer from the Animal Health & Production Division could be asked to inspect and certify the meat for carcasses slaughtered outside registered slaughter houses.

7. To source their milk supply from pasteurised milk sources, or to ensure that raw milk is thoroughly boiled to over 80 degrees centigrade for 45 – 60 mins

8. Carefully dispose of any aborted materials from infected cows using gloves and necessary personal protective gear. Thoroughly wash and disinfect yourself and equipments with alcohol based disinfectants.

9. Report any abnormalities seen in animals as soon as possible to the nearest animal health clinic or to Dr. Robin Achari on 9406896 or the Ministry Help Desk on 3383583 during official working hours from 8.00 am to 4.30 pm (Mon – Thurs) and 8.00 am to 4.00 pm (Fri).

**By:**

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