Brucellosis Fact Sheet

Introduction

brucellosis is an important production disease that can cause considerable economic losses in your animals through reproductive failure. It is a disease that can be transmitted to humans (zoonosis).

What causes brucellosis?

brucellosis is an infection caused by the bacterium (germ) *Brucella.* Several different species of *Brucella* infect sheep, goats, camels, cattle and buffalo, and also infect and cause important disease in humans.

What signs are shown by animals affected by brucellosis?

- Abortions in late pregnancy are a common sign of newly infected flocks. Other signs in female animals include stillbirths, weak newborns, retained placentas, and mastitis.
- brucellosis can cause ongoing infertility too. Male goats and sheep may have swollen testicles. Occasionally infected animals will have swollen joints.
- Does and ewes usually only abort once but continue to shed bacteria – so they can infect other animals and people without showing any signs. There may be no signs, or sporadic abortions, in flocks that have been affected for some time.
- Goats become persistently infected and can shed the bacteria in their milk throughout their lifetime. Healthy asymptomatic carriers are a source of infection.

Stillborn aborted fetuses

What signs are shown of brucellosis in humans?

The initial symptoms are in the People that have caught brucellosis will have a flu-like illness. This could include high fever, headache, weakness and joint and muscle pain, and loss of weight and appetite Pregnant women and their babies are at significant risk. If left untreated, infection may cause birth defects or abortion

How do animals get brucellosis?

- Brucellosis is spread among animals by contact with the placenta, fetus, fetal fluids, and vaginal discharges from infected animals.
- The disease can also be spread by milk and semen, so once the disease is in your flock it can continue to infect.
- *Brucella* can survive a long time in dust, equipment, clothing and straw bedding that have come in contact with infected material.
- The *Brucella* organism is killed by several hours of exposure to direct sunlight.

How is brucellosis diagnosed?

- When dams abort, brucellosis should be assumed. Immediately take precautions to protect human health (see below)
- Official diagnosis can only come from laboratory testing. Specific cases can be tested by laboratory testing of milk, blood or aborted material.

What to do if you suspect your animals have brucellosis?

- Practice good infection control and hygiene: see below
- Clean up birthing material and dispose of it by burying; clean and disinfect the birthing area
- Farmers can contact livestock departments for advice and diagnosis if infection is suspected.

Treatment

- There is no practical treatment that is successful. Poor reproductive performance can cause major economic losses to farmers, so control and prevention are very important.

Infection control/hygiene

- Hygiene is important to prevent further infection in the herd and human infection.
- When dealing with infected material or assisting dams at birth cover your clothing, wear sturdy rubber or plastic gloves and scrub well with soap and water afterward.
- Clean and disinfect areas, clothing and objects that have come in contact with infected material.
- Dispose of infected material through deep burial.
- Keep sick animals away from other animals to avoid spreading the disease.
- Eating uncooked milk or meat can also cause infection in people. All milk should be heated (pasteurised) before drinking or being made into cheese/yoghurt/butter. Meat should be well cooked too.
- Women who might be pregnant should not handle animals that could have brucellosis

Prevention and biosecurity

Hygienic measures are essential to limit and control the spread of brucellosis.

- It is of great importance to use prevention measures (especially in endemic areas of brucellosis) to reduce the prevalence of the disease.
- Government vets may carry out livestock testing from time to time to check for brucellosis
- Vaccination is the tool of choice to reduce and prevent brucellosis
    - It should not be used in pregnant animals
    - The common brucellosis vaccines are dangerous to people: great care must be taken to avoid exposure or accidental self-injection with the vaccine

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