



Kenya Climate Smart
Agriculture Project

CONTROL OF BRUCELLOSIS TO PREVENT ABORTION IN LIVESTOCK



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What is brucellosis?

Brucellosis is an infectious disease that affects humans and animals. It is caused by germs (bacterium) known as *Brucella*. These are microscopic, round or rod-shaped organisms found mainly in the reproductive organs of animals causing abortions and sterility. They are secreted in large amounts in the animals' urine, milk and foetal/placental fluids. The disease is also referred to as contagious abortion (in animals), undulant fever, Malta fever or 'ugonjwa wa maziwa' (in humans). Brucellosis attack nearly all animals, particularly cattle, goats, camel and swine.

The disease manifests itself as late term abortions, retained after-births, swollen testicles and infertility. The germs are transmitted from animals to humans by ingestion of infected animal food products, direct contacts with infected animals or inhalation of contaminated aerosols.

Causes of brucellosis in different animal species

The disease is caused by a group of bacteria known scientifically as the genus *Brucella*. Bacteria are shed in milk or via the aborted fetus, afterbirth, or other reproductive tract discharges since the disease primarily localizes in the reproductive organs and/or the udder. Three species of *Brucella* cause the disease of most concern.

1. Cattle – *Brucella abortus*.
2. Goats – *Brucella melitensis*.
3. Pig – *Brucella suis*.

How do animals get infected?

- By ingesting contaminated feed and water or by licking genitals of infected animals
- Through mucous membranes of the third eyelid, wounds or even intact skin
- Venereal transmission but is rare.

How would I know an animal has the disease?

- Late term abortion is the main sign.
- Stillbirths, retained afterbirth.
- Reduced milk production.
- Testes become swollen and may later shrink leading to infertility.
- Infertility in females (dirty discharge from the vulva lips, repeat breeding).

Is there a cure for infected animals?

- No known effective cure
- Prevention is the better option.

What preventative measures do I need to take?

- Source animals from brucellosis free herds.
- Animals should be screened regularly.



Confirmatory diagnosis in laboratory

- Breeding stock should be screened every six months.
- Animals proved positive should be slaughtered under the supervision of veterinary authority.
- Use Artificial Insemination (A.I) services.
- Quarantine newly acquired animals for 30 days and should be retested before they join the herd.

In humans, who is likely to get infected?

- Animal health service providers



- Laboratory workers



- Slaughterhouse workers



- Animal transporters and others who directly work with animals



How do I get infected?

Human to human transmission is rare; mostly the disease is derived from infected animals through:

- Splashes or aerosols of infectious material into eyes, nose and mouth.
- Inhaling infectious materials.
- Consuming contaminated un-boiled or unpasteurized milk, raw blood and meat.
- Contact with contaminated materials through open skin.

How would I know that I have brucellosis?

- Intermittent fever
- Sweating (particularly at night)
- Chills
- Headache
- Joint and back pains
- Fatigue
- Weakness
- Weight loss.

What measures do I need to take to avoid getting infected?

- Use protective clothing when handling aborted fetuses.
- Report any suspected cases to veterinary authority.
- Avoid contact with infected animal/herd.

- Drink boiled or pasteurized milk.
- Cook blood and meat before eating.
- Avoid eating, drinking or smoking while handling animals or raw animal products.
- Bury dead fetuses and carcasses at least 2 feet below ground level.
- Disinfect or thoroughly wash hands with soap and water after handling infected material or animal.





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