

How is infection found in livestock?

1. Milk from livestock herds can be tested periodically in a year for evidence of brucellosis.
2. Livestock herds that do not produce milk for sale can be routinely tested for brucellosis from blood samples.
3. Adult live-stock can be subjected to blood tests for brucellosis upon or before change of ownership.

What is the current status of Brucellosis in Karamoja

- Ø In Karamoja, Kidandaire and others in 2012 documented the prevalence of *B.melitensis* in all livestock species across all ages although it was lower than in other regions of Uganda.
- Ø Boma and others in 2013 also documented the prevalence of 23.2% of *B.abortus* infection and 0.016% of mixed species infection of both *B.melitensis* and 0.008% *B.melitensis* infections in camel in Amudat district in 2013 (unpublished).
- Ø Among humans in the region, there has been a general increase in the number of cases

How do you treat Brucellosis?

- Ø Treatment of brucellosis in humans aims to relieve symptoms, prevent a relapse of the disease and avoid complications. You will need to take antibiotics for at least six weeks and the symptoms may not go away completely for several months, the disease can also return and may become chronic.
- Ø In livestock, it is advisable to cull or eliminate the female reactors since they will be a source of the bacteria for their entire life.

How do you control Brucellosis?

- Ø It is advisable to test all the existing livestock in the herd for Brucellosis before restocking. All reactive animals should be culled or eliminated from the herd
- Ø When restocking, ensure that you buy stock from Brucellosis free herds.
- Ø Vaccination against brucellosis using S-19 vaccine should be strictly on female calves of 4-12 months only. This will greatly reduce on the amount of bacteria shed in the milk when the calves have grown into dams and calved.
- Ø Avoid getting in contact with and taking or eating raw blood
- Ø Boil all the milk properly to 63°C or for at least 10 minutes before drinking
- Ø Avoid contact with raw meat and broken mucous membranes; ensure proper safety wear usage for at risk occupation such as butchers, veterinarians, CAHWs, hunters, slaughter house workers, micro biologists and milk men.

What are the signs of Brucellosis in animals?

1. Abortion in the fifth to seventh month in cattle and third to fourth month in goats.
2. Birth of weak calves/kids
3. Reduced milk production
4. lowered fertility with poor conceptions
5. Retained placenta/afterbirths with resulting uterine infections
6. Occasionally enlarged, arthritic joints.



BRUCELLOSIS IN KARAMOJA REGION



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What is Brucellosis?

- Ø Brucellosis is a contagious infection that spreads from animal to people (zoonotic)
- Ø If affects humans, domestic and wild animals. Cattle, goats, sheep, pigs, dogs, camels are especially affected.
- Ø The disease is also called contagious abortion or Bang's disease.
- Ø In humans, it is known as undulant fever because of the severe intermittent fever accompanying human infection.

What disease agents cause brucellosis?

- Ø The disease is caused by a group of bacteria belonging to the genus *Brucella*
- Ø Two species of *Brucella* cause the most concern: *B. abortus*, principally affecting cattle and *B. melitensis* principally affecting goats
- Ø The disease currently localizes in the reproductive organs and/or the udder.
- Ø Bacteria are shed in milk or via the aborted fetus, afterbirth, or other reproductive tract discharges.

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What are the signs of Brucellosis in people?

Fever, Chills, Sweats, Weakness, Fatigue, Joint, muscle and back pain and Headache

How is brucellosis spread between livestock animals?

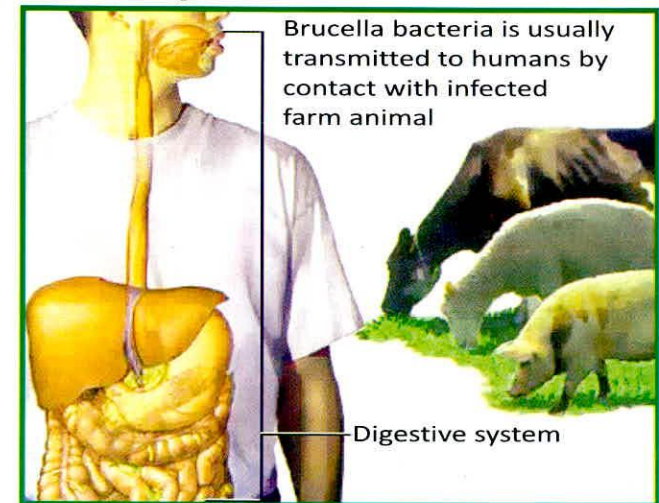
1. Direct contact with infected animals or with an environment that has been contaminated with discharge from infected animals.
2. Aborted fetuses, placental membranes or fluids, and other vaginal discharges present after an infected animal has aborted or calved are all contaminated with infectious *Brucella* organisms.
3. Animals may lick or sniff at those materials of the genital area of other animals or ingest the disease causing organisms with contaminated food or water.
4. When a herd owner buys infected or exposed replacement live stock that are infected or have been exposed to infection prior to purchase.
5. The disease may be caused when animals from an infected herd mix with brucellosis free herds.
6. Spread may also be from vaccination of heifers and cows with S-19 vaccine just before they are served or when pregnant.



Abortus dropped on open pasture can help spread brucellosis to grazing livestock through sniffing at it.

How is Brucellosis spread from animals to people?

1. Raw dairy products, *Brucella* bacteria in the milk of infected animals can spread to humans in raw milk and other milk products. The bacteria can also be transmitted in the raw blood, raw or undercooked meat from infected animals.
2. Inhalation, *Brucella* bacteria spread easily in the air. Farmers, laboratory technicians and slaughter house workers can inhale the bacteria.
3. Direct contact, bacteria in the blood, semen or placenta of an infected animal can enter your bloodstream through a cut or other wounds.
4. Brucellosis normally doesn't spread from man to man but in a few cases, women have passed on the disease to their infants during birth or through their breast milk.



The most vulnerable groups are;

The young herders aged between 6 and 12 years, the people milking, the men involved in slaughter and dressing of animal carcasses, the community animal health workers who attend to sick animals and assist during calving/kidding