

What is brucellosis?

Brucellosis is a disease that affects a wide range of animals. Cattle, sheep, goats, dogs, pigs, horses and humans are susceptible to the bacteria. There are six species of *Brucella*, each infecting a different animal. All are capable of causing disease in humans. The *Brucella* bacteria are found in high numbers in animal secretions, the reproductive organ tissue of animals, and in aborted fetuses of a diseased female animal.

How is the *Brucella* organism spread?

Human infection can result from direct contact of the organism to mucous membranes such as eyes and lips and openings in the skin (cuts, sores or breaks in the intact surface of the skin); drinking unpasteurized milk from an infected animal; or by breathing in the bacteria if it is released in the air by accident or on purpose. Person-to-person transmission is rare.

What are the clinical signs of infection?

Most animals are ill with reproductive problems including abortions and uterine or testicular infections. Humans at high risk for exposure to animal infection with *Brucella* include: farmers, packing plant workers, veterinarians, and animal care professionals. Signs of infection with the bacteria include: recurrent fever, muscle aches, weight loss, and headaches. The disease is often called undulant fever in humans. A detailed history of exposure to possibly infected animals is the key to diagnosing this disease.

How can brucellosis be diagnosed?

Laboratory testing to screen for the bacteria is performed on all milk and dairy products commercially produced in the United States. Tests are also routinely performed on animal blood after slaughter. Positive laboratory results need to be reported to the state veterinarian.

Can *Brucella* infections be treated?

Yes, these infections can be treated with antibiotics, if the disease is identified early in its course.

How can *Brucella* infection be prevented?

Stopping the disease in domestic animals is the best defense against infection. Due to national efforts to eliminate brucellosis from animal herds, any animals that test positive are removed from the food chain to break the cycle of infection. Bulk tank milk is tested to identify and eliminate infected herds. All dairy cows are vaccinated against brucellosis at approximately 2 months of age. Humans, especially pregnant women, should not consume raw milk or eat cheese made from unpasteurized milk.