

BRUCELLOSIS

Brucellosis is an infectious disease caused by the bacteria of the genus *Brucella*. These bacteria are primarily passed among animals, and they cause disease in many different vertebrates. Various *Brucella* species affect sheep, goats, cattle, deer, elk, pigs, dogs, and several other animals. Humans become infected by coming in contact with animals or animal products that are contaminated with these bacteria.

TRANSMISSION

Humans are generally infected in one of three ways: eating or drinking something that is contaminated with *Brucella*, breathing in the organism (inhalation), or having the bacteria enter the body through skin wounds. The most common way to be infected is by eating or drinking contaminated milk products. When sheep, goats, cows, or camels are infected, their milk is contaminated with the bacteria. If the milk is not pasteurized, these bacteria can be transmitted to persons who drink the milk or eat cheeses made from it. Contamination of skin wounds may be a problem for persons working in slaughterhouses or meat packing plants or for veterinarians. Hunters may be infected through skin wounds or by accidentally ingesting the bacteria after cleaning deer, elk, moose, or wild pigs that they have killed.

SYMPTOMS

The incubation period for Brucellosis is usually 5 to 60 days. In humans, Brucellosis can cause a range of symptoms from mild flu-like illness to severe infection of the central nervous system or lining of the heart. It can also cause long-lasting or chronic symptoms that include recurrent fevers, joint pain, and depression.

WHO IS AT RISK?

Direct person-to-person spread of Brucellosis is extremely rare. Mothers who are breast-feeding may transmit the infection to their infants. Sexual transmission has also been reported. For both sexual and breast-feeding transmission, if the person or infant at risk is treated for Brucellosis, their risk of becoming infected will be eliminated within 3 days.

TREATMENT

Doctors can prescribe antibiotics. Usually doxycycline and rifampin are used in combination for 6 weeks. The reason for the length of therapy is that it is not known where the bacteria may hide in the body, and they could cause infection in places like bone marrow. Infection often recurs with short-course therapy.

PREVENTION

Do not consume unpasteurized milk, cheese, or ice cream while traveling. Hunters and animal herdsman should use rubber gloves when handling viscera of animals. There is no vaccine available for humans.