



## BRUCELLOSIS

### What is brucellosis?

Brucellosis is a bacterial disease also referred to as undulant fever in humans. The disease is transferred from animals to humans. The bacteria multiply in the reproductive organs and mammary glands. Infected animals are most contagious when they deliver or abort. The disease is uncommon in the United States with approximately 100 human cases occurring every year. The disease is very common in underdeveloped countries.

There are several species of *Brucella* bacteria. Domestic animals that may be infected include cattle, sheep, goats, dogs, and swine. Bison, elk, caribou, coyotes, and some species of deer may become infected. *Brucella canis*, the species that may infect dogs and coyotes, is rarely transmitted to man.

### Who gets brucellosis?

Anyone can get brucellosis if they are exposed. Occupations at highest risk in the United States are veterinarians, cattle ranchers, and slaughterhouse employees. Persons who consume unpasteurized milk and cheeses made with raw milk are also at risk. Brucellosis may be accidentally transmitted to humans by careless handling of live virus animal vaccine.

### How is brucellosis spread?

Brucellosis is spread to humans through contact with blood, body tissues, or body fluids of infected animals. The most common method is consumption of unpasteurized milk and dairy products. Human infections may occur through breaks in the skin when handling infected animal tissues.

### What are the symptoms of brucellosis?

In humans, fever, night sweats, extreme fatigue, loss of appetite, weight loss, headache, and joint pain characterize the disease. In severe cases, the central nervous system and the lining of the heart may be affected. One form of the illness may also cause long-lasting symptoms, including recurrent fevers, joint pain, and fatigue. The disease may last for several days, months, or even one year or more if not adequately treated.

### How soon do symptoms appear?

The incubation period is usually five to 60 days. The average incubation period is one month, but in rare cases the incubation period may be longer.



# Frequently Asked Questions

## **Should an infected person be excluded from work or school?**

Most people get brucellosis by eating or drinking unpasteurized dairy products, such as milk and cheese, that come from infected cows and goats. Direct person-to-person spread of brucellosis is extremely rare.

## **What is the treatment for brucellosis?**

Treatment usually requires long-term antibiotic therapy. Some regimens may include two different antibiotics for six weeks. Relapses are common.

## **What can a person or community do to prevent the spread of brucellosis?**

The federal and state agriculture departments working with farmers and ranchers have been highly successful in their eradication efforts in the United States. Do not buy dairy products from unlicensed retailers, street vendors, or other questionable sources.

Foodborne transmission has become the most common means of exposure. Many of these cases are a result of consuming cheese originating outside the United States. Persons traveling to Latin America, Eastern Europe, Central Asia, Africa, India, and the Mediterranean are at increased risk of exposure. Dairy products should be avoided unless you can be absolutely certain they were made from pasteurized milk.

## **Resources**

Centers for Disease Control and Prevention, <https://www.cdc.gov/brucellosis/>