

## PRECAUTIONARY MEASURES FOR EARLY DETECTION AND TREATMENT OF BRUCELLOSIS DISEASE.

**Kibriev Bexroz Abdurakhmonovich**

**Termez University of Economics and Service, Faculty of Medicine**

**Email – [kibriev1991@gmail.ru](mailto:kibriev1991@gmail.ru)**

**Sulaymonova Hilola**

**Termez University of Economics and Service, Faculty of Medicine**

**Abstract:** This article examines how important the spread of brucellosis among people is today and measures to prevent its spread. Epidemiological features of the disease, spreading factors and diagnostic methods were analyzed in the study. The focus is on the implementation of effective preventive measures against the disease, including vaccination programs, compliance with sanitary and hygiene rules, and raising awareness of the population. The article describes strategies for the prevention of whooping cough.

**Key words:** brucellosis, epidemiology, prevention, vaccines, immunization, diagnostics, sanitary hygiene, disease spread.

**Access.** Brucellosis is a bacterial disease caused by various *Brucella* species that mainly infects cattle, pigs, goats, sheep and dogs. People usually contract the disease through direct contact with infected animals, eating or drinking contaminated animal products, or breathing airborne substances. Most cases result from consumption of unpasteurized milk or cheese from infected goats or sheep

Brucellosis is one of the most common zoonoses transmitted by animals, and human brucellosis in endemic areas has serious consequences for public health. Expansion of the livestock industry and urbanization, lack of hygienic measures in animal husbandry and food processing are partially responsible for the public health risk of brucellosis. The global burden of human brucellosis remains enormous. The organism causes more than 500,000 infections per year worldwide. In the United States, the annual number of reported cases (about 100) has decreased significantly due to aggressive animal vaccination programs and pasteurization of milk. Most of the cases in the US have been linked to consumption of unpasteurized dairy products



imported from Mexico. About 60% of human brucellosis cases in the United States occur in California, Texas, Arizona, and Florida. In addition to the possibility of using Brucella disease as a biological weapon, interest in brucellosis is increasing due to the increase in international tourism and migration events. [ 7 ] Familiarity with the presentation of brucellosis and knowledge of optimal laboratory investigations are essential to recognize this re-emerging zoonosis. *B. melitensis*, *B. abortus*, and *B. suis* have been fully sequenced, and these sequence data will contribute to our understanding of the pathogenesis and presentation of this complex disease

### **The main part**

**Treatment and care.** Brucellosis usually causes flu-like symptoms, including fever, weakness, malaise, and weight loss. However, the disease can manifest itself in many atypical forms. In most patients, the symptoms are mild and therefore the diagnosis can be ignored. The incubation period of the disease can be very variable, from 1 week to 2 months, but usually 2-4 weeks.

Treatment regimens included doxycycline 100 mg twice daily for 45 days and streptomycin 1 g daily for 15 days. The main alternative therapy is doxycycline at a dose of 100 mg, twice a day for 45 days, as well as rifampicin 15 mg / kg / day (600-900 mg) for 45 days. Experience shows that streptomycin can be replaced by 5 mg/kg of gentamicin per day for 7-10 days, but currently there is no study that directly compares the two regimens. Optimal treatment for pregnant women, newborns, and children under 8 years of age has not yet been determined; options for children include trimethoprim/sulfamethoxazole (co-trimoxazole) combined with an aminoglycoside (streptomycin, gentamicin) or rifampicin.

Brucellosis is usually spread when an animal aborts or gives birth. High levels of bacteria are found in the birth fluids of an infected animal. The bacteria can live outside the animal for months, especially in cool, moist conditions. They become contagious to other animals who ingest the bacteria. Bacteria also colonize the udder and contaminate the milk.

The disease can also be transmitted to animals and humans through skin cuts or mucous membranes.

Brucellosis is an important disease in wildlife, infecting wild boar, bison, elk, and European rabbits. A reservoir of diseases in wildlife complicates eradication efforts. Bacteria have also been found in marine mammals.

**Conclusion.** In preventing the spread of brucellosis, comprehensive approaches such as vaccination, compliance with sanitary and hygiene rules and training of medical personnel play an important role. The preventive measures implemented in this direction are effective and make it possible to significantly reduce the spread of the disease. However, these measures need to be further improved and expanded. It is very important to implement effective preventive measures to prevent the spread of brucellosis. In particular, increasing the awareness of the population about the disease is the main means of reducing the spread of the disease. Brucellosis can be prevented and spread by improving vaccination programs and health care. The results of this study showed that the state programs implemented in the prevention and treatment of brucellosis are effective, but there is a need to further expand the work in this regard and introduce innovative technologies.

#### Used literature

1. <https://www.who.int/news-room/fact-sheets/detail/brucellosis>
2. <https://emedicine.medscape.com/article/213430-overview>
3. <https://www.woah.org/en/disease/brucellosis/>
4. [https://uz.wikipedia.org/wiki/Wayback\\_Machine](https://uz.wikipedia.org/wiki/Wayback_Machine)
5. <https://www.ecdc.europa.eu/en/brucellosis>

---

# Research Science and Innovation House