

Brucellosis

Description:

Brucellosis is an illness caused by infection with a type of bacteria (Brucella). It occurs worldwide but is uncommon in Australia.

Symptoms:

Brucellosis may come on either suddenly or quite gradually. It can cause a continuous or intermittent fever, headache, weakness, drenching sweats, chills, joint pains, weight loss and generalised aches. The severity and duration of symptoms can vary greatly between people.

The disease may last for several days, months or occasionally may last for a year or more if not adequately treated. Some or all symptoms may reappear after apparent recovery. People who have had brucellosis may get it again.

Transmission:

Different types of *Brucella* can occur in different animals. Around the world, *Brucella* bacteria are carried by cattle, sheep, goats, pigs, working dogs, camels, buffalo, reindeer, marine and other animals. In Australia, *Brucella* is no longer found in cattle and has never been found in sheep or goats. The commonest source of human infection in Queensland is from feral pigs. If an animal is infected, the bacteria can be present in the urine, faeces, blood, vaginal discharges, aborted animal fetuses and especially in the placenta and afterbirth.

The bacteria are easily spread to humans through a break in the skin (open cut or sore), or by inhalation during work in dusty yards. People may also be infected by eating and drinking raw milk and dairy products from infected animals. Person to person spread is extremely rare.

The incubation period (time between when the person is exposed to the bacteria and the appearance of symptoms) is usually 1 - 2 months, occasionally several months.

Treatment:

Effective treatment usually involves a long course (eg. six weeks) of antibiotics. Relapses may still occur in 5% of treated cases.

Control

The ultimate control of brucellosis rests on the elimination of the disease in animals.

Prevention:

There is no human vaccine for protection against brucellosis. The most important means of preventing disease in humans is to take precautions when coming into contact with animals or animal products that may be infected.

If you are likely to come into contact with potentially infected animals (especially feral pigs):

- cover all cuts or abrasions with waterproof dressings
- use gloves, overalls and face masks when slaughtering animals or handling carcasses
- thoroughly wash hands and arms in soapy water after handling animals or carcasses
- take particular care when handling or disposing of birth products, such as placentas vaginal discharges, aborted fetuses or the mother animal itself
- wash off all urine, faeces, blood and other body fluids and thoroughly clean all working areas.

Other preventive measures include:

- minimise dust and rodents in slaughter areas and in animal housing areas
- do not slaughter or cut up feral pig carcasses in areas also used for handling meat for human consumption

Brucellosis

- avoid feeding domestic animals on raw feral pig meat as this may infect them with brucellosis
- avoid drinking unpasteurised milk or eating dairy products produced from unpasteurised milk, particularly if travelling overseas. Boiling raw milk is effective when pasteurisation is not possible.

Help and Assistance

For further information please contact your local doctor or nearest public health unit.

References

Heymann, D. (Ed). 2008. *Control of Communicable Diseases Manual*, 19th edition. Washington, DC: American Public Health Association.