



## **Brucellosis**

### **What is Brucellosis?**

Brucellosis is the infection caused by the bacteria *Brucella abortus*. This is a highly contagious disease that results in abortion in cows and an infection of the testicles (orchitis) in bulls.

The organism is spread when infected cows calves and other cows come into contact with the cow around the time of calving as the calf, placenta and uterine fluids all contain huge quantities of the infection.

Infected cows may only abort once in their lifetime but will continue to shed the disease indefinitely. Breeding bulls may pass brucellosis to cows at service through infected semen.

Undulant fever in humans is caused by exposure to *Brucella abortus*, primarily through drinking affected unpasteurised milk. This is a very difficult condition to treat and therefore pasteurisation is essential to avoid infection and affected cows excrete the organism into their milk throughout production.

Brucellosis was eradicated in the UK herd but has seen a re-emergence in recent times. As a zoonosis, it remains a notifiable disease.

### **Diagnosis**

The clinical signs of infection are not necessarily exclusive to brucellosis.

They include premature calving or abortion, retained placenta which can look infected and in bulls, one or both testicles may be swollen.

An infection of the joints has also been observed.

The only reliable diagnosis of brucellosis is by lab testing samples of blood or milk, or by culturing samples of milk, foetal membrane or vaginal discharge.

All premature calving or abortion must be reported to the Divisional Defra Health Office so tests for brucellosis may be carried out where necessary.

### **Treatment**

No treatment of brucellosis is allowed. All infected animals and any contacts that may have been exposed to infection must be slaughtered.

Prevention measures introduced are designed to work towards prevention of an outbreak on a national scale rather than a herd scale. This takes the form of regular testing of bulk milk samples and regular herd blood testing.

Stringent quarantine and testing guidelines are recommended for imported animals even if a test carried out prior to importation was negative. Cows that carry the disease can sometimes not test positive until after calving.