

## Infectious Bovine Rinotracheitus (IBR)

## What is Infectious Bovine Rinotracheitus (IBR)?

IBR is an acute viral disease caused by bovine herpesvirus 1 and affects the upper respiratory tract, which can lead to fatalities through the development of pneumonia. It was first diagnosed in the UK in 1962 but a severe form of IBR was recorded in Scotland in 1977/8 and it is this form that has since spread across the UK.

Animals can overcome IBR with an effective immune response, however they will remain latently infected throughout their lives and can continue to shed the virus when stressed. It is an infectious condition (transmission by air but close contact necessary) and can be imported to a clean herd by the introduction of infected stock. It can also spread in the semen of infected bulls.

## **Diagnosis**

Physical symptoms consist of; fever, dullness, reduced appetite, weight loss, nasal discharge and conjunctivitis. Accompanying these symptoms in adult cows, severe and extended milk loss, abortions and reduced fertility can be seen.

Several diagnostic methods can be used for confirmation of infection. The simplest of these would be virus isolation from swabs taken from runny noses or eyes.

Blood sampling can also confirm the presence of IBR but cannot differentiate between the wild IBR virus and antibodies present due to vaccination.

For an effective herd health screen, an antibody test can also be run on a bulk milk sample to give an indication of the level of an IBR problem.

## **Treatment**

A broad spectrum antibiotic can control the symptoms of the infection, however production levels will still suffer and would be unlikely to fully recover.

A number of vaccines are available but only IBR marker vaccines are acceptable where a disease eradication programme is adopted. These are the only vaccines that indicate that the presence of antibodies is not due to infection (nb. some pneumonia vaccines may contain conventional IBR vaccine and it is important to avoid these in an IBR eradication programme).

To achieve Disease Free Status Accreditation, two consecutive clear tests of all animals over 8 months old are required (the second test may follow the first from four weeks to twelve months after a clear test).

This may mean whole herd testing and the removal of any animals that test positive as these reactors will continue to shed the virus.