Cattle Information Service

IBR Factsheet

What is Infectious Bovine Rinotracheitus (IBR)?

- IBR is an acute viral disease caused by type 1 bovine herpes virus (BHV-1) and affects the upper respiratory tract, which can lead to fatalities through the development of pneumonia.
- It can also result in abortions and neonatal mortalities.
- 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.

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.

Monitor

- Test bulk tank sample, or
- Individual cow samples, collected at routine CIS herd recording.

Interpretation

- The test detects the presence of antibodies in milk specific to the BHV-1 virus. If the antibodies are present, the test results in the formation of a blue compound which when blocked become yellow. The intensity of the colour known as the optical density (OD) is a measure of the amount of antibodies present found in the milk sample. The OD of the test sample is compared with the OD of a specific control sample to calculate a S/P percentage or limit of positivity.
- Any Bulk sample with an S/P % less than 0.25 (<25%) is considered coming from a group of animals, which has not been in contact with the BHV-1 virus.
- Any Bulk sample with an S/P % greater than 0.25 (>25%) is considered coming from a group of animals, which has been in contact with the BHV-1 virus.
- Any individual sample with an S/P % equal or greater than 0.55 (55%) is considered coming from an animal, which has not been in contact with the BHV-1 virus
- Any individual sample with an S/P % between 0.45 (45%) and 0.55 (55%) is considered to be doubtful. A second test would be necessary to confirm this.
- Any individual sample with an S/P % equal or lower than 0.45 (45%) is considered to be from an animal, which has been in contact with the BHV-1 virus.

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, on advice from your veterinary surgeon.

Cattle Information Service

IBR Testing Protocol

- Analysis of milk samples taken as part of routine recording can be used to identify individual cow disease status.
- The milk recorder will need to be advised on the day of recording if the whole herd is to be tested or the line numbers of individual cows if part herd testing is required.
- The milk recorder will complete a submission form highlighting the line numbers and corresponding barcodes of the cows that require disease analysis.
- This submission form will then be placed in the box with the samples to alert the laboratory that further milk testing is required.

Results

- Milk disease analysis will not delay routine milk recording results.
- A report of the results will be available on 'Your Herd'.
- It is recommended that all results are discussed with your veterinary surgeon before any action is taken.