Herdsure® Disease Information Sheet Infectious bovine rhinotracheitis (IBR)



Introduction

Infectious Bovine Rhinotracheitis (IBR) is caused by Bovine Herpes Virus 1 and may result in acute upper respiratory tract infections, which can lead to fatal pneumonia. In adult cows, the disease is associated with a severe and prolonged drop in milk yield, reduced fertility and abortion. On occasions, the disease can be so mild that it can be overlooked and some cattle can harbour the virus for life, becoming infectious again following periods of stress. The spread of disease is mainly by nose-to-nose contact as the virus is shed in secretions from the respiratory tract. It can also be spread in semen from infected bulls.

Protocols

Below are details of each protocol and the actions required. The Herdsure Management System is designed to ensure that this is a simple and clear process to follow by providing automatically generated sampling prompts and submission forms. Samples are returned to the laboratory using business reply labels, supplied by Herdsure. All blood samples should be collected in red top blood tubes.

- Entry Where laboratory results indicate evidence of IBR in the previous 12 months the herd should enter at level 2.
- Beef and dairy herds

Level 1 - Establishing health status

Testing at Level 1 aims to establish whether IBR is present in the herd or not. Differentiation between non-marker vaccine antibody and field infection antibody is not possible so herds vaccinated with non-marker vaccine join at Level 2. Milking cows, suckler cows, breeding bulls and cattle that are more than 12 months old are tested for antibody. For milking cows this can be done using a bulk milk sample. If marker vaccine has been used in the milking cows, blood samples from a proportion of the herd will be collected instead of bulk milk. Blood samples from a proportion of suckler cows, cattle over 12 months old and all breeding bulls will also be collected. At the conclusion of Level 1 a decision is made whether to follow Level 2a or Level 2b.

Level 2 - Improving health status through disease reduction strategies

Level 2a - Seronegative

Blood samples are tested for all cattle older than 12 months plus all non-homebred younger animals. Seropositive animals should be culled. Testing is repeated at 1 to 12 month intervals until no more positives are found. All possibly IBR-related disease should be investigated and biosecurity policies implemented. After two clear tests the herd can progress to Level 3. The herd will also then be eligible for CHeCS accreditation.

Level 2b - Maintained immunity/seropositive

A marker vaccination programme is optional but recommended. Non-marker vaccinated and unvaccinated dairy cows have quarterly bulk milk serology performed. Beef or marker vaccinated dairy cows have an annual statistical bleed. Youngstock, aged 8-11 months, have an annual statistical bleed and all breeding bulls have an annual bleed. All possible IBR-related disease should be investigated and biosecurity policies implemented. As a result the number of seropositive animals should decline and eventually a decision may be made to move to Level 2a.

Level 3 - Monitoring and maintaining health status

Unvaccinated or non-marker vaccinated dairy cows have quarterly bulk milk serology performed 3 months after entering Level 3. Beef or marker vaccinated dairy cows have an annual statistical bleed starting 1 year after entering Level 3. Youngstock, older than 12 months, have an annual statistical bleed. Breeding bulls and bought-in animals have an annual bleed. All possible IBR-related disease should be investigated with maintainance and monitoring of the biosecurity policy. CHeCS accredited herds must test all bought-in and all marker-vaccinated animals annually.

Biosecurity

The farmer and veterinary surgeon should work together to ensure good biosecurity. Results from previous years before joining the scheme must be declared. For herds seeking CHeCS accreditation the veterinary surgeon must confirm that appropriate biosecurity and management measures have been implemented.

- Farm boundaries It is important to prevent cattle from straying on or off the farm and to prevent nose-to-nose contact over fences or walls. Installation of double fencing, with a gap of 3 metres, between the farm's cattle and any neighbouring cattle is essential.
- Cattle IBR Level 2 and 3 herds must not have contact with cattle from herds of a lower level otherwise animals lose their status and will then be treated as added animals. Delivery and pickup points should take place at a site isolated from other cattle. Added animals must be isolated and tested unless from an IBR Level 3 herd. Cattle must not be grazed on pasture previously grazed by non-accredited cattle until a period of 2 months has elapsed. The same grazing restrictions apply to accredited cattle if slurry or manure collected from non-accredited cattle has been used on the pasture.
- Movements Keep movements of people into cattle areas to a minimum. Wear protective clothing and footwear which should be cleaned and disinfected before and after contact. Hauliers must remain in cab unless wearing farm-dedicated protective clothing and boots.
- Equipment Keep movements of equipment and vehicles into cattle areas to a minimum. Shared farm equipment must be cleaned and disinfected before use. Vehicles should be cleaned and disinfected before entering cattle areas. Veterinary equipment should not be shared with other herds and surgical instruments must be sterilised before use.
- Isolation facilities Isolation facilities must prevent contact with other stock and be a separate building which does not share airspace, drainage or dung storage. Dung can only be spread after all animals have tested negative and joined the herd. Dung from a positive group should only be spread onto land that will not be grazed by cattle for 1 year.
- Adding animals to the herd The number of bought-in cattle should be minimised and if buying animals it is essential to establish the IBR history of the herd of origin before purchase. If herd of origin is at Level 3 for IBR, animals can be introduced without isolation or testing. If herd of origin is not at Level 3, animals must be blood sampled and isolated. Pre-purchase blood sampling at the farm of origin should be carried out whenever possible and do not buy animals that test positive for antibodies to field virus. If results are negative, move the animals directly to your isolation facility. If not tested at farm of origin, sample immediately after arrival and reject positives and isolate the remainder of the purchased group for 28 days. Repeat blood samples after 28 days and remove any further positive animals. Negative-testing animals in the same consignment must be isolated for a further 28 days then retested and if all animals are negative then they can join the herd. Follow-up testing should be performed for those cattle 12 months or older at 12 and 24 months after introduction to the herd. This is required for CHeCS accredited herds.

CHeCS Accreditation



Herdsure provides the option of accredited disease free status for IBR. Herds will be eligible to apply for CHeCS accreditation provided they achieve negative results with appropriate animals tested and comply with defined biosecurity rules.

Herds are eligible for CHeCS accreditation at Level 3 following 2 consecutive clear herd tests at Level 2a.

Herdsure issues certificates of accredited health status and can issue individual animal sale cards if requested.

For further information on CheCS please visit www.checs.co.uk