



# FarmLab

## HEALTH SURE

FarmLab HealthSure is a cattle health certification scheme, administered by FarmLab Diagnostics. Under the scheme members can certify their herds as being free from Infectious Bovine Rhinotracheitis (IBR) through monitoring for IBRgE antibodies and be allocated a risk categorisation for Johne's Disease in their herds. This scheme adheres to the CHeCS (Cattle Health and Certification Scheme) Standard for cattle health schemes. Participants in this scheme must adhere to the general rules of CHeCS as set out in Appendix 1 and the CHeCS Technical Guidance Document available at [www.cheecs.co.uk](http://www.cheecs.co.uk)

### **Infectious Bovine Rhinotracheitis (IBR)**

IBR is caused by bovine herpesvirus 1 (BoHV-1). This virus causes an acute upper respiratory tract disease which can lead to fatal pneumonia. Infection can also cause severe and prolonged drop in milk yield, reduced fertility and abortion. However, on occasion, the disease can be so mild that newly infected animals are not seen to be affected. The virus is mainly shed in secretions from the nose but can also be spread in the semen of infected bulls. An important characteristic of the disease is that once an animal has become infected, it remains infected for life. This is termed 'latent infection' with the virus surviving in neural tissue. Reactivation and shedding of the virus can occur at periods of stress. The experience of transport and introduction to a new herd is a common trigger for reactivation of the virus, leading to new infections in the herd. Vaccination is an effective means of preventing the disease but does not stop infection nor does it stop infected animals from shedding the virus at a later date.

Infected animals can be detected by testing either milk or blood for antibody to BoHV1. The available tests cannot differentiate between antibodies stimulated by the naturally occurring virus and those stimulated by conventional BoHV-1 vaccines. However, in 2001, BoHV-1 marker vaccines were introduced into this country. Central to the marker vaccine system, is an antibody test that can distinguish marker vaccinated animals that have not been infected from marker vaccinated animals that have been infected. Marker vaccines can now be used in an infected herd where the long-term objective is to achieve freedom from infection with



minimum culling. However, it must be recognised that the marker vaccine test is less able to detect infection than the standard test plus a small number of animals may have latently infected semen, despite testing negative on the IBRgE test. The consequence of this limitation is that marker vaccinated bulls are not accepted onto AI studs and may not be accepted for import to some countries.

IBR is endemic in Ireland and in many parts of the world, but some countries are free of infection and there are moves in other EU countries to eradicate the disease. Despite the effect this disease has on animal health and productivity, its main significance is as a barrier to the export of live cattle to other regions or countries within Europe where the disease has already been eradicated. In future, in order to gain access to these markets, herds will have to be able to prove freedom from BoHV-1 infection.

## **IBR Testing and Control Programme**

For IBR, the programme in place under the FarmLab Diagnostics HealthSure Scheme is the Vaccinated Monitored free programme. This programme allows herds to put a programme in place for IBR, without the requirement for the entire farm to be double-fenced.

### **Vaccinated Monitored free (VMF) Programme**

Objective: To demonstrate that the herd is operating a marker vaccination policy and is negative for IBR based on testing for gE antibodies. The goal is to allow herds that are free of BoHV 1 but for whom double fencing is not an option, to get recognition of that status and to enable the purchase of stock that have a much lower risk of being latently infected carriers than those in the general population.

### **Qualifying tests (Start of programme)**

2 herd tests carried out using clotted serum samples, collected by the herd's veterinary practitioner, at least 4 weeks apart, no more than 12 months apart.

- All animals over 12 months to be tested
- Animals less than 12 months, which are not homebred
- If both tests are negative the herd is deemed to be vaccinated monitored free
- In herds where BoHV1 positive animals are detected the herdowner may discuss various eradication options with their veterinary practitioner. If the positive animals are culled, the above testing procedure may be repeated. The herd will be deemed to be accredited IBR free when all animals in two consecutive tests are negative for BoHV1

### **Introduction of new animals**

Once a herd enrolls in the scheme, all newly purchased animals must undergo the following isolation and testing procedures:

- Be tested no more than 7 days before or after entry to the herd



- Remain isolated from the rest of the herd after entry for a minimum of 28 days, and before leaving isolation must be tested for IBR as follows:
- Retested no sooner than 28 days after entry to the herd (ie 28 days after entering on-farm isolation).
- If one or more isolated animals shows positive, it must be removed from the herd immediately. Any cohort animals may not leave the isolation facility until they have been retested; retesting may not take place until a period of 28 days has elapsed from removal of the positive animal from the herd.
- Herd is accredited with Vaccinated Monitored Free free status when all tested animals test free in two consecutive herd tests, and no evidence of infection is found in reproductive failure investigations or clinical disease outbreaks.

### Annual Testing

All animals over two years of age must be blood sampled annually, In addition the following animals must be tested annually:

- All non-homebred animals on the farm
- Any bull calves over 12 months old which will be used for breeding in the future
- 10% of all animals on the farm aged less than 2years of age at the time of test, ideally this should be a mix of age and management groups on the farm, eg calves over 6 months and yearlings.

### On-going monitoring

- Any cow which aborts, or produces a stillborn calf, or fails to produce a live calf having previously been diagnosed as pregnant, must be tested for the presence of antibodies to BoHV-1
- Clinical disease outbreaks. Any clinical disease events where IBR cannot be ruled out as part of the disease outbreak must be investigated for the involvement of IBR.
  - Blood samples from a representative sample of affected animals should be taken at the initial investigation of the disease outbreak. Nasal swabs may also be taken at this point.
  - A second set of blood samples should be taken from the same animals at least three weeks and not more than six weeks after the initial set of samples have been taken.

### Vaccination strategy

In general all animals over 12 months of age should be vaccinated, there are some limited exceptions to this as noted below:

- Male animals which may potentially be used for artificial insemination in the future. The total number of unvaccinated animals in the herd can not exceed 5% of the eligible animals at anytime.

Animals should be vaccinated with a marker vaccine, as per the data sheet. Vaccine must be prescribed and supplied by the herd's veterinary practitioner . The herd's veterinary



practitioner is required to certify that he/she has prescribed and supplied IBR vaccine to the herd, together with the number of doses of vaccine sold

## **Johne's Disease**

This disease is a chronic, progressive, wasting condition that affects ruminants. It is caused by the organism *Mycobacterium avium* subspecies *paratuberculosis* (Map). The infectious agent is shed in faeces, can cross the placenta and can be found in colostrum and milk. Animals are generally infected by ingesting the agent and young animals are considered to be the most susceptible to infection. However, clinical signs of diarrhoea and weight loss usually do not occur until sometime after 18 months of age. In heavily infected herds this leads to a high rate of wastage in cattle mostly in the three to five years age range. Infection is nearly always introduced to a herd by purchasing infected replacement breeding stock, including bulls.

It has been suggested that the causal organism of Johne's disease may be implicated in the human disease of the bowel known as Crohn's disease, although no direct link between the diseases has yet been shown to exist..

Tests carried out on blood samples to detect antibodies and on faeces samples to detect Map are valuable procedures for the diagnosis of Johne's disease. However, they can only be reliably used to detect infected animals in the later stages of infection in the short period before clinical disease becomes apparent. This means that infected animals may test negative on several occasions at annual tests before they test positive. Testing individual animals at the point of sale may be of very limited value. However whole herd testing is a good indicator of herd infection. If a herd repeatedly tests negative for the disease at annual intervals, the herd can be categorised as low risk with regards to Johne's disease.

As the diagnosis of the disease is difficult and because the organism survives well in the environment, control and eradication of Johne's disease at the herd level is more difficult than for the other diseases. However, for the reasons given above, an effort should be made to eradicate the disease from an infected herd. A simple test and cull programme is not sufficient. It must be supplemented by the removal of offspring of any test positive dam from the breeding herd, as these are at particularly high risk of developing the disease, and by a hygiene programme designed particularly to reduce calf exposure to faeces from adults and more generally to reduce the amount of faecal contamination for all ages of breeding stock. Reducing the prevalence of disease in a herd is a slow process and can take many years even where all efforts are taken to manage and eliminate the disease

Map infection is not limited to cattle, and sheep flocks can be infected and be a source of infection for cattle. Rabbit populations on farms where there are infected cattle herds have also been shown to be infected with Map. While the risk from these sources of infection may be limited they should be considered as potential sources of infection must be considered in any control programme.

## **Johnes Disease Risk Level certification programme**



**Objective:** To provide an assessment of the risk of Johne's disease being present in the herd, to provide a control programme that achieves a reduction in the risk of Johne's disease within the herd and to allow the marketing of cattle with an accredited risk level.

**Method:** Herds may progress from level 5 to level 1 as they progress in controlling the disease. In addition to adhering to the CHeCS rules there are mandatory requirements that support the control and prevention of Johne's disease within this programme (detailed below). Herds will be CHeCS accredited for the four risk levels within the programme. Herds may choose to test animals but not adhere to the mandatory requirements. These herds and any herds not testing will be risk level 5 and will constitute the highest risk of being a source of Johne's disease infected stock. This programme of risk accreditation can be used in both beef and dairy herds.

**Definition of levels within the Johne's Disease Risk-Level Certification Programme:** To progress to the next level, testing cannot be sooner than 12 months after the previous test. When assigning a herd risk level, all test positive animals identified in the previous 12 months must be included in the calculation.

All animals two years of age and over must be tested in order to qualify for this risk level certification program.

**Accreditation of herd for levels 1 to 4:** The date the herd achieves a particular level will be included on the Certificate of Accreditation. Should a herd, having reached a particular level, fail to meet the standard and drop down a level but subsequently regains the original level, the date on the certificate will be when the particular level was regained.

**Level 1:** Herds must have had three consecutive clear herd tests at annual (See points 1.2 to 1.4 below on testing methods) . Level 1 will be further defined by stating the year in which the herd achieved level 1 assessment. This is directly equivalent to the previous CHeCS Accredited Free Status and is associated with the lowest risk of Johne's disease in relation to buying breeding stock from participating herds.

**Level 2:** This applies to all herds that have had an initial, or two consecutive clear tests, but are yet to achieve level 1 status. Level 2 will be further qualified by the number of consecutive clear herd tests that have been achieved (e.g. Level 2, one year clear; Level 2, two years clear). This is directly equivalent to the previous CHeCS Qualifying Status.

**Level 3:** These are herds that have test positive animals identified within the herd, but the number of test positive animals does not exceed 3% of the herd eligible for testing in the Johne's programme at the most recent test.

**Level 4:** These herds have more than 3% of eligible animals identified as test positive animals at the most recent test.

Level 5: These herds may be carrying out a testing programme, but are not adhering to the mandatory requirements of the programme.

### **Essential points on Testing Methods**

The instructions contained within 1.1 to 1.10 are mandatory for herds participating in the Johne's Disease Risk-Level Certification Programme (beef and dairy).

**1.1 Samples:** Clotted blood samples should be used. Faeces samples should weigh at least 5g and be submitted in a sample pot designed for the purpose. Faecal samples must be taken and submitted by the on-farm veterinarian.

**1.2 Definition of a test positive animal:** Any animal that tests positive for antibodies to Johne's disease by ELISA test must be placed in isolation and retained there as a test positive animal. Any animal that tests positive for antibody is also defined as a test positive animal if no further testing is done. Further testing may not be appropriate in herds where more than 2% of the herd is positive for antibody. Test positive animals should have no contact with young stock and where possible should be kept isolated from the rest of the herd until the results of further testing are known and allow the appropriate action to be taken. Where animals test positive close to the cut-off threshold with a blood sample, then at the laboratory's discretion retesting after one month may be carried out using blood antibody ELISA test. If it is negative on that occasion then it should be considered not to be a test positive animal. Alternatively follow-up testing may be carried out by examination for the infective organism in faeces by PCR. If the animal is confirmed as having Johne's disease, by detecting the organism in faeces that animal is defined as a test positive animal.

**1.3** Any animal that tests positive for antibody to Johne's disease by blood and negative for infective organism by culture or PCR should be considered as high risk and must not be sold for breeding. It is also advised that these animals should not be retained for breeding. These animals do not affect the herd risk level.

**1.4 Suspected cross-reactions following intradermal tuberculin testing:** Following the tuberculin test, animals may produce antibody that will cross-react in the Johne's antibody test and result in false positives. To avoid this it is recommended that testing is not carried out within three months following tuberculin testing. Where this cannot be avoided or where it has inadvertently occurred it is recommended that seropositive animals should be separated from test negative animals and be tested again at one month, and if still positive, at three months after the original blood test. If the positive results have been due to cross-reacting antibody then the level of antibody will have declined. Any animal remaining antibody positive at three months should be subjected to faecal screening. If faecal testing is negative the animal is considered to be free of infection and the herd status is retained.

**1.5 Whole Herd Faecal Screen:** The option exists for herds to test the whole herd by faecal culture or PCR instead of the blood test. Faecal samples may be pooled in the laboratory and tested in batches of up to five. Samples must be taken and submitted by the herd's veterinary practitioner.



**1.6 Clinical Disease:** Any disease condition in an animal six months of age or older that might be attributable to Johne's disease must be investigated by the herd's Veterinary Surgeon. This includes all animals that may have diarrhoea, or weight loss or both. If the Veterinary Surgeon is satisfied that the condition is not Johne's disease, then no further action need be taken. If the Veterinary Surgeon cannot rule out Johne's disease, then a blood sample and faeces sample should be collected from each affected animal and tested. The affected animals should be isolated from the herd until the results of the laboratory tests are known. Animals that die before blood or faeces samples are collected must be examined by post mortem examination and tested for the presence of MAP positive tissue at the ileo-caecal junction.

**1.7 Added Animals – Non-accredited:** These animals always constitute a risk of introducing infection and if at all possible should not be added to the herd. Young stock, in particular, can be incubating infection but test negative. When this risk is taken, it is preferable to blood sample and test animals for antibody to Johne's disease, and also to test faeces, while they are on the farm of origin. If positive, the animals cannot enter the herd and there will be considerable savings in time and expense. It has been found that following pre and post movement tuberculin testing animals may test positive for antibody in the Johne's ELISA. While this has previously been assumed to be due to a cross-reaction (i.e. a false positive reaction) evidence is emerging to suggest that positives occurring in this situation may well indicate previous exposure to Johne's disease and such animals may be infected. Where cross-reactivity is suspected animals with a negative antibody and faecal result three months after purchase may enter a herd without loss of status, however it must be acknowledged that this is a high risk strategy and it may be prudent to exclude them from the herd. On entry to the herd, added animals must be placed in quarantine and the general CHecs rules on isolation and testing apply (Including the rules applying for IBR listed above). This is mandatory for herds with status Levels 1, 2, 3, or 4 and strongly advised for Level 5 herds. The animals must be tested for Johne's disease using both blood (Elisa testing) and faeces samples (PCR testing) irrespective of the age of the animal. Animals must remain isolated until the results of the tests are known. Only when the results are negative can the animals be introduced to the herd. Where a group of animals have been purchased from a single source and one or more of them tests positive, the remainder of the animals in the group should be viewed as level 5 animals carrying the highest risk of introducing infection to a herd.

**1.8 Selling on animals that have been purchased from another herd:** When an animal is purchased from a herd with an inferior Johne's disease risk level than the herd to which it is added, the purchased animal retains the risk level of the herd of origin should it be sold on. For example it cannot be sold as risk level 1 if purchased as risk level 2, 3, 4 or 5. Animals that are purchased from a herd with a superior risk level can be sold only at the risk level that applies to the purchasers herd at the time of subsequent sale. For example, an animal purchased as risk level 1 into a risk level 4 herd can only be sold at the risk level that applies to the level 4 receiving herd at the time of subsequent sale.

**1.9** Where a purchased animal from a herd with a certified risk level is found within six months of purchase to test positive by faecal culture or PCR then the purchaser must inform the vendor of the result. The vendor must in turn inform his health scheme provider. The result



will then be taken into consideration in relation to the number of positives that were found in the most recent herd test that has been completed for the vendor's herd at the time the animal was found to be positive. The risk level of the herd will be re- assigned as per the rules of the scheme. Therefore a herd that was risk level 1 or 2 will become risk level 3 or 4 depending on the total number of positives and the number of eligible animals in the herd. If the test positive animal had been too young to be included in the herd test or had already left the herd then it should be added both to the numerator and the denominator in order to determine the exact percentage of the herd that tested positive and whether the risk level is now 3 or 4. To progress to the next level, the vendors next annual herd test cannot be sooner than 12 months after the most recent positive testing animal is identified on a purchasers farm. In cases of dispute the following protocol should be followed. Animals may be re-tested after one month using sequential faecal screening. Animals must be placed in an isolation pen free of faecal contamination from other animals and with no nose to nose contact with other animals. Faecal samples should be collected on day 7, 14, 21 and 28 of isolation for PCR testing . Faecal samples must be collected per rectum by a vet. If an animal tests positive on any one of the four occasions it is confirmed as a test positive animal.

**1.10 Shows, Sales etc:** If Johne's disease accredited cattle have been away from the herd at a show for a period not exceeding seven days and have been prevented from having contact with other cattle, particularly their manure and soiled bedding, the accredited cattle can rejoin their herd of origin without the need for isolation or testing.

## **2. On-going Monitoring**

**2.1 Annual Herd blood tests:** These are carried out on all animals two years of age or older at an interval of 12 months. An annual herd test can only count as clear providing 12 months have passed since there was a herd test with any test positive animal and providing no other test positive animal has been identified in the herd in those 12 months.

**2.2 Milk testing.** Milk samples are not an allowed test matrix as part of the FarmLab HealthSure scheme

**2.3. Accreditation of herd for levels 1- 4:** The date the herd first achieved a particular level will be included on the Certificate of Accreditation. Should a herd, having reached a particular level, fail to meet the standard and drop down a level, but subsequently regain the original level, the date on the certificate will be when the particular level was regained.

**2.4. Annual Tests:** All animals two years or older must be tested every 12 months.

**2.5. Definition of a clear test:** For a herd test to be clear, any animal with positive antibody results must have further testing carried out, as in section 1.2, with negative results. **If further testing is not carried out, animals with positive antibody results are considered to be test positive animals by default and the herd will drop down a level or levels depending on the number of test positive animals.** Further testing may not be appropriate in herds where more than 2% of eligible animals test positive by blood or milk antibody ELISA





### **3. Mandatory Control Elements of the Johne's Disease Risk-Level Certification Programme**

**3.1. Antibody positive animals:** All seropositive animals must be placed in isolation (see 1.2) with any follow up testing, if appropriate, being carried out as soon as is practical.

**3.2. Cull all test positive animals:** Notwithstanding the requirements for separation of test positive animals in 3.1, all animals confirmed as test positive animals must be removed from the breeding herd as soon as is practical. Where cows are in late pregnancy or rearing calves, they may be retained until the calf can be weaned but must be separated from other breeding animals or animals intended for breeding. If the test positive animal is kept at pasture no breeding animal or animal intended for breeding can graze that pasture for 12 months following the removal of the test positive animal. The faeces from test positive cattle must be kept away from other cattle.

**3.3. Offspring of female test positive animals:** Any calf that has been reared by a cow since the time the cow was recognised as a test positive animal must not be retained for breeding or sold as a breeding animal. See also 4.7.

**3.4. Health Plan:** A health plan covering the control of Johne's disease must be in place. It must be updated annually and it must be signed off by both the herd's Veterinary Surgeon and by the herd owner or manager. Scheme members in the Republic of Ireland must implement an Animal Health Ireland(AHI), Veterinary Risk Assessment and Management Plan (VRAMP) if applicable (Note: additional control elements will have to be incorporated for beef herds).The health plan must be available to the health scheme provider on request. The health plan must cover the four mandatory control elements (3.1 to 3.4) and the seven advisory measures listed in the guidelines (4.1 to 4.7) The herd's Veterinary Surgeon must detail in writing within the health plan why any particular guideline has not been followed.

**3.5 Failure to adhere to mandatory requirements:** Should a herd fail to adhere to any of the points 3.1 to 3.4 then it will immediately lose status and be categorised as level 5. Furthermore failure to provide a current and signed off health plan within one week of it being requested by the health scheme provider will result in the immediate loss of status and the herd will be categorised as level 5.

**3.6 Re-accreditation:** Herds that have lost status as detailed in 3.5 can only regain their previous status following all mandatory requirements being satisfied and after the next herd test.

**4.0 Guidelines for the Johne's Disease Risk-Level Certification programme health plan**  
Health Scheme members in the Republic of Ireland must have a Veterinary Risk Assessment and Management Plan (VRAMP) carried out by the herd's veterinary surgeon. The VRAMP must incorporate the current version of the agreed Animal Health Ireland (AHI) VRAMP protocol at the time of the plan being drafted. The VRAMP must be reviewed annually by the herd's veterinary surgeon. The herd's veterinary surgeon must have undergone VRAMP training , and be on the list of AHI approved VRAMP practitioners. In addition, health



**scheme members and their veterinary practitioners should adhere to points 4.1-4.7 listed below, including additional management procedures on the farm where appropriate.**

**4.1 Hygiene programme:** Detailed herd specific instructions should be in place to reduce the amount of faecal contamination that stock are exposed to. The main focus for this is to keep cows in the immediate pre-calving period as clean as possible and to ensure that faecal contamination of any calving area, post calving housing and for young calves sucking their dams is minimised. It should include guidelines on slurry and manure management.

**4.2 Feed and water delivery systems:** Procedures should be in place to keep all feed and water delivery systems as free of faecal contamination as possible.

**4.3 Water provision at grass:** Where ever possible mains water should be provided. Herds in extensive grazing which are at least 50 hectares are exempt from this requirement, but note that enclosed grazings (in-by) are not exempt.

**4.4 Natural water sources:** Ponds and other areas that allow cattle to defecate into them and then drink from them should be fenced off. Extensive grazing is exempt from this requirement.

**4.5 Co-grazing with other ruminant species:** Other ruminants can be a source of infection for cattle and should be considered as a potential source of environmental Map contamination.

**4.6 Rabbits:** Rabbit populations can become infected with Map and should be considered as a potential source of environmental Map contamination.

**4.7 Offspring of female test positive animals:** The mandatory requirement of 3.3 that, any calf that has been reared by a cow since the time the cow was recognised as a test positive animal must not be retained for breeding or sold as a breeding animal, should be extended to include her previous calf.

## **5 Irish National Control Programmes**

**5.1 National IBR and Johnes Control Programmes:** It is a requirement of the FarmLab HealthSure scheme that members in the Republic of Ireland sign up to whatever statutory or voluntary Animal Health Ireland National Johnes or IBR control programme is in place at the time that they are members. Participants must adhere to the conditions of any of these programmes in addition to the requirements laid down in this document.

**5.2 Transfer of data to Animal Health Ireland and ICBF:** Participants in the Republic of Ireland will also be required to allow their testing data to be transferred to Animal Health Ireland via the ICBF database.



**5.2 Provision of data to Health Scheme provider:** Health scheme participants in the Republic of Ireland must allow permission for the Health Scheme Provider (FarmLab Diagnostics) access to their herd data on ICBF , for the purposes of allowing audits on the animals tested and movements in and out of the herd

## Appendix 1

### General Rules of CHeCS

#### Herd Biosecurity

1. Herd biosecurity: Herd biosecurity is explained and the general principles are detailed in the Defra document entitled "Disease prevention for livestock and poultry keepers", published 11th September 2012. Last updated 21st September 2015: <https://www.gov.uk/guidance/keeping-livestock-healthy-disease-controls-and-prevention> (accessed 24th August 2017)) and in Animal Health Ireland publications ([http://animalhealthireland.ie/?page\\_id=397](http://animalhealthireland.ie/?page_id=397))

Herd owners, managers and Veterinary Surgeons participating in a cattle health scheme must be familiar with these documents and should seek to achieve the standards set.

In addition to this general guidance, set out below are more specific conditions and requirements to which participants in the CHeCS accreditation programmes must adhere.

2. Herd Definition: A herd is defined as cattle that are under a unified management system but not necessarily on one site. All cattle on the holding are considered to be part of the herd except under exceptional circumstances where the herd's owner and veterinary surgeon can show that adequate separation of two sets of animals exists and can be maintained to satisfy the rules of the scheme. Documentation to this effect must be produced by the herd's veterinary surgeon, reviewed annually and held on file by the CHeCS licensee.

3. Farm boundaries: Farm boundaries must prevent cattle from straying off or onto the farm and must prevent nose to nose contact with cattle of a lower health status over fences or walls. Installation of double fencing, or use of an equivalent boundary to provide a gap of 3 metres between scheme cattle and any neighbouring cattle of a lower health status, is a useful standard to adopt for all disease control programmes.

4. Accredited status: Accredited status is specific to each disease. If herds are accredited for different diseases, the rules for movement and contact between those herds shall be the same as if they were non-accredited herds. Accreditation means that the standard defined for the disease in question has been met.

5. Added animals: Whenever possible, cattle should only be added to a health scheme herd if they are from a herd that is accredited free from the disease in question, or in the case of



Johne's disease at risk level 1. Otherwise they must be placed in isolation for the required period and tested by the appropriate test(s) for the disease(s) in question.

6. Contact with cattle of different health status: Cattle from health scheme herds must not come into contact with non-health scheme cattle or health scheme cattle of a lower status otherwise they will lose their status within the scheme. To re-introduce them into the herd, they must be regarded as non-accredited added animals and must be placed in isolation for the required period and tested by the appropriate test(s) for the disease(s) in question.

7. Grazing of cattle: Cattle must not be grazed on pasture previously grazed by non-accredited cattle until a period of twelve 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.

8. Feed and bedding: When buying feed and bedding, care must be taken to avoid the risk of introducing infection into the herd. Feed and bedding stores should be protected against access by vermin and wildlife.

9. Colostrum: Colostrum from non-health scheme herds, or from health scheme herds of a lower status, must not be brought into a health scheme herd.

10. Water: Piped mains water should be used rather than natural water sources whenever possible because there is a risk of cattle becoming infected with Johne's disease from water courses. Where scheme participants are following the programmes for these diseases, it is preferable, but not essential, that scheme cattle do not have access to watercourses that have other cattle or sheep grazing upstream or that have flowed through another farm.

11. Veterinary equipment: Equipment such as drenching guns, surgical instruments and hypodermic needles must not be shared with cattle from another herd. Veterinary surgical instruments must be sterilised before use in the herd.

12. Farm equipment: Equipment, machinery, livestock trailers and handling facilities that are shared between health scheme cattle and other livestock must be cleaned and disinfected before use with health scheme cattle. For herds in the Johne's disease programme, a DAFM-approved product at the dilution recommended for tuberculosis control must be used: (<https://www.agriculture.gov.ie/animalhealthwelfare/diseasecontrol/disinfectants/>)

13. Delivery or collection of stock: Delivery and pick-up points should be at a site isolated from other cattle on the farm. Where possible the driver should remain in his cab and should never assist in removing cattle from pens unless using farm-dedicated protective clothing and footwear.

14. Isolation facility: An isolation facility that prevents contact with other stock must be provided for all added animals. A dedicated building separate from other cattle buildings is ideal but a separate paddock that prevents contact with other stock may suffice. No air space,



drainage or manure storage may be shared with other cattle. Manure may only be removed from the dedicated storage area to be spread on land or added to the main manure store when all animals in the isolation facility have passed the required health tests and been added to the herd.

If any of the animals in the isolation facility test positive for any of the five diseases, manure from the isolation facility must not be used in recycled bedding or be disposed of onto pasture that is to be grazed by cattle within 12 months. Where paddocks have been used to isolate test positive animals, or to quarantine disease breakdown cattle, other cattle must not be allowed to graze them for at least 12 months.

15. Isolation period: A defined isolation period must be observed for all additions to a health scheme herd and appropriate testing carried out as required for the particular disease programme being adopted. It is only when both the isolation period and the requisite tests have been completed, with results indicating freedom from infection, that those animals can enter the herd.

16. Co-grazing with sheep or other domestic ruminants or camelids: Although not a mandatory requirement, it is strongly recommended that wherever possible cattle and sheep do not graze together.

17. Notification: Herd owners, managers and veterinary surgeons participating in a cattle health scheme must inform the health scheme's supervising Veterinary Surgeon of any changes that could affect herd biosecurity.

18. Semen/embryos. Accredited herds should only source new genetic material from reliable sources (e.g. semen collection centre approved for intra-community trade).

#### Herd Testing Rules:

19. Previous results: All herds which are enrolled onto a CHecs programme (accredited, monitored and eradication schemes) must declare the results of any screening carried out in the previous 12 months for the disease for which accreditation is being sought. Also if the disease in question has been confirmed in the past 12 months this information must be communicated to the scheme's Veterinary Surgeon. It is implicit within the membership of the scheme that all results relevant to the accreditation process are made available to the health scheme provider by the member. Failure to disclose any such relevant results will result in loss of status.

20. Sample identification: At the time of collection all samples must be identified in order to allow blood, milk or faeces samples to be unequivocally matched with the individuals tested. The animal's full official ear number must be used as the unique identifier. The scheme provider retains the right to carry out further sampling and testing and or re-testing of original samples in order to confirm the integrity of individual samples. This may involve the use of genetic testing.

21. Sample collection: Samples can only be collected by a Veterinary Surgeon.



22. Establishment of new herd from accredited stock: Where it is intended to establish an accredited herd by acquiring cattle accredited free of the particular disease, the premises must be inspected by a Veterinary Surgeon before the new stock are introduced in order to ascertain that the biosecurity of the premises and farm boundaries meet the requirements of the scheme. The appropriate accreditation test for the disease must be carried out no sooner than three months after establishing the herd. Once testing has been completed with satisfactory results, the herd can be recognised as having achieved accredited status.

23. Testing programme: The testing programme for each disease is detailed in the relevant section and must be followed.

24. Suspicion and confirmation of target disease: Any disease condition which might be attributable to a disease that is the target of the scheme must be investigated by the owner's own Veterinary Surgeon. If the Veterinary Surgeon is satisfied that the condition is not the target disease no further action need be taken. If the Veterinary Surgeon cannot rule out the target disease, the requisite samples as detailed in the programme must be collected from each affected animal and tested. The affected animals must be isolated from the herd until the results of the laboratory tests are known.

25. Confirmation of target disease: After the target disease has been confirmed in a herd, the herd will not be eligible for accredited status until all the herd have passed the requisite tests, as detailed in the specific programme, and all known test positive animals have been removed from the herd. Where animals have been confirmed as infected with Johne's disease they must not be sold on, except to slaughter.

26. Movement of accredited cattle off farm for purposes other than show and sale: Accredited cattle leaving their home herd for any purpose other than to attend a show or sale must be loaded, transported, unloaded and accommodated separately from non-accredited cattle. No direct or indirect contact between accredited and non-accredited cattle must be allowed to occur at any time. If these conditions are met then accredited cattle may return to their herd of origin, or to another accredited herd, without any isolation or testing.

27. Movement of accredited cattle off farm for shows and sales: It should be recognised that any contact with other stock puts the status of the herd at risk. Animals moving off the owner's holding for preparation for sale will lose accredited status if the CHecs biosecurity rules are not adhered to on the premises where preparation is taking place.

In the absence of CHecs accredited sections at cattle shows and sales, any accredited cattle attending a show or sale will be deemed to have lost their accredited status. On being returned to the herd of origin such cattle must be treated as non-accredited added animals and must be isolated and tested according to the requirements of the individual disease programmes. The only exception to this is for Johne's disease accreditation when, providing the period of contact is less than one week, the added animal procedure need not apply. (See Johne's disease section, paragraph 1.10)



28. Contact with non-accredited cattle: Accredited cattle that have come into contact with non-accredited cattle must be treated on their return to the farm as non-accredited added animals. The isolation and testing programmes as required by the particular disease programme(s) must then be carried out. Failure to observe this condition will result in the loss of accredited status.

29. Certification (1): Certificates are only issued by cattle health scheme operators licensed by CHeCS. No other certificates are acceptable to the operators of CHeCS cattle health schemes. Only herds with valid certificates are deemed accredited for the disease(s) for which they have been tested. The certificates will be valid for 13 months from date of issue, providing the rules of the scheme continue to be adhered to. Certificates will not be renewed until the testing required to maintain the accredited status of the herd has been carried out, with negative results, for the disease(s) in question.

30. Certification (2): Certification is based upon:

- Owner's declaration of compliance with the rules.
- Inspection of the herd by the practising Veterinary Surgeon.
- The Veterinary Surgeon's declaration of compliance with collection of the appropriate samples.
- Appropriate laboratory tests carried out at a CHeCS approved laboratory.
- All results relevant to the accreditation process (from private as well as CHeCS approved laboratories) are required to be made available to the health scheme provider by the member.
- The standards for certification stated in the Veterinary Council of Ireland's Code of professional Conduct are adhered to. Veterinary Surgeons who are members of a cattle health scheme operating to the CHeCS rules must have knowledge of and comply with the The Veterinary Council of Ireland's guidance on self- certification.

31. Certification (3): Sample certificates are in Appendix 2 and 3. Two certificates are produced to show herd status. One is signed by the health scheme provider, which can be displayed at sales etc. (Appendix 2), and the other is signed by the vendor and should be used to record the ear numbers of stock leaving the farm and supplied to purchasers as a record (Appendix 3).

Two certificates are produced to show Individual Health Declarations in Appendix 4; the A3 and A4 Individual Health Declarations or 'Pen Cards'. The A4 certificate contains additional information on vaccination, status and testing results. It is important to note that individual animals that are not from CHeCS accredited herds can be sold with a pen card, however column two containing the Herd Accreditation boxes will be blank.

32. Loss of accreditation: Failure to observe any of the above rules will result in loss of status until such time as follow up testing can demonstrate that the disease status of the herd has not been compromised. This will be in the judgement of the CHeCS scheme provider's Veterinary Surgeon.



33. Veterinary Surgeons: CHecs strongly recommends that Veterinary Surgeons participating in a cattle health scheme are members of the British Cattle Veterinary Association and have received appropriate training on the CHecs scheme and the target diseases.

