



New Rules for Cattle Health Schemes on Johne's Disease

Revised 22 June 2021

This chapter will replace the current Johne's disease chapter in the CHECS Technical Document
Date from which effective: PENDING (awaiting outcomes of an independent review)

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Johne's disease Programmes

For Johne's disease, there are two programmes:

1. Johne's disease Risk-Level Certification Programme (beef and dairy)

2. Johne's disease Risk-Level Reduction Programme (dairy)

1. Johne's disease Risk-Level Certification Programme (beef and dairy)

Objective: To provide an assessment of the risk of Map infection 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 in compliance with the required programme will be risk level 5 and will constitute the highest risk of being a source of Map infected stock. This programme of risk accreditation can be used in both beef and dairy herds, but it is envisaged that for many commercial dairy herds participation in the Johne's disease Risk-Level Reduction Programme may be more appropriate.

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. Testing is at annual intervals and must be completed within a month of the anniversary of the previous herd test (except for those herds qualifying for biennial testing). When assigning a herd risk level, all test-positive animals identified since the previous annual herd test and all animals eligible for testing at the previous annual herd test 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 regain the original level, the date on the certificate will be when the particular level was regained. The number of animals tested at the last full herd test will also be included on the certificate of accreditation.

Level 1: Herds must have had three consecutive clear herd tests at annual intervals. Level 1 will be further defined by stating the year in which the herd most recently achieved level 1 accreditation. This is associated with the lowest risk of Map infection or 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).

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 animals in the herd eligible for testing 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.

2. The Johne's disease Risk-Level Reduction Programme (dairy)

Objective: To implement a control programme to reduce the detrimental effects on herd productivity caused by this disease and to reduce Map infection prevalence within the herd over time. The ultimate long-term goal is to achieve freedom from the disease but the removal of test-positive animals is not a strict requirement. In order to achieve certification for Johne's disease, participating herds are required to join the Johne's Disease Risk-Level Certification Programme (beef and dairy).

1. 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), but are discretionary for herds following the Johne's disease Risk-Level Reduction Programme (dairy).

1.1 Samples: Blood samples should be either clotted or heparinised. Individual milk samples provide an alternative sample. Advice on this can be obtained from your cattle health scheme provider. Faeces samples should weigh at least 5g and be submitted in a sample pot designed for the purpose.

1.2 Definition of a test-positive animal: Any animal that tests positive for antibodies to Map by a milk or blood 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 be appropriate in herds where no more than 2% of the herd, or one animal in herds of 50 or fewer, is

positive for antibody, or, at the discretion of the CHECS board, under exceptional circumstances set out by the scheme provider for consideration.

Test-positive animals should have no contact with youngstock and should be kept isolated from the rest of the herd until the results of further testing are known to allow appropriate action to be taken.

Where animals test positive for antibody in a milk sample, or 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 a blood antibody ELISA test. If it is negative on that occasion then it should be considered not to be a test-positive animal.

Where a herd has vaccinated against Johne's disease, it is likely that a significant proportion of the herd will test positive using the antibody ELISA and testing option 1.5 may be more appropriate.

The further tests available are:

- a. Examination for the infective organism in faeces by culture or PCR.
- b. If the animal concerned is sent for slaughter, examination of tissues for the infective organism by culture or PCR or histological assessment of the ileo-caecal junction and draining lymph node.

If the animal is confirmed as being infected with Map or as having Johne's disease, either by detecting the organism in faeces or tissues or by finding typical histological lesions in the intestine, that animal is defined as a test-positive animal.

1.3 Any animal that tests positive for antibody to Map by blood or milk ELISA 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. Neither, if they are female, should any of their offspring born, or calves they have reared, since the disclosure of the positive test result or during the twelve months preceding this.

1.4 Suspected cross-reactions following intradermal tuberculin testing:

Following the tuberculin test, animals may produce antibody that will cross-react in the Map antibody test and result in false positives. To avoid this it is recommended that testing is not carried out within the 90 days following tuberculin SICCT 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 1 month after day 1 of the SICCT test. If the positive results have been due to cross-reacting antibody then the level of antibody will have declined. There is evidence, however, that PPD (used in the SICCT test) boosting acts to increase the sensitivity of the Map antibody ELISA test meaning infected animals will be identified earlier than they otherwise might. Any animal remaining antibody positive 90 days

after day 1 of a SICCT test should be considered test-positive, regarded as high risk and not retained or sold for breeding.

1.5 Whole Herd Faecal Screen: The option exists for herds to test all eligible animals 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.

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 Johne's disease is not the cause then no further action need be taken. If the Veterinary Surgeon cannot rule out Johne's disease as the cause, then a blood sample and faeces sample should be collected from each affected animal and tested. If the result of either test is positive Johne's disease will be deemed to have been confirmed.

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 as in 1.2b above.

1.7 Added Animals – Non-accredited: These animals always constitute a risk of introducing infection and ideally should not be added to the herd. Youngstock, 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 Map and also to test faeces, while they are on the farm of origin. If either test gives a positive result, 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 to Map. 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 Map 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. 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 evidence of infection with Map using both blood and faeces samples irrespective of the age of the animal. Only when the results are negative can the animals be introduced to the herd. Note that the time required to test for Map by faecal culture can be up to ten weeks and the animals must be isolated until the results are known. In addition, they must also be re-tested every twelve months, notwithstanding any annual or biennial herd-screening programme (see section 2.4 below). 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 Added animals - Accredited: Animals which are born and have resided since birth in RL1 herds are exempt from the isolation and quarantine testing requirements for Johne's disease.

1.9 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. Purchased animals are described on sale certificates as 'not-homebred' and cannot be sold with a herd status, with the exception of animals sourced from risk level 1 herds that have remained throughout their lives in a risk level 1 herd, and appropriate evidence of this is provided to their health scheme provider. This is at the discretion of the health scheme provider and assessed on a case-by-case basis.

1.10 Where a purchased animal from a herd with a certified risk level is found within twelve months of purchase to test positive for antibodies to Map or by faecal culture or PCR then the purchaser must inform their health scheme provider who the vendor was and also inform the vendor of the result. Both the purchaser's health scheme provider and the vendor must in turn inform the vendor's health scheme provider. The result will then be taken into consideration in relation to the number of test-positive animals that were identified at 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. If the test-positive animal had been too young to be included in the herd test, or had already left the herd at the time of the herd test 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 when determining the risk level to apply. 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 identified on a purchaser's farm left the vendors herd.

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 direct or indirect contact with other animals. Faecal samples should be collected on days 7, 14, 21 and 28 of isolation for PCR testing or culture. Faecal samples must be collected per rectum by a vet and certified as such. If an animal tests positive on any one of the four occasions it is confirmed as a test-positive animal.

1.11 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 and particularly with their manure and soiled bedding, the accredited cattle can re-join their herd of origin without the need for isolation or testing.

2. Johne's disease Risk-Level Certification Programme (beef and dairy)

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 at which any test-positive animal(s) was (were) identified and providing no other test-positive animal has been identified in the herd within those 12 months.

2.2 Quarterly individual milk sample testing: This can be used in place of a herd test as described in 2.1. A clear cycle of testing is achieved when four quarterly tests have been carried out, and all bulls and other eligible non-milking cattle have been blood tested, and no test-positive animal has been identified in the herd over a 12-month period.

2.3. Accreditation of herd for levels 1- 4: The date the herd most recently 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 or Biennial Herd Tests:

- Annual - All breeding animals, or animals intended as breeding animals, two years old or older must be tested every 12 months.
- Biennial – once a herd achieves Risk Level 1 status and has subsequently had two further clear annual herd tests, there is the option to follow the non-homebred and cull screen programme (see 2.5 below), in which testing of homebred animals may be carried out biennially rather than annually. This option is only available to herds that have at least 20 homebred breeding animals of two years of age and over.

2.5. Non-Home Bred and Cull Screen: This test must be performed when the biennial herd testing option has been selected. It is not available to herds with fewer than 20 homebred animals aged two years or older. 12 months after the last complete herd test, all animals two years old or older that are not home-bred or are scheduled for culling are blood sampled (this does not apply to finishing cattle). Animals should not be removed from the herd before the test result is known or a faeces sample has been collected. Where, in the course of the second 12 months from the full herd test, further animals are culled, or at any time if animals need to leave the herd urgently, they too are sampled as above. If the blood results are positive or inconclusive then

their faeces samples will be screened for the presence of the infective organism by culture or PCR.

2.6. Definition of a clear test: For a herd test to be clear, irrespective of whether an annual or biennial programme is being followed, any animal giving a positive antibody test result must, if permissible, 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 identified. Further testing will not be permitted in herds where more than 2% of eligible animals, or one animal in herds of 50 or fewer, test positive on blood or milk by antibody ELISA, except in exceptional circumstances and then only at the discretion of the CHECS board.

3. Mandatory Control Elements of the Johne's disease Risk-Level Certification Programme 3.1-3.6

3.1. Antibody positive animals: All seropositive animals must be placed in isolation (see 1.1 and 1.2) with any follow up testing, if appropriate, being carried out as soon as is practical. Members should be aware that any animal that leaves the herd or dies before the results of the herd test are known, may have a positive antibody result. Therefore, to ensure that such animals can have confirmatory screening carried out, should they test Map antibody-positive and it is appropriate, you should arrange for your vet to collect a faeces sample from these animals before they leave the holding. This can be managed for animals that have been subject to emergency slaughter, culled for some other reason, sold or otherwise died. In the event of these animals having a positive antibody result the dung samples can be tested if required.

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 kept separate from other breeding animals, animals intended for breeding, and youngstock. If the test-positive animal is kept at pasture no breeding animal, animal intended for breeding or other young animal can graze that pasture for 12 months following the removal of the test-positive animal. 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 delivered or reared by a cow since the time the cow was recognised as a test-positive animal, or during the 12 months before this, must not be retained for breeding or sold as a breeding animal.

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. 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 (4.1 to 4,7) listed in the guidelines. 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 all the points under sections 1 and 2 of the Johne's disease risk-level certification programme or to any of the points 3.1 to 3.4 inclusive, 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 (4.1- 4.7)

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 from faecal contamination as possible.

4.3 Water provision at grass: Wherever possible mains (or other potable) water should be provided. Herds on extensive grazings which are at least 50 hectares in area 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 not co-graze with cattle. This applies to all but extensive grazings.

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

5. Dairy Johne's disease Risk-Level Reduction Programme (dairy) – Test systems

5.1. Initial herd test: All animals two years or older must be either blood tested or milk tested as part of a quarterly herd individual animal screen. Any animals two years old and older that have not had a milk sample tested as part of the herd screen must be blood sampled, including any cows not being milked and bulls. If all samples in the initial herd blood test or first year of quarterly milk sample testing give negative results, then this can be the first clear test for the Johne's disease Risk-Level Certification Programme, providing the rules of the scheme are adhered to and the mandatory requirements (3.1 to 3.4) are satisfied.

Where herds are using this programme they may progress to the Certification programme once a complete clear herd test has been attained and the mandatory elements of the Certification programme are being followed. As with the conventional testing system there is the option to confirm positive milk antibody test results, if appropriate, using a faecal test (defined in 1.2 above). Having achieved a clear 12-month period, they may then enter the Certification programme at Risk Level 2, providing the other requirements detailed (3.1 to 3.4) have been met.

Subsequent herd tests may be based on either continued complete 12-month cycles of quarterly milk testing with the addition of all bulls and other eligible non-milking cattle as defined in 2.2 or annual whole herd tests as defined in 2.4 and 2.5.

5.2. Managing test positive animals and their offspring:

It is advised that the last two calves of any test-positive animal should not be retained for breeding and any test-positive animal should be removed from the herd as soon as is practical.

In the case of quarterly individual cow milk testing, a management strategy for high- and medium-risk cows should be agreed between the vet and the farmer. Where possible, no high-risk cows should remain in the herd at calving. Medium-risk cows should be isolated at calving to avoid risk of infecting young stock.

5.2.1 Definition of High-Risk Cow: A cow is identified as high-risk if she has tested positive at two of the previous four quarterly milk antibody tests or by blood antibody testing.

5.2.2 Definition of Medium-Risk Cow: A cow is identified as medium-risk if she has tested positive on a single occasion in a quarterly milk sample during her current lactation. Cows that have been identified as medium-risk on the last milk sample of their current lactation should be further blood-sampled after one month and before they calve. Should she test positive on blood she will be categorised as high-risk.

5.2.3 Definition of Low-Risk Cow: A cow is low-risk if she has had more than two consecutive milk antibody tests or a single blood antibody test in the negative zone, including the most recent result, unless she has previously been defined as high-risk.

5.3. Routine herd test: Routine annual testing (testing all eligible animals over two years old) and/or quarterly individual cow milk testing (testing all eligible animals in milk over two years old at each test) continues and management procedures to reduce the exposure of cattle to infection are implemented.

5.4. Suspected cross-reactions following intradermal tuberculin testing in milk antibody testing schemes:

Following an SICCT test animals may produce antibody that will cross-react in the Map antibody test and result in false positives. In most cases such cross-reactions will disappear within 90 days and before the next round of Map antibody testing. Therefore, cows testing positive as a consequence of a recent SICCT test will eventually return to the low-risk category. However, it is also possible that the priming effect of the PPD used in the SICCT test increases the sensitivity of Map antibody testing so that more Map infected animals are correctly identified earlier than they otherwise would and so, irrespective of any recent SICCT test, test positive animals should continue to be regarded as high-risk, particularly if serial testing fails to demonstrate a declining Map antibody titre

6. Vaccination: If the number of positive animals at a herd test is such that a culling policy cannot be pursued, herd vaccination may be considered. There is no licensed Johne's disease vaccine available in the UK, but the use of an imported vaccine may be authorised and the herd's Veterinary Surgeon can advise on this. Antibody tests cannot distinguish between non infected, vaccinated cattle and infected cattle, therefore discussion should be had with your health scheme provider before enrolling a vaccinated herd on a disease reduction programme. Vaccination will not prevent infection but may delay the onset and reduce the severity of clinical disease signs. Management procedures to reduce the exposure of cattle to infection should be implemented. Vaccination continues until no clinical Johne's disease occurs for a period of at least two years. At this point, vaccination can cease and progression towards Johne's disease risk-level accredited status can begin.

The Diseases

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 of 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. However, both the Food Standards Agency and Defra have advised that the precautionary principle should be observed and that measures should be taken to minimise the number of Map organisms that enter the food chain. This can be achieved by having a herd Johne's disease control programme.

Tests carried out on blood or milk samples to detect antibodies to Map and on faeces samples to detect Map are valuable procedures for the diagnosis of Map infection and Johne's disease. However, they can only be reliably used to detect infected animals in the later stages of infection during 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. Nevertheless, the tests are 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 Map infection is difficult and because the organism survives well in the environment, control and eradication of Johne's disease is more difficult than for the other diseases in the CHECS portfolio. 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. It will take a minimum of three years before progress can be appreciated and at least a further three years before the disease may be removed from the herd. In many herds removal of the disease from the herd may take considerably longer.

Map infection is not limited to cattle. 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. These potential sources of infection must be considered in any control programme.

In heavily infected herds, particularly where there are barriers to introducing the control programme, vaccination may be used to reduce the number and severity of clinical cases of Johne's disease, delay their onset and possibly to reduce the Map load in the environment. However, vaccination will not remove the infection from a herd and the use of vaccine is not recommended for herds that are selling breeding stock.

EFFECTIVE DATE PENDING

4. CHECS Johne's disease Programme

Mandatory Elements
4.1 Has annual herd testing (all animals over 24) been undertaken?
4.2 What happens to test positive animals and any calves at foot? Is follow up testing carried out? Any calves at foot when reactors are identified must not be retained for breeding purposes. It is recommended that this is extended to include the dam's previous calf.
4.3 Have any animals been added/returned to the herd and have they been tested appropriately? Blood and dung testing is required on all added animals, regardless of age unless they have come from a risk level 1 herd.
Advisory Elements
4.4 Hygiene and calf management. What measures are undertaken to prevent infection of young calves via faecal contamination?

4.5 Slurry management.

How is slurry/-manure managed? Spreading on calf pasture to be avoided. Slurry/-manure from non-accredited cattle must not be spread on pasture.

4.6 Food and water supplies.

What measures are undertaken to prevent faecal contamination of food and water supplies?

4.7 What is the policy on co-grazing?

Cattle should not co-graze with other ruminants. Rabbit populations should be controlled.

4.8 Additional notes

Date:

EFFECTIVE DATE PENDING