Irish Johne’s Control Programme
Interim Technical Manual

This document should be read in conjunction with the requirements for registration Irish Johne’s Control Programme
AHI gratefully acknowledges the financial and other contributions of our stakeholders.
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<table>
<thead>
<tr>
<th>Term</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>AIMS</td>
<td>Animal Identification and Movement System.</td>
</tr>
<tr>
<td>Ancillary Testing</td>
<td>Test undertaken to resolve the status of an ELISA test-positive or test-</td>
</tr>
<tr>
<td></td>
<td>inconclusive animal.</td>
</tr>
<tr>
<td>Approved Veterinary</td>
<td>A veterinary practitioner approved by AHI for the purposes of the</td>
</tr>
<tr>
<td>Practitioner</td>
<td>Johne’s Disease Control Programme.</td>
</tr>
<tr>
<td>Bio-containment</td>
<td>Farm practices that prevent the spread of infection within a farm (e.g.</td>
</tr>
<tr>
<td></td>
<td>high calf hygiene standards, manure management).</td>
</tr>
<tr>
<td>Bio-exclusion</td>
<td>Farm practices that prevent the introduction of infection onto a farm (e.g.</td>
</tr>
<tr>
<td></td>
<td>a closed herd policy).</td>
</tr>
<tr>
<td>Biosecurity</td>
<td>Farm practices encompassing both bioexclusion (keeping infectious diseases</td>
</tr>
<tr>
<td></td>
<td>out of holdings) and biocontainment (reducing infectious disease threats</td>
</tr>
<tr>
<td></td>
<td>within the farm).</td>
</tr>
<tr>
<td>Designated Laboratory</td>
<td>A Laboratory that has been designated to provide test results to the IJCP;</td>
</tr>
<tr>
<td></td>
<td>only results from designated laboratories may be uploaded to the programme</td>
</tr>
<tr>
<td></td>
<td>database and are accepted for the purposes of the programme. The current</td>
</tr>
<tr>
<td></td>
<td>list of designated laboratories is available at</td>
</tr>
<tr>
<td></td>
<td><a href="http://animalhealthireland.ie/?page_id=352">http://animalhealthireland.ie/?page_id=352</a></td>
</tr>
<tr>
<td>Eligible cattle</td>
<td>Eligible cattle are any:</td>
</tr>
<tr>
<td></td>
<td>Animals in a breeding herd, over the age of 2 years on the date the whole</td>
</tr>
<tr>
<td></td>
<td>herd test is initiated, or</td>
</tr>
<tr>
<td></td>
<td>Non-breeding animals over the age of 2 years which are not</td>
</tr>
<tr>
<td></td>
<td>maintained in a physically separate biosecurity unit relative to any</td>
</tr>
<tr>
<td></td>
<td>breeding animals and young stock in the herd intended for breeding.</td>
</tr>
<tr>
<td>ELISA</td>
<td>Enzyme Linked Immunosorbent Assay. A rapid laboratory test that detects</td>
</tr>
<tr>
<td></td>
<td>the presence of antibodies to the bacterium which causes Johne’s disease</td>
</tr>
<tr>
<td></td>
<td>in either milk or blood.</td>
</tr>
<tr>
<td>Herd Assurance Score</td>
<td>The HAS is an objectively calculated score viewable by the individual</td>
</tr>
<tr>
<td>(HAS)</td>
<td>farmer on the ICBF database to quantify the level of confidence that any</td>
</tr>
<tr>
<td></td>
<td>given herd participating in the programme with negative test results are</td>
</tr>
<tr>
<td></td>
<td>truly free of infection or the relative level of infection in the herd,</td>
</tr>
<tr>
<td></td>
<td>where present.</td>
</tr>
<tr>
<td>IJCP</td>
<td>Irish Johne’s Control Programme.</td>
</tr>
<tr>
<td>Map</td>
<td><em>Mycobacterium avium</em> subspecies <em>paratuberculosis</em>. The causal agent of</td>
</tr>
<tr>
<td></td>
<td>Johne’s disease.</td>
</tr>
<tr>
<td>PCR</td>
<td>Polymerase Chain Reaction. A rapid test which detects the genetic material</td>
</tr>
<tr>
<td></td>
<td>of the Map organism.</td>
</tr>
</tbody>
</table>
1. Background

Johne’s disease (JD) is an infectious condition of cattle caused by the bacterium *Mycobacterium avium* subspecies *paratuberculosis* (Map). The disease progresses slowly causing increasingly severe damage to the lining of the gut. Obvious signs of disease often only become apparent in adult animals, typically between 3 and 5 years of age. The signs reflect the degree of damage to the gut and vary depending upon the stage of infection, beginning with reduced productivity followed by weight loss, scour and ultimately emaciation and death. Animals can become increasingly susceptible to other conditions as infection progresses and thus may be culled before the classic signs of a thin scouring adult animal appear. In these cases Johne’s disease could be contributing to an excessively high cull rate.

Infection usually occurs through the consumption of dung containing bacteria which has contaminated the calf’s environment, colostrum, milk or food, or transmission within the womb from an infected dam. The bacteria can be present in milk through direct shedding from the cow or through contamination of the udder with dung containing Map. Importantly, an infected animal can shed very large numbers of the bacteria into the environment through its dung. Therefore the identification of infected cattle and their removal in conjunction with the maintenance of high on-farm hygiene standards, particularly around young livestock, is key to the control of infection. The AHI Johne’s Disease Technical Working Group (JD TWG) is an all-island expert group comprising veterinary practitioners and scientists drawn from general veterinary practice, research centres, veterinary laboratories and DAFM that is responsible for advising on the technical aspects of the Johne’s disease control programme. The JD TWG has produced a comprehensive information leaflet on Johne’s disease. This leaflet is provided to all farmers enrolling in the programme and is available to view or download from the AHI website (http://animalhealthireland.ie/?page_id=333), where answers to a list of frequently asked questions can also be found.

Although the majority of infected cattle acquire infection as calves, they rarely test positive in the first two years of life. Even in older animals the available tests will miss a proportion of infected cattle. For this reason, negative test results should not be regarded as conclusive evidence that an animal (or herd) is uninfected. The programme therefore requires repeated testing over several years to help build confidence in the true status of the herd.

The technical details of the programme outlined below have been developed by the JD TWG. The Johne’s Disease Implementation Group (JDIG), which is comprised of representatives from farmer, processor and veterinary organisations, breed societies and DAFM, oversees the programme and its implementation. The Irish Johne’s Control Programme for dairy herds draws on international best practice in Johne’s disease control and seeks to introduce all of the components required to enable effective and credible disease control in Ireland in a structured manner.
2. About the Programme

The Irish Johne’s Control Programme (IJCP) programme builds on the knowledge and experience gained from the pilot programme (2014-16), and a review of international best practice. In developing the IJCP, stakeholders acknowledge that the effective control of Johne’s disease requires a long-term commitment on their part, and on the part of participating farmers.

Programme Phases

A phased approach is being adopted to implementation, with Phase One, commencing in 2017, acting as a bridge between the pilot programme and the IJCP for those herds that participated in the former. Phase Two, scheduled to commence in early 2018, following the completion of an international consultant’s report on the relative effectiveness of a range of programme measures, will open participation to all herds and expand the range of programme measures available to participating farmers.

Phase One

The programme focuses on clarifying the status of herds containing ELISA test-positive or test-inconclusive animals, building confidence of freedom for test-negative herds and the resolution of infection in infected herds through the implementation of tailored management plans, based on biosecurity risk assessments, risk mitigation practices and testing. Animal health awareness and knowledge exchange activities are underpinning elements of the programme. Thus a series of regional workshops, convened by milk processors and aimed at promoting an awareness of Johne’s disease prevention and control, will be put in place in Phase One. During Phase One, herdowners who were formerly enrolled in the pilot programme will be encouraged to register with the programme so that they can become actively involved and benefit from the various funded supports available for activities, including ancillary testing, VRAMP and whole herd testing. They may do this by completing the registration form provided to them as part of a direct mail out from AHI.

Phase Two

During Phase Two, access to the programme will be broadened to include all herdowners who register with the programme, with a range of pathways by which herdowners may participate (Appendix One). Additional measures will also progressively be made available to farmers, including individual herd investigations for infected herds, funded by DAFM and the EU, and delivered through the TASAH measure of the Rural Development Programme. The allocation of funds to support measures within the programme, and the requirements of the programme itself, will be refined based on the outcomes of an international consultancy and programme outcomes over time. In this phase, measures for beef farmers will also be developed and progressively rolled out.
3. Objectives of the Programme

1. Enhance the ability of participating farmers to keep their herds clear of Johne's disease.
2. Enable participating farmers to reduce the level of infection in their herds, where present.
3. Provide additional reassurance to the marketplace in relation to Ireland’s efforts to control Johne’s disease.
4. Improve calf health and farm biosecurity in participating farms.

4. Programme Duration and Review

International experience has shown that the control of Johne’s disease is achievable, but that the timeframe required is long, being measured in years.

The current programme commenced in 2017 and in keeping with the evolving state of knowledge will be subject to ongoing scrutiny to ensure it continues to address the Programme objectives, and will be informed by the outcomes of an international consultancy which is due to report in early 2018. A formal evaluation is planned for the end of 2019-2020 at which time the programme may be further refined to reflect any changes in the prevalence of Johne’s disease in Ireland, risks to the dairy and beef industries and/or any additional scientific information on tests, control measures etc. that become available. The programme will also be formally reviewed after 5-6 years, the precise details of which are yet to be determined but will be informed by the interim review in 2019-2020. It is expected any review will be wide-ranging but include an analysis of the effectiveness of the pathways recommended for disease prevention and reduction at the individual herd level.

5. Required components of the Irish Johne’s Control Programme

Farmers seeking to register for the benefits of the IJCP are required to:

1. Complete a Programme registration form, including acceptance of the programme requirements.
2. Nominate an Approved Veterinary Practitioner (AVP).
3. Undertake to have an on-farm risk assessment and management plan developed (VRAMP) within twelve months of registration and to comply with the recommendations contained in the plan.
4. Carry out a compliant Whole Herd Test and ensure samples are submitted to a designated laboratory(ies) for testing and upload to the ICBF.
5. Have any ELISA test-positive or inconclusive animals resolved through ancillary testing.
6. Agree to carry to a TASAH herd investigation where infection is identified or already known to be present.
7. Prevent the sale of any animal that is inconclusive, positive or suspect based on testing for Johne’s disease, except to a licensed slaughter premises, feedlot or herd from which animals are exclusively sent to slaughter.
6. Designated Laboratories

AHI publish a list of designated laboratories (see web link for details of the laboratories and tests for which they are designated) that are approved to provide testing to the programme. [http://animalhealthireland.ie/?page_id=352](http://animalhealthireland.ie/?page_id=352)

7. Whole Herd Screening Test

All eligible animals in the herd must be included in herd screens and the herd screen completed within 12 months of registration or within 12 months of the previous whole herd screening test. The anniversary for annual testing is the date of the initial whole herd test, and each twelve months thereafter. Testing all eligible animals at the same time is strongly recommended to assist in interpretation of results.

Although the majority of infected cattle acquire infection as calves, they rarely test positive in the first two years of life. Even in older animals the available tests will miss a proportion of infected cattle. For this reason, negative test results should not be regarded as conclusive evidence that an animal (or herd) is uninfected. For this reason the programme requires repeated testing over several years to help build confidence in the true status of the herd.

8. Testing Compliance

Testing compliance is determined as 100% of eligible animals within a 12 month period, where animals are tested in accordance with the protocols described in Section 9IV and 9V.

I. Whole Herd testing ELISA Blood

It is recommended that all eligible animals are tested at the same time when using ELISA (blood) as the whole herd screening test, preferably at the time of the first TB test. Any eligible animals not available for testing on the test date should be tested within 12 months of testing of the first eligible animals in the herd.

II. Whole Herd testing ELISA Milk

For ELISA testing (milk), the Programme requires all eligible animals to be tested in accordance with the protocol set out in Section 9V.

Testing compliance for ELISA (milk) is determined as 100% of eligible animals milk tested twice within 12 months of calving (commencing to milk).

Alternatively a single blood test ‘sweeper test’ for eligible animals that have not had two milk tests during any one lactation is required to achieve test compliance.

For the purposes of determining the eligible animals participating in a whole herd screening test (ELISA blood), animals which have entered the herd after the annual testing period commences (ie first animal tested) are not counted for the purpose of compliance in that year, but must be tested within 12 months of entry into the herd.
Animals that are eligible and in the herd at the time of the annual whole herd test (ELISA Blood) and not tested during that test must be tested before leaving the herd.

For the purposes of determining the number of animals participating in a whole herd screening test (ELISA milk), animals which have entered the herd after the first milk test had been undertaken must be tested at the next milk test and may require a sweeper ELISA blood test if their stage of lactation prevents a second milk test.

Animals that have participated in the first milk test but leave the herd permanently prior to the second milk test is undertaken will not be considered part of the herd for the purposes of determining the size of the whole herd or testing compliance in that year.
9. Approved Tests

Currently four tests are approved as tests within the IJCP. These are:

1. Individual animal milk ELISA.
2. Individual animal blood ELISA.
3. Individual animal faecal culture.
4. Individual animal faecal PCR.

I. Herd screening tests

Two tests are approved as herd screening tests. These are:

1. Individual animal blood ELISA (single test).
2. Individual animal milk ELISA (two tests at a minimum 90-day interval).

II. Ancillary testing

Two tests are approved as ancillary tests for use to clarify the test status of animals which test positive or inconclusive to either individual milk or blood ELISA tests. These are:

1. Individual animal faecal culture.
2. Individual animal faecal PCR.

III. Testing procedure for herd screening

Each eligible animal should be tested each year by a designated laboratory, using the sample types and frequencies set out in the table below. It should be noted that a herdowner may test more frequently than this in order to ascertain the infection status of the herd or individual animals more rapidly.

Note: In the case of a test-negative herd, additional negative tests in a year (additional to those required by the Programme) will not advance the status or assurance of the herd.

<table>
<thead>
<tr>
<th>Sample Type</th>
<th>Test Frequency (per year)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Blood</td>
<td>Once</td>
</tr>
<tr>
<td>Milk</td>
<td>Twice at a minimum 90-day interval</td>
</tr>
</tbody>
</table>

IV. Blood tests

One complete herd test of all eligible animals is required annually.
V. Milk tests

Two complete herd tests (comprising individual animal tests) at least three months apart are required. Any animals missed during a herd test using individual milk ELISA tests must be tested within 12 months of the initial scheduled whole herd testing date.

Milk samples collected for the purposes of milk recording can be used to screen for Johne's disease within the terms of the programme. In this case the herdowner should contact the relevant laboratory in advance of milk sampling. Where herdowners have indicated that milk samples are their preferred sample type and identify their milk recording organization (MRO), AHI will share this information with the MRO.

Herd that choose to use one sample type can use the same or a different sample type in subsequent years.

VI. Historical results

Farms that have been participating in herd screening (as defined above) prior to joining the programme may have these historical results uploaded to the database provided the laboratory that conducted the testing is now designated and the samples were appropriately identified. Herdowners wishing to have such results uploaded to the ICBF database should contact the relevant laboratory to request the transfer/upload.

These results may then be taken into account when determining the herd assurance score (see below), with previous negative herd screening tests increasing the level of confidence that herds that test negative within the programme are free of infection.

10. Sample Timing and Result Interpretation

An ELISA test on blood or milk will be classified as positive using the test cut-off recommendations of the manufacturer of the test kit that is being used. A dung sample culture result will be classified as positive following molecular confirmation of any suspect bacterial growth. A dung sample PCR test will be classified as positive based on the interpretation provided by the test kit manufacturer.

Cattle should not be milk or blood sampled for 3 months after the first day of the TB skin test (injection of tuberculin), as this can lead to false positive Johne's test results. Where this has happened and to avoid as far as possible false positive results being used for future Herd Assurance Score calculation, all animals testing positive for the first time as a result of testing within the 90 days should be tested again, using a further blood or milk test (taken more than 3 months following the TB skin test). If this further test is negative, the animal will be considered to be negative. If one or more animals remain test-positive or test-inconclusive, they should be subject to ancillary testing (in previously test-negative herds).

Similarly, milk samples from the first 7 days of lactation should not be tested as milk taken during this period can lead to false positive results. Where a sample has been taken during this period, any animals testing positive should be subjected to a further antibody test on blood or milk. If this further test is negative the animal will be considered to be negative. If it remains test-positive or test-inconclusive, they should be subject to ancillary testing (in previously test-negative herds).

I. Johne's disease test-inconclusive animals

In some cases, the ELISA test result may be inconclusive. Where an animal has an inconclusive ELISA test result on either milk or blood samples the animal will require an ancillary test to resolve its infection status.
II. Johne’s disease test-positive animals

An animal is considered test-positive once it has returned a positive test result to an approved test carried out in a designated laboratory (blood, milk or faeces).

III. Johne’s disease suspect animals

If an animal which is test positive or inconclusive to an approved serological test undergoes an ancillary test by either faecal culture or PCR and the result is negative, the animal is considered to have a suspect status until the next whole herd screening test, except where:

- the original test was performed within 3 months of a TB skin test, or
- where a milk sample was taken during the first 7 days of lactation, in which case the animal will be considered to be negative.

If a subsequent whole herd test returns a negative serological result, a suspect animal is considered to be test-negative. If the animal remains in the herd and is not retested as part of a whole herd test within 12 months the animal reverts to a test-positive (infected) status.

If a subsequent whole herd test returns an inconclusive or positive serological result on a suspect animal, the ancillary testing should be repeated, unless the initial ancillary test was positive. If the animal remains in the herd and is not retested as part of a whole herd test within 12 months the animal reverts to a test-positive (infected) status.

IV. Johne’s disease infected animal

An animal that is ELISA test positive (milk or blood) is considered infected until it undergoes ancillary testing, using either faecal culture or faecal PCR and returns a negative result, at which time it will be considered suspect.

An animal that is test-positive to either faecal culture or faecal PCR will be considered infected.

11. Reporting of Results

Laboratories will report results electronically to ICBF. Test results may be Negative, Positive, Inconclusive or Unsuitable (where there is either inadequate material to test or the material is not in an adequate state to test). 95% of blood and milk results should be reported by labs to the ICBF database within 7 days of sample receipt and 99% reported within 10 days of sample receipt (these turnaround times form some of the criteria under which laboratories are designated within the programme). For faecal culture results 95% of results should be reported within 10 weeks of sample receipt and for PCR 95% of results should be reported within 7 days of sample receipt.

12. Sale of JD Test-Inconclusive, Suspect or Test-Positive Animals

Herdowners shall not permit the sale of any JD test-inconclusive, suspect or test-positive animal, in accordance with the definitions provided above (see ‘sample timing and result interpretation’), except to a licensed slaughter premises, feedlot or herd from which animals are exclusively sent to slaughter.
13. Herd Screening

All eligible animals in the herd must be included in herd screening tests and the herd screen test completed within 12 months of registration, or within 12 months of the previous herd screen. Testing carried out in a designated laboratory in the 12 months prior to registration may also be accepted as the initial herd screen.

14. Herd Assurance

Herd assurance of freedom is derived from the number of animal movements into a herd as well as the results from whole herd testing and the number of whole herds tests carried out in a herd.

A herd which is testing regularly may still contain animals which present a spectrum of risk for the prospective purchaser and this is reflected by the Herd Assurance Score. Prospective purchasers should be familiar with their own Herd Assurance Score and preferably only introduce animals from a higher Herd Assurance Score than their own herd.

High Herd Assurance Score herds should aim to restrict animal introductions to further protect their own High Herd Assurance Score.

The TWG recommends herdowners of all herds should provide a Cattle Health Declaration with stock offered for sale and certainly to do so on request by a potential purchaser.

15. Herd Assurance Score (HAS)

Herd screening tests and stock movements form the basis for the Herd Assurance Score (HAS). The HAS, which is based on a number of risk scores, provides a measure of the degree of confidence of freedom (herd assurance) that any given herd is truly free of infection at a particular point in time and a framework by which to evaluate progress in controlling the disease at individual herd and aggregate level. It enables a purchaser of stock to make informed decisions and also assists the JD TWG and JD IG in the task of refining and improving the programme over time.

The HAS is based on two streams of data:

1. Herd test results.
2. Animal movement data.

Animal movement data will be captured from AIMS and the risk of introduction of Johne’s disease attaching to each of these movements will be calculated automatically by the database based on the source of the animal. Initial and subsequent assurance scores for all herds will be calculated annually following the completion of a herd screen test and upload of results, any ancillary test results and the completion of a VRAMP in accordance with the programme requirements.

The score is described numerically in the range 9* to 0* where zero is applied to a herd which has registered but not yet engaged in any recognised assurance activities or a herd whose keeper has not yet registered with the programme and 9 is the score provided to herds with the highest confidence of freedom from infection.
To obtain a Herd Assurance Score all eligible animals must be tested as required for compliance.

In the absence of annual testing a HAS will decline over time based on the level of stock movements into the herd. To maintain a current score a whole herd screening test must be completed annually.

A summary of Herd Assurance Scores is provided in the table below.

<table>
<thead>
<tr>
<th>Herd Assurance Score</th>
<th>Assurance description</th>
<th>Infection Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>9</td>
<td>Higher confidence of absence of infection (Higher assurance herd)</td>
<td>• Absence of confirmed infection with increasing confidence of freedom from infection from 4 (lowest confidence) to 9 (highest confidence)</td>
</tr>
<tr>
<td>8</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Lower confidence of absence of infection (Lower assurance herd)</td>
<td>• Absence of confirmed infection with increasing confidence of freedom from infection from 4 (lowest confidence) to 9 (highest confidence)</td>
</tr>
<tr>
<td>5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Presence of infection (Infected herd)</td>
<td>• Low within herd apparent prevalence of infection</td>
</tr>
<tr>
<td>2</td>
<td></td>
<td>• Moderate within herd apparent prevalence of infection</td>
</tr>
<tr>
<td>1</td>
<td></td>
<td>• High within herd apparent prevalence of infection</td>
</tr>
<tr>
<td>0</td>
<td>Herd is yet to enter the programme, or is pending completion of the annual herd screen or any ancillary tests. (Nil Assurance)</td>
<td></td>
</tr>
</tbody>
</table>

Infected herds will be allocated one of three scores based on the apparent prevalence of infection within the herd.

The apparent prevalence (AP) of infection is the number or percentage of animals classified as infected in the herd based on the results of programme testing. It does not necessarily measure the true prevalence of infection as the screening tests are unlikely to detect all infected cattle. Infected herds will be assigned a HAS using the following criteria:

<table>
<thead>
<tr>
<th>Herd Assurance Score</th>
<th>Herds with 40 or fewer eligible animals</th>
<th>Herds with greater than 40 eligible animals</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>1 positive animal</td>
<td>• AP less than or equal to 2.5%</td>
</tr>
<tr>
<td>2</td>
<td>2 positive animals</td>
<td>• AP between 2.5-5%</td>
</tr>
<tr>
<td>1</td>
<td>3 positive animals</td>
<td>• AP greater than or equal to 5%</td>
</tr>
</tbody>
</table>

Herd Assurance Score 3 progresses from assurance score 1-3 must be assigned an assurance score of 4 for at least 12 months, before progressing to a higher category.
16. Veterinary Risk Assessment and Management Plan (VRAMP)

This is a detailed on-farm review carried out by an Approved Veterinary Practitioner in partnership with the farmer to:

(i) identify aspects of management that could predispose to the introduction and spread of infection within the farm of Map, and

(ii) provide recommendations for the prioritised reduction of these risks.

Only veterinary practitioners who have undergone specific training provided by AHI will be able to undertake the assessments. A list of these veterinary practitioners is available from the AHI website http://animalhealthireland.ie/?page_id=350 or by contacting AHI directly. The first such risk assessment must be carried out within 12 months of registration in the programme.

The risk assessment and disease management component uses a scoring system which assists the identification of high-risk practices and areas within the farm on which control should be focussed. The assessment will lead to a small number of agreed farm-specific practical recommendations to be implemented on the farm to mitigate the risks identified.

In conducting the risk assessment, the AVP will have access to outputs from the database, including previous animal movements. This data will be reviewed with the herdowner to identify the impact of such movements on the risk of introduction of infection, the confidence that a negative screening test indicates that the herd is truly free from infection and the importance of implementing the agreed recommendations. Where, for specific reasons, individual animal movements are deemed to have constituted a low risk of introduction of infection, these movements can be discounted by the AVP within the database so that they are not used for the calculation of the Herd Assurance Score (see above).

For herds which have completed an initial VRAMP a follow-on risk assessment should be carried out within 12 months of the previous VRAMP. These follow-on assessments are essential to monitor progress that the herd may have made in mitigating Johne’s disease related risks. This will be achieved by comparing scores attributed to risks in previous VRAMPS and measuring the degree to which the management plan has been successfully carried out or identifying reasons for less than optimal reduction in scores and agreeing new management practice changes that can be implemented. The assessment will also assist with the identification of new risks that may require addressing.

17. Programme Compliance

All herds registering for financial support within the programme agree to have all eligible animals tested within one year (12 months) of registration and an on-farm disease management and risk assessment visit completed within 12 months of the herd’s registration date or the date of the previous V-RAMP.
Progression in the Programme for TEST NEGATIVE herds

YEAR 1
- Biosecurity Guideline
- VRAMP
- Testing

YEAR 2
- Biosecurity Guideline
- Modified VRAMP (review management plan)
- Testing

YEAR 3
- Biosecurity Guideline
- NO VRAMP
- Testing of 3yr olds upwards

YEAR 4
- Biosecurity Guideline
- Modified VRAMP
- Testing of 3yr olds upwards

YEAR 5
- Biosecurity Guideline
- NO VRAMP
- Testing of 3yr olds upwards

YEAR 6
- Biosecurity Guideline
- Modified VRAMP
- No Testing

TEST POSITIVE CONFIRMED YEARS 1-5

Years 3-6 subject to review pending consultant’s report on the impact of reduced frequency and level of testing.

A Biosecurity Guideline will be developed by the TWG to provide guidance on minimising the risk of disease entry into test negative herds.
Progression in the Programme for TEST POSITIVE herds

YEAR 1

- Biosecurity Guideline
- TASAH intervention (Development of farm Johne’s disease management plan)
- Testing

YEAR 2

- Biosecurity Guideline
- Modified VRAMP (review management plan)
- Testing

YEAR 3

- Biosecurity Guideline
- NO VRAMP
- Testing

YEAR 4

- Biosecurity Guideline
- Modified VRAMP
- Testing

YEAR 5

- Biosecurity Guideline
- NO VRAMP
- Testing

YEAR 6

- Biosecurity Guideline
- Modified VRAMP
- Testing

PATHWAYS TO TEST-NEGATIVE PROGRAMME

The point at which herds move to the test-negative programme is dependent upon the outcome of a consultants report.

A Biosecurity Guideline will be developed by the TWG to provide guidance on minimising the risk of disease entry.