

Pathways to progress with Bovine Johne's Disease

Managing the risk of Bovine Johne's Disease
and the National Dairy BJD Assurance Score

TECH NOTES for veterinarians and dairy herd advisers



November 2006

bjd
aware

Welcome to the National Dairy BJD Assurance Score – a new way forward for the Australian dairy industry in the management of bovine Johne's disease (BJD).

The Score is a voluntary dairy industry program for farmers, based on self assessment, which provides clear pathways to progress with BJD. The Score ranks the existing herd classifications based on sound scientific principles for BJD management.

As veterinarians and herd advisers you have a key role in helping dairy farmers reduce the risk of BJD to the dairy industry. BJD can be managed successfully.

These Tech Notes were developed for veterinarians and dairy herd advisers. Their purpose is to serve as a practical resource to aid discussions with farmers on making progress with BJD. Please use them to help every dairy farmer make progress with BJD.

Individual copies of each Tech Note, and further resources on BJD, can be downloaded from www.dairy.com.au/bjd

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The higher the Score, the lower the risk.

Pathways to progress with Bovine Johne's Disease

Managing the risk of Bovine Johne's Disease



National Dairy BJD Assurance Score

The National Dairy BJD Assurance Score is a voluntary classification scheme for dairy cattle. It is based on self assessment and assists dairy farmers to better manage the risk of bovine Johne's disease (BJD). The Score provides clear pathways to progress with BJD using existing herd classifications. By using the Score farmers can better manage the risk of BJD for their herd and are protecting their industry.

What is the National Dairy BJD Assurance Score?

The dairy industry, Australia-wide, has agreed on a simple way to compare dairy herds in relation to their risk of having or spreading BJD. The Score is a tool to help dairy farmers when they are buying or selling stock, or seeking to improve the Score of cattle within their herd.

The Score allows dairy farmers to compare the risk of BJD in groups of cattle, such as those being offered for sale in comparison with those in their own herd. The base Score gives a measure of the risk of BJD being present in a herd and is determined by the highest risk animal in the herd. Individual adult animals within the herd may also have their own Score, depending upon the circumstances, as adult cattle are generally considered resistant to infection.

The higher the Score the lower the risk

The new system is available now and is based on self assessment. The Score ranks all the BJD statuses that currently exist in the approved control programs and the Australian Johne's Disease Market Assurance Program for Cattle (CattleMAP) and adds three new statuses for tested herds. A herd's base Score will be between 0 to 10, depending on the herd's BJD prevalence, BJD history, geographical location (zone) and calf rearing practices.

What Score for what herds?

The existing herd classifications and the three new ones form the basis for the Score.

Non-Assessed herds—Score 0

BJD is common in dairy herds in south-eastern Australia. Many Non-Assessed dairy herds are likely to be infected with BJD. The commonly used term "no known Johne's" means "no assurance on Johne's" and this is reflected by allocating cattle within these herds the lowest assurance category—Score 0 after July 2008, following a phase-in period. Introducing cattle from a Non-Assessed herd in these areas presents a high risk of introducing BJD.

Phase-in period

During the introduction of the Score, Non-Assessed herds in the Control and Residual zones, and the NSW Protected Area, will have an initial herd base Score of 3. Cattle within herds where an auditable calf rearing program has not been implemented or tested before July 2008 will revert to Score 0. However, cattle within a Non-Assessed dairy herd in a Control or Residual zone or the NSW Protected Area in which an auditable hygienic calf rearing program has been implemented before July 2008 will remain on Score 3. The base Score for the herd can be raised to Score 4 after four consecutive years of this program. Alternatively, if a farmer does test the herd for BJD, with negative results (i.e. no evidence of BJD), the base Score for the herd is Score 7.

Infected and Suspect herds—Score 1

Cattle with a herd that is known to be infected or suspect start off at Score 1; as something is known about them. Demonstrating progress in on-farm disease control by testing and implementing control measures will improve an infected herd's base Score.

The National Dairy BJD Assurance Score

The National Dairy BJD Assurance Score is a voluntary tool based on self-assessment to help farmers manage the risk of BJD in their herds. It's a 10-point Score that recognises the benefits of good BJD management practices, in areas such as calf rearing and herd testing.

- voluntary
- self-assessment
- pathway to progress

The higher the Score the lower the risk

This technote provides a guide to improving the BJD Assurance Score of dairy cattle.

This project is funded by the dairy service levy.

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National Dairy BJD Assurance Score

Control Program herds—Scores 2 to 6

Cattle within infected herds, that are currently undertaking an approved test and control program, have Scores from Score 2 (for a herd with a high prevalence of infection in the herd) up to Score 6 (for a herd that has had a series of negative herd tests). The Score given to cattle within a control program herd reflects the lower risk that these herds pose over herds where no assurance is provided. Many herds on approved control programs will probably have a base Score of 4 in the early stages.

CattleMAP herds—Scores 8 to 10

CattleMAP herds are ranked the highest in the Dairy BJD Assurance Score. Through protecting their negative status by a process of maintaining on-farm biosecurity and undertaking ongoing tests and audits, they pose the lowest risk of introducing BJD into another herd. Consequently, animals within CattleMAP herds have a Score of 8, 9 or 10 for level MN1, 2 or 3 respectively.

Protected and Free Zones

Cattle within Non-Assessed herds in the Queensland, Tasmanian, South Australian and Northern Territory Protected Zones are either Score 7 or 8 (depending upon surveillance performed within the zone). Cattle within Non-Assessed dairy herds in the NSW Protected Area are Score 3. All herds in the Free Zone (W.A.) are Score 10.

Extra points for good calf rearing

Rearing calves so that they do not come into contact with adult cattle, that are potentially infected with Johne's disease, significantly reduces the risk of those calves becoming infected with BJD; and this is recognised within the Score.

Heifers and bulls reared under the Victorian Johne's Disease Calf Accreditation Program (JDCAP) are eligible for 3 extra points.

Those reared under the 3-Step Calf Rearing Plan are eligible for 1 extra point. For example, individual heifers and bulls reared under JDCAP in a herd with a base Score of 4 are eligible for a Score of 7 (i.e. 4 + 3).

Hygienic calf rearing is an effective way to minimise BJD in a herd because:

- BJD is spread mostly through contact with the manure of infected cattle;
- calves are most susceptible to becoming infected and the younger they are the more likely this is; and
- once cattle reach 12 months of age, they are usually resistant to infection.

Declaring the Dairy BJD Assurance Score

To maximise the benefits of the Score, vendors should declare the Score with every consignment of dairy cattle or calves offered for sale or restocking.

The Score can also be entered in section 9 of the National Vendor Declaration (NVD) by simply writing "Dairy Assurance Score xx (xx = your 1-10 score)". The Score is not needed on NVDs for slaughter cattle.

It is important that the declared Score can be supported by documentary evidence that could be inspected by a prospective buyer on request or to an auditor. A person declaring an incorrect score may be liable to prosecution or civil action.

In South Australia, vendors of dairy cattle at saleyards must declare their Dairy Score on all cattle offered for trade.

For more information:

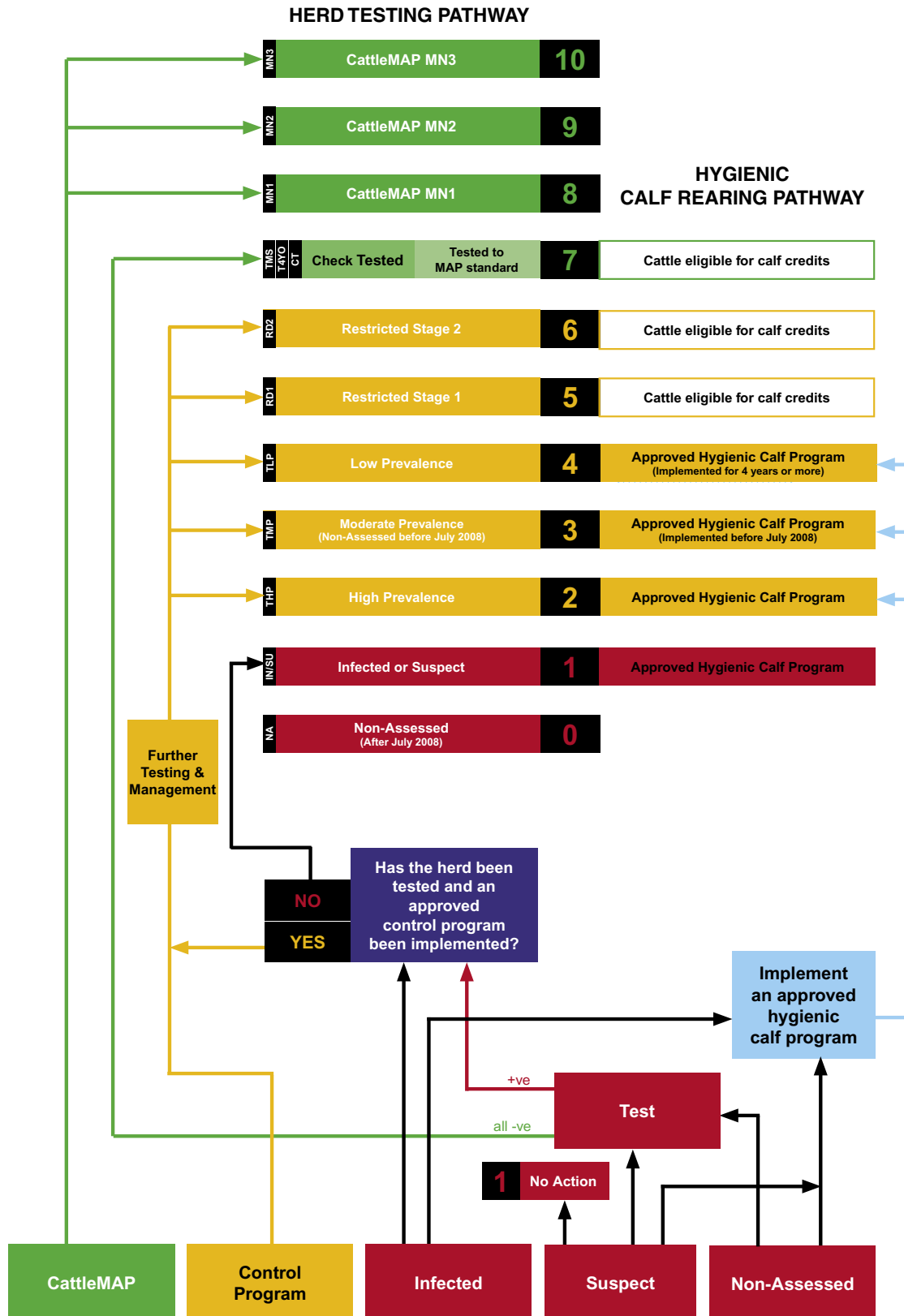
Please contact the relevant person in your state, as listed on Tech Note 7.

Pathways to progress with Bovine Johne's Disease

Managing the risk of Bovine Johne's Disease



National Dairy BJD Assurance Score



Pathways to progress with Bovine Johne's Disease

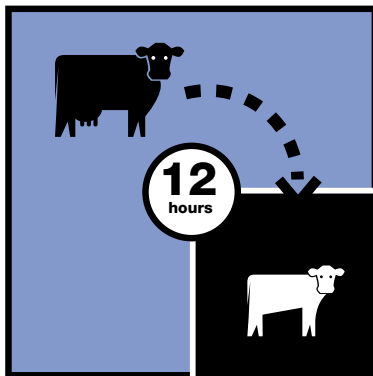
Reducing the risk of Bovine Johne's Disease



3-STEP CALF PLAN

Reducing the risk of Johne's disease within a herd, and improving the National Dairy BJD Assurance Score for cattle within a herd, can be achieved by implementing the 3-Step Calf Plan. Young calves are most susceptible to the infection, which is usually acquired by contact with manure from adult cattle. By limiting the contact calves have with adult cattle and sources of manure, the risk of Johne's can be reduced. All dairy companies have included this program in their on-farm milk quality programs.

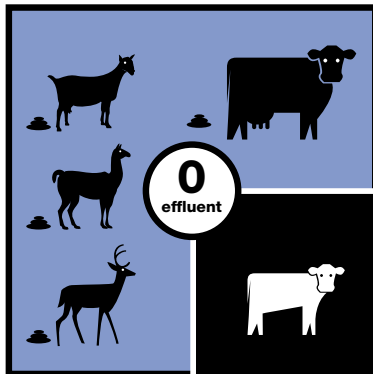
1



Calves should be taken off the cow within 12 hours of birth

Prompt calf removal reduces the exposure to potentially infectious material from either the dam or the environment. Young calves are most susceptible to infection.

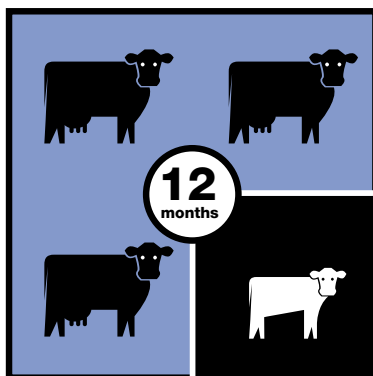
2



Management of the calf rearing area should ensure that no effluent from animals of susceptible species comes into contact with the calf

Effluent containing faecal material from cattle or goats, alpaca and deer is potentially infectious to calves. By keeping the calf rearing area free of effluent sources, calves will also be less likely to develop other infections.

3



Calves up to 12 months old should not be reared on pastures that have had adult stock or stock that are known to carry Bovine Johne's on them during the past 12 months

Cattle develop age related resistance to Johne's. By the time cattle are 12 months old they are at low risk of becoming infected.

The National Dairy BJD Assurance Score

The National Dairy BJD Assurance Score is a voluntary tool based on self-assessment to help farmers manage the risk of BJD in their herds. It's a 10-point Score that recognises the benefits of good BJD management practices, in areas such as calf rearing and herd testing.

- voluntary
- self-assessment
- pathway to progress

The higher the Score the lower the risk

This technote provides a guide to improving the BJD Assurance Score of dairy cattle.

This project is funded by the dairy service levy.

For more Information:

Please contact the relevant person in your state, as listed on Tech Note 7.

Pathways to progress with Bovine Johne's Disease

National Dairy BJD Assurance Score options for



NON-ASSESSED HERDS

Demonstrating that cattle are a low risk of having or spreading bovine Johne's disease (BJD) can be achieved by either implementing an auditable hygienic calf program or testing the herd. By implementing a hygienic calf program the base Score for the herd will be improved. Alternatively, a single negative herd test result will progress cattle within a Non-Assessed herd to Score 7. Herds found to be infected through testing can make progress through implementing an approved control program.

Option 1: Implement an auditable hygienic calf rearing program

What needs to be done?

For many farmers the implementation of an auditable hygienic calf program will require closer attention to a herd's general calf management. To demonstrate that cattle are a low risk for Johne's disease through hygienic calf rearing, the herd manager must implement an approved program. Two such programs are currently available:

3-Step Calf Plan

The requirements of the 3-Step Calf Plan are:

1. Calves are to be taken off the cow within 12 hours of birth.
2. Management of the calf rearing area should ensure that no effluent from animals of susceptible species comes into contact with the calf.
3. Calves up to 12 months old should not be reared on pastures that have had adult stock or stock that are known to carry BJD on them during the past 12 months.

See also Tech Note 2 for more information.

JDCAP

In Victoria, there is a hygienic calf program managed by the Department of Primary Industries (DPI) but administered on-farm by accredited veterinarians. The program is called the Johne's Disease Calf Accreditation Program (JDCAP).

JDCAP provides a greater reduction in the likelihood of Johne's transmission to calves than the 3-Step Calf Plan because of the additional biosecurity measures. These include requirements for the water supply, colostrum, physical barriers, herd introductions and stock movements.

In Victoria there is a financial subsidy available to farmers to assist with implementation of the JDCAP.

Why does hygienic calf rearing contribute to the Score?

Calves are more susceptible to infection with *Mycobacterium paratuberculosis* (*Mptb*) than adult cattle. By limiting the potential ways in which calves could be exposed to *Mptb*, greater assurance can be provided that the calves are low risk. The susceptibility to infection declines with age, and by 12 months of age calves are usually resistant.

Hygienic calf rearing programs such as JDCAP and the 3-Step Calf Plan aim to break the transmission pathway, primarily by limiting potential sources of contact with faeces of adult cattle.

The National Dairy BJD Assurance Score

The National Dairy BJD Assurance Score is a voluntary tool based on self-assessment to help farmers manage the risk of BJD in their herds. It's a 10-point Score that recognises the benefits of good BJD management practices, in areas such as calf rearing and herd testing.

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National Dairy BJD Assurance Score options for



NON-ASSESSED HERDS

What's the Score?

A start-up or introductory period, up until July 2008, has been established to encourage farmers to implement hygienic calf programs. After July 2008, the base Score for a herd in which an auditable hygienic calf program has been implemented will remain on Score 3 in the Control and Residual zones; otherwise the base Score for the herd will revert to Score 0.

Where a calf program has been in place for at least four years the herd will be eligible to increase its base Score by one point to a maximum of Score 4.

Calves reared under the Victorian Johne's Disease Calf Accreditation Program (JDCAP), or an auditable 3- Step Calf Plan as part of a dairy processor's quality assurance program, are eligible for extra points on top of the herd base Score.

Heifers and bulls reared under JDCAP are eligible for three extra points on top of the herd base Score. Those reared under the 3-Step Calf Plan gain one extra point on top of the herd base Score. For example, heifers and bulls reared under JDCAP in a herd with a base Score of 4 are eligible for an individual animal Score of 7 (i.e. 4 + 3).

How do I improve the Score?

Herd testing with negative results will advance the herd base beyond Score 4.

Option 2:

Testing the herd

What needs to be done?

Testing usually involves blood sampling all or a sample of the adult cattle in the herd. The number of samples depends on the type of test and the reason it is being performed. Individual faecal samples could also be used, although this is slower and more costly. The sample collection is undertaken by approved veterinarians. There are two types of testing protocols for Non-Assessed herds:

Check Test

This is a single blood test of 50 adult animals, selected to be those that would be most likely to be infected and react on the test. The Check Test is only available to herds that do not have an Infected or Suspect status.

Sample Test

This test is usually done on herds before entry into the CattleMAP. The animals to be blood tested must include all adult cattle, including the 2- and 3-year-olds or, in larger herds, a representative sample of up to 300 cattle.

Why does testing contribute to the Score?

Testing a herd provides information on the presence of bovine Johne's disease (BJD) within a herd and gives an indication of the prevalence of the disease within the herd.

What happens if the herd tests negative?

If all samples return a negative result, using any of the above testing procedures, all cattle within a Non-Assessed herd are eligible for a Score of 7.

Pathways to progress with Bovine Johne's Disease

National Dairy BJD Assurance Score options for



NON-ASSESSED HERDS

What happens if the herd test returns positive results ?

The local state government animal health staff will discuss the results of testing with the herd owner to work out the process by which the true disease status of the test positive animals will be established. If the test positive animals are found to be NOT infected after retesting with faecal culture or post-mortem examination, then all cattle within the herd are eligible for Score 7. If the test positive animals are found to be infected with *Mptb*, then all the cattle within the herd will be eligible for a lower score. The Score for cattle within herds that test positive will depend on the extent of infection within the herd.

In some States, infected herds may be able to access subsidised testing and other assistance included in official programs for BJD. For more information on financial assistance, please contact your local State government's Animal Health office.

What happens to animals that test positive (reactors)?

Animals that return a positive result on a blood test (ie reactors) need to have their infection status confirmed by a second, more comprehensive, test. Officially, a herd is not infected until the organism is detected; although a Suspect status will apply.

Depending on the history of BJD in the herd, repeated faecal cultures may be performed to resolve an animal's status, although this may take several months due to the slow growth of the organism. Alternatively, the animal could be slaughtered and the intestines examined microscopically for the presence of the organism. This initial process may take approximately two weeks.

How long does all this take?

Cattle within herds on approved control programs may progress to Score 6 over time by achieving a series of negative herd tests. Progress is demonstrated by fewer animals reacting on the blood test. Cattle may attain Score 6 when a herd on an approved control program has achieved two whole herd negative tests, two years apart, commencing at least 12 months after the last known infected animal has been removed from the herd.

How do I maintain or increase the Score for cattle through testing?

- For cattle within a herd to maintain Score 7 (a herd that tested negative):

Check Test the herd every two years.

- For cattle within control program herds:

Infected herds could enrol in an approved control program and progress from Score 2 to Score 6. By achieving a series of negative tests for the herd, Score 5, Score 6 and Score 7 can be obtained.

By enrolling in the Australian Johne's Disease Market Assurance Program for Cattle (CattleMAP) a herd can progress to MN3 status and Score 10 can be obtained.

For more Information:

Please contact the relevant person in your state, as listed on Tech Note 7.

Pathways to progress with Bovine Johne's Disease

National Dairy BJD Assurance Score options for



INFECTED HERDS

There are two options for improving the Score of the cattle within a herd known to be infected. The base Score for an infected herd is Score 1. This can be increased by implementing a hygienic calf rearing program, by testing the herd and by implementing management practices as part of an approved control program.

Option 1:

Implement an approved test and control program

What needs to be done?

Approved control programs for bovine Johne's disease (BJD) require a farmer to sign up to an agreement to undertake certain measures to control the disease. These measures include calf management practices, herd testing and culling of blood test reactors and removal of high-risk animals.

In some States, financial assistance is available to support the running of these programs. In all States, the state government animal health staff and accredited private veterinarians are available to help implement an approved control program.

Why does a test and control program contribute to the Score?

Control programs provide assurance on a herd's Johne's risk because the herd prevalence of Johne's disease is assessed regularly, a hygienic calf rearing program is implemented and infected and high-risk animals are culled from the herd.

What Score does it give the cattle within the herd?

The base Score for herds (and all cattle within the herd) on control programs start on Score 2, Score 3 or Score 4 depending upon seroprevalence; and, may progress to Score 6 over time. Progression from Score 2 to either Score 3 or Score 4, or from Score 3 to 4, will take a minimum of 12 months. Progress is demonstrated by fewer animals reacting on the blood test. Score 6 is reached when a herd on an approved control program has achieved two whole herd negative tests, two years apart, commencing at least 12 months after the last known infected animal has been removed from the herd.

See also FAQ 4 in Tech Note 6 for more information.

How do I progress from here?

When all cattle in a control program herd have reached a Score of 6, by achieving another negative herd test after two years, they can attain Score 7. If the herd manager wants to secure this negative status with further biosecurity management, the herd can enter the Australian Johne's Disease Market Assurance Program for Cattle (CattleMAP). Animals within CattleMAP herds are eligible for Scores 8, 9 & 10.

The National Dairy BJD Assurance Score

The National Dairy BJD Assurance Score is a voluntary tool based on self-assessment to help farmers manage the risk of BJD in their herds. It's a 10-point Score that recognises the benefits of good BJD management practices, in areas such as calf rearing and herd testing.

- voluntary
- self-assessment
- pathway to progress

The higher the Score the lower the risk

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Pathways to progress with Bovine Johne's Disease

National Dairy BJD Assurance Score options for



SUSPECT HERDS

A herd that has a Suspect status for bovine Johne's disease (BJD) can improve its level of assurance from a herd base Score of 1. This is achieved by implementing an auditable hygienic calf rearing program and /or resolving the Suspect status through testing. Herds found to be infected can also make progress through an approved control program.

What is the Score for Suspect herds?

All Suspect herds receive the same base Score as Infected herds – Score 1. Herds that have a Suspect status do so because there is evidence of a Johne's risk as a result of:

- the herd's BJD history
- trace back to or traceforward from an infected herd
- a blood test reactor whose status has not been resolved
- animals coming in contact with BJD infected animals or land.

Without any further clarification of the suspect status the herd is considered a similar risk to an infected herd.

What needs to be done to improve the Score?

The manager of a herd that has a Suspect status can improve the assurance that cattle are low risk for BJD by either implementing an auditable hygienic calf-rearing program or resolving the Suspect status through testing and possibly selective culling.

Option 1: Implement an auditable hygienic calf rearing program

Why does hygienic calf rearing contribute to the Score?

Calves are more susceptible to infection with *Mycobacterium paratuberculosis* (*Mptb*) than adult cattle. By limiting the potential ways in which calves could be exposed to *Mptb*, greater assurance can be provided that the calves are low risk. The susceptibility to infection declines with age, and by 12 months of age calves are unlikely to become infected.

Hygienic calf rearing programs such as JDCAP and the 3-Step Calf Plan aim to break the transmission pathway, primarily by limiting potential sources of contact with faeces of adult cattle.

What needs to be done?

For many farmers the implementation of an auditable hygienic calf program will require closer attention to a herd's general calf management. Two approved calf rearing programs are currently available:

3-Step Calf Plan

The requirements of the 3-Step Calf Plan are:

1. Calves are to be taken off the cow within 12 hours of birth.
2. Management of the calf rearing area should ensure that no effluent from animals of susceptible species comes into contact with the calf.
3. Calves up to 12 months old should not be reared on pastures that have had adult stock or stock that are known to carry BJD on them during the past 12 months.

See also Tech Note 2 for more information.

JDCAP

In Victoria, there is a hygienic calf program managed by the Department of Primary Industries (DPI) but administered on-farm by BJD accredited veterinarians. The program is called the Johne's Disease Calf Accreditation Program (JDCAP).

JDCAP provides a greater reduction in the likelihood of BJD transmission to calves than the 3-Step Calf Plan because of the additional biosecurity measures. These include requirements for the water supply, colostrum, physical barriers, herd introductions and stock movements. There is a financial subsidy available to farmers to assist with implementation of the JDCAP.

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- voluntary
- self-assessment
- pathway to progress

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Pathways to progress with Bovine Johne's Disease

National Dairy BJD Assurance Score options for



SUSPECT HERDS

Option 2: Herd Testing

The steps require to resolve the Suspect status to the satisfaction of the Chief Veterinary Officer will vary from herd to herd depending on the reasons for the suspicion, which animals are implicated and when the herd may have been exposed. This may involve one or more herd tests and, possibly, selective culling and examination of cattle that are deemed to be particularly high risk. Herd owners should consult with their local state government Animal Health Staff and approved vet prior to undertaking any testing to resolve their herd status.

If the suspicion of infection is resolved, the resulting herd status and Score will depend on what path the owner wants to take. It could revert to Non-Assessed or to a tested negative (Score 7) or even MAP status (Score 8).

If infection is confirmed in the herd, the base Score for the herd (and all cattle within the herd) will become either Score 2 (High Prevalence), Score 3 (Moderate Prevalence) or Score 4 (Low Prevalence). These are higher than the Suspect Score of 1 as the investigation or testing has provided useful information for risk assessment.

See also FAQ 4 in Tech Note 6 for more information.

What happens to animals that test positive (reactors)?

Animals that return a positive result on a blood test need to have their infection status confirmed by a second, more comprehensive test. Officially, a herd is not infected until the organism is detected.

Faecal culture can be performed to resolve an animal's status, although this may take many months due to the slow growth of the organism. Alternatively, the animal could be slaughtered and the intestines examined microscopically for the presence of the organism.

How do I maintain or progress the Score through testing?

Once a Suspect status has been resolved, (and if tested cattle are all negative) cattle within the herd have a Score of 7; this is maintained by Check Testing every two years. By enrolling in the Australian Johne's Disease Market Assurance Program for Cattle (CattleMAP), a herd can progress to MN3 status and Score 10 can be obtained.

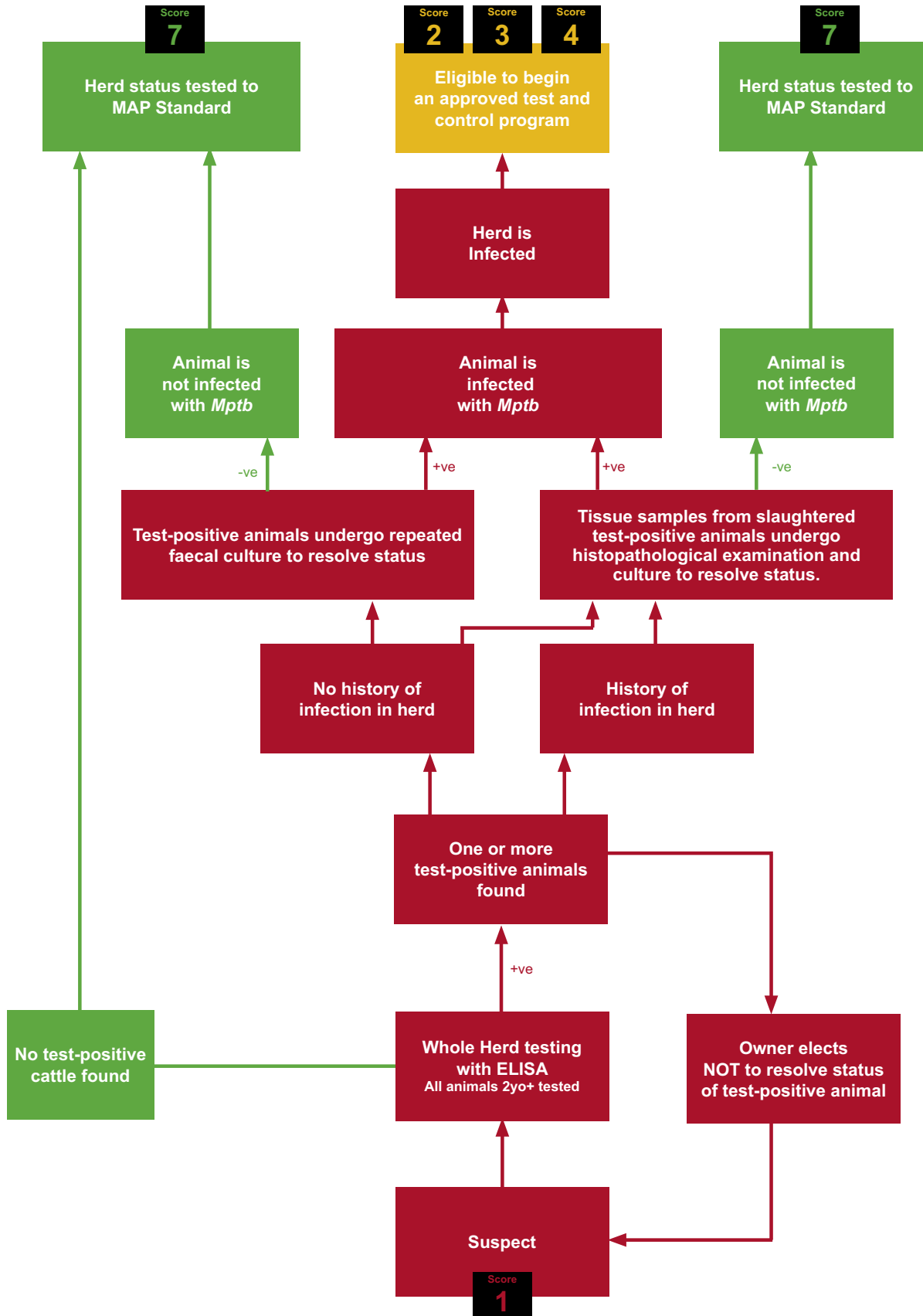
A herd that is found to be infected could be enrolled in an approved control program and the Score of cattle within that herd can progress from Score 2 to Score 6. By achieving a series of negative tests for the herd, Score 5 and Score 6 cattle can be obtained.

Pathways to progress with Bovine Johne's Disease

National Dairy BJD Assurance Score options for



Resolution of a SUSPECT herd status by testing



For more Information:

Please contact the relevant person in your state, as listed on Tech Note 7.

Pathways to progress with Bovine Johne's Disease

National Dairy BJD Assurance Score options for



FREQUENTLY ASKED QUESTIONS

The purpose of this FAQs and answers document is to provide consistent guidance for veterinary practitioners, government animal health staff and dairy herd advisers on the Dairy Score.

Individual and herd base Score

1. Do individual adult cattle have their own Score?

Yes. An individual adult animal's Score is derived from the herd's base Score (which is determined by the lowest Score animal on its property of origin) when the individual was less than 12 months of age; plus any applicable calf credits.

The underpinning principle is that cattle 12 months and older keep their Score for life because the risk of adult cattle becoming infected is low. However, in some situations their Score may change as further information on their assurance becomes available. For example, in a previously Non-Assessed herd, the Score for individual cattle may change if the herd is tested; because testing reveals additional information on the risk of BJD in the herd.

For example, where a NA herd has a Check Test with negative results, the Score for cattle within the herd is increased from Score 0 to Score 7.

During the transition period, some herds that test in the Control and Residual zones could theoretically revert to a lower Score (from Score 3 to Score 2) if there is subsequently found to be a high prevalence of infection in the herd.

Thus, in the literal sense, the Score for individual cattle (from a NA herd) is not strictly for life but until further assurance is demonstrated.

2. What is meant by the 'base Score' for a herd?

The base Score of the herd is the score of the lowest Score animal (ie. highest risk) in the herd. See also questions 15 & 16.

3. What is the base Score of a Non-Assessed herd during the introductory period of the Score?

A Non-Assessed herd is a herd that is not known or suspected to be infected and has not been tested. An introductory period will operate until July 2008. During this time all Non-Assessed herds in the Control and Residual zones will have a herd base Score 3.

After July 2008 all remaining Non-Assessed herds in the Control and Residual zones will revert to herd base Score 0; unless recognised BJD assurance measures that reduce the risk of BJD have been implemented.

A herd manager must implement either the 3-Step Plan or JDCAP before July 2008 for a Non-Assessed herd to be eligible to maintain its base Score 3 in the Control and Residual zones. Testing is another measure to progress the base score.

4. What is the starting base Score of a previously Non-Assessed herd that has blood test positive cattle at its first whole herd test?

In this situation, the presence of blood test positive cattle indicates that the herd may be infected and would be classed as Suspect (Score 1) until further testing is undertaken. A follow-up confirmatory test, using either faecal culture or slaughter and histopathological examination, should be performed to clarify the true disease status of the herd. If *Mycobacterium paratuberculosis* is cultured or identified at post-mortem from one or more animals, the herd may then be classified as Infected. The herd would then have a base Score of 1 until further approved control measures that reduce the risk are implemented.

The National Dairy BJD Assurance Score

The National Dairy BJD Assurance Score is a voluntary tool based on self-assessment to help farmers manage the risk of BJD in their herds. It's a 10-point Score that recognises the benefits of good BJD management practices, in areas such as calf rearing and herd testing.

- voluntary
- self-assessment
- pathway to progress

The higher the Score the lower the risk

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Pathways to progress with Bovine Johne's Disease

National Dairy BJD Assurance Score options for



FREQUENTLY ASKED QUESTIONS

If a herd is found to be infected and implements a State approved control program, the Score will be determined by the number of reactors found at the initial whole herd test (see Table 1 below).

Table 1

Guide to assigning a Dairy Score for individual animals in a herd by the proportion of blood test positive cattle found at an initial or subsequent whole herd test of cattle either two years and older or four years and older.

Prevalence	Tested >2 year old	Tested >4 year old	Dairy Score
Low	Less than 1.5%	Less than 2%	4
Medium	1.5% to 3%	2% to 4%	3
High	More than 3%	More than 4%	2

For herds enrolled in the South Australian Dairy ManaJD program, please consult the State's BJD coordinator in regard to the Score allocation during the initial whole herd testing phase.

5. How does a herd maintain base Score 7?

Check Testing needs to be repeated within 24 months to maintain the base Score for a herd at Score 7.

A Check Test is a test of 50 animals in the herd, biased to increase the probability of detecting infection. Animals should be selected so as to increase the herd level sensitivity of the Check Test by maximising the probability of finding an infected animal. This is achieved by sampling those animals most likely to be infected and most likely to react to the test. This includes: animals in poor condition, older animals, and introduced animals.

Calves

6. What are calf credits?

These are bonus points available to cattle when as calves they were reared in accordance with the requirements of the Victorian JDCAP (+3 credits) or the 3-Step Plan (+1 credit). Calf credits are added onto the herd's lowest base Score that the herd had in the animal's first 12 months of life. This then becomes the Score for those individual cattle reared under these programs.

For example, calves reared under the 3-Step Plan (+1 point) in a base Score 3 herd are eligible for Score 4 (3+1).

7. What is the maximum Score attainable for individual cattle reared under either JDCAP or the 3-Step Plan?

Score 7 is the maximum individual animal Score for calves reared under either JDCAP (+3 points) or the 3-Step Plan (+1 point) where calf credits are added to the base Score for the herd.

For example, calves reared under JDCAP in a herd that is in the Victorian Test and Control Program, which has attained RD2 (Score 6), can only claim a maximum of Score 7 not Score 9.

8. Do calves reared under JDCAP or the 3-Step Plan keep their Score for life?

Yes. Calves reared under JDCAP can attain a maximum of Score 7 which is maintained for life eg. base Score 4 + 3 JDCAP credit points. The animals must have been reared under the JDCAP program for 12 months—although this may not necessarily have been continuous on the same property.

9. What is the definition of an adult animal in the context of the Dairy Score?

Any animal over 12 months of age.

10. Does a previously Non-Assessed herd that undertakes a Check Test, with negative results, have to implement the 3-Step Plan to maintain Score 7?

No, however it is strongly recommended, especially if cattle are being introduced into the herd for any reason.

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FREQUENTLY ASKED QUESTIONS

Note that to maintain Score 7, the herd must be re-tested every 2 years by Check Testing 50 animals.

11. What is the base Score for a herd that has been implementing JDCAP for a number of years?

After 4 years of an approved calf rearing program the base herd score is increased by one point.

In herds where JDCAP has been implemented for 4 years or more, and this can be substantiated with documentation, the base Score of the herd is Score 4.

In herds where JDCAP has been in place for less than 4 years, the base Score of the herd is Score 3, until 4 years of JDCAP is achieved.

12. At what age do calves reared under JDCAP or the 3-Step Plan become eligible to claim calf credits?

Calves must be at least 12 months old to be eligible to claim the relevant credit points towards their individual animal Score for life.

13. What happens if calves being reared under JDCAP or the 3-Step Plan are moved into another herd?

If calves are directly transferred from a herd that is implementing either JDCAP or the 3-Step Plan, the eligibility for calf credits is maintained. This is because the environment is of similar risk.

The base Score used for adding calf credit points (+1 or +3) is determined by lowest base Score herd they were exposed to in their first 12 months of life. In this way the highest risk environment (ie. lowest base Score) is used to calculate the individual animal Scores.

14. How will the 3-Step Calf Plan be audited?

Dairy companies have included the 3-Step Plan as part of their on-farm QA programs. This will initially operate as advisory and awareness raising process, with field staff supporting farmers as they implement the program. It is the herd manager's responsibility to keep records that can demonstrate implementation of their calf rearing plan.

Herd introductions

15. What happens to the base Score of the herd when adult cattle with a lower Score are introduced?

The base Score of the herd is lowered to the lowest Score adult animal.

Because individual adult animals keep their Score for life, there is no effect on the Scores of either the introduced adult cattle or the adult cattle already in the herd.

16. What happens to the base Score of the herd when adult cattle with a higher Score are introduced?

No change to the base Score of the herd.

17. How do leased and introduced bulls affect the base Score of a herd?

The situation with respect to bull introductions is considered different to that of introduced female cattle and there is no change in the base Score of a herd. This is due to the generally lower risk conditions associated with their introduction.

Farmers need to adopt sound risk management when bulls are to be introduced to ensure there is no increased risk of BJD. Factors which reduce the risk from the introduction of bulls are:

- Bulls are kept separate from calving cows and from animals less than 12 months of age
- Beef bulls have lower risk as BJD prevalence is much lower in beef cattle
- Young bulls (typically 2-4 years), even if infected, are unlikely to excrete organisms
- Bulls, if leased, spend only short time on the farm
- Small numbers of bulls introduced
- Bulls are introduced from CattleMAP herds

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Declaring the Score

18. When required, how should farmers formally declare the Score?

From time to time a farmer may need to declare the Score in more detail than the National Vendor Declaration allows (eg for entry to a show). A standard declaration form is available for download from Animal Health Australia (www.animalhealthaustralia.com.au); the dairy industry BJD web site (www.dairy.com.au/bjd); or, by collection from local State government animal health offices.

19. How should buyers and sellers of replacement cattle declare the Score?

The Score should be written in **Section 9** on the **National Vendor Declaration (NVD)** as: "Dairy Score XX".

It is a mandatory requirement of the South Australian Dairy ManaJD program to declare the Score of all cattle offered for sale.

20. Are farmers issued with a Dairy Score certificate?

No certificates are issued for the Dairy Score; except for:

- Herds that have enrolled in the South Australian Dairy ManaJD program; or
- Herds that are participating in the Australian Johne's Disease Market Assurance Program for Cattle (CattleMAP) will have certificates for their respective MN status.

Information sources

21. What if I can't work out the Score?

In situations where determining the Score for a group of cattle is not clear, farmers are advised to contact an approved veterinarian or local State government animal health offices.

22. Where do I find information for interstate movement requirements on Johne's?

Local State government animal health offices or the State BJD coordinators should be contacted in relation to the BJD requirements for interstate movement, and any other animal health requirements.

23. What are the legal requirements with respect to the sale of land and bovine Johne's disease?

Please contact your local State government animal health office for advice.

24. What happens to a dairy farm that goes out of dairying and into beef production?

The Dairy Score does not apply to beef cattle.

A Non-Assessed herd on a dairy farm that subsequently becomes a beef farm is initially ineligible for the Beef Only scheme; unless the dairy herd was enrolled in the CattleMAP.

Please contact your local State government animal health office for further advice regarding Johne's disease in beef cattle and the declaration requirements for Beef Only.

For more Information:

Please contact the relevant person in your state, as listed on Tech Note 7.

Pathways to progress with Bovine Johne's Disease

Further information on Bovine Johne's Disease



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www.dairy.com.au/bjd

The higher the Score, the lower the risk.

