One Biosecurity: Disease Risk Ratings

PRODUCER GUIDELINES
JULY 2018







Disease Risk Ratings: Producer Guidelines

Information current as of 31 July 2018

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All Enquiries

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General Information

Included in the One Biosecurity program there are currently four diseases modules available for sheep and three disease modules for cattle, as shown in the table below.

Species	Disease	Agent
	Johne's disease	Mycobacterium paratuberculosis
Shoon	Ovine Brucellosis	Brucella ovis
Sheep	Footrot	Dichelobacter nodosus
	Lice	Bovicola ovis
	Pestivirus – dairy and beef	Pestivirus, also known as bovine viral diarrhea virus (BVDV)
Cattle	Johne's disease – dairy	Mycobacterium paratuberculosis
	Johne's disease – beef	Mycobacterium paratuberculosis

You will not be able to undertake any of the disease modules until after you have completed your Biosecurity Rating (BSR).

All modules are voluntary and you will appear on the system as "Not Currently Classified" until you complete the disease and achieve one of the other ratings. It is not expected that producers will immediately complete all of the disease modules. There will be workshops that producers can attend that will provide assistance to undertake these modules. There is no requirement to reach a very low risk category. For many producers reaching the self-assessed or managed category will be the most appropriate level for their business needs.

Each module is set out in the same format:

- 1. General information about the disease, the clinical signs, and how it may be spread from animal to animal or property to property.
- **2.** A series of questions broken into three sections:
 - a. Monitoring for disease (where disease is not known to occur)
 - b. Monitoring for disease (where disease is known to occur)
 - c. Livestock Introductions and Management Practices (what practices you undertake to minimise spread or introduction of disease).
- **3.** A final risk rating you receive based on your answers, with a summary document that provides the details of the biosecurity practices you undertake and includes any additional information that you have provided.

What are the disease risk rating (DRR) categories?

All diseases have the same four categories:

1. Independently assessed: very low risk

Clinical presentations of the disease are not known to occur in the herd/flock and external accreditation (laboratory test results and/or assessment by an independent assessor) is in place. The enterprise has a high level of biosecurity practices to minimise the risk of introduction and spread of the disease. A monitoring program is also in place to detect disease if it is introduced.

2. Self-assessed: low risk

Clinical presentations of the disease are not known to occur in the herd/flock, as assessed by the producer. The enterprise has biosecurity practices in place to minimise the risk of introduction and spread of the disease. A monitoring program is also in place to detect disease if it is introduced.

3. Managed: known risk

The disease is known or suspected to occur in the herd/flock, and specific biosecurity practices are undertaken to support active disease management and minimise spread of the disease.

4. Not currently classified: unknown risk

The questionnaire has not been completed yet OR the answers provided do not meet the criteria for the enterprise to be classified as 'Independently Assessed', 'Self-Assessed', or 'Managed'. This does NOT automatically mean that the disease is present on the property, but an unknown status is considered to be the highest risk status and individual risk assessment should be undertaken when purchasing from these flocks.

How are risk ratings determined?

Provided in this document under each disease are the minimum biosecurity practices you must undertake to achieve the disease risk rating category. You must answer all the relevant questions to indicate you undertake these practices to achieve the status. The minimum standards have been developed in consultation with industry and considering national or state programs that currently exist. These will be reviewed as part of the on-going review and improvement process for One Biosecurity and your feedback is welcomed.

How do I use the disease risk ratings?

How you use the disease risk ratings will depend on your individual business and how much risk the disease is to your business. Within each risk rating there will still be a spectrum of different producers as we have set a minimum level but some producers will have even higher standards. For some producer the fact that a property has a very low risk rating may be sufficient but others may wish to seek further information. The disease risk ratings are designed to be a starting point where you can delve into the individual property summary document if you require more information or ask for a National Health Declaration prior to purchase. There is more detailed information within each disease section later in this document.

Reducing the risk posed by introducing animals should not be focused on just a risk assessment prior to purchase but also involves inspection/treatment on arrival and ensuring isolation from the remainder of the herd/flock for an appropriate period.

If a category is low risk or very low risk does that meant they are definitely not infected?

No. For endemic diseases it is not possible to 100% guarantee that a property is not infected. Laboratory testing is not perfect, and only provide a snap shot in time when the samples were taken. It is also possible for the bacterium or virus to be present and not cause clinical disease at a level that is noticeable or detectable. Similar to a National Health Declaration it is possible that a declaration is made in good faith and the producer is unaware that the disease is present. However, producers in One Biosecurity are required to investigate if there is concern regarding disease being present, plus there is also a level of verification through desktop and on-farm verification.

Why isn't one of the disease risk ratings categories in One Biosecurity called "infected"?

In Australia with endemic diseases we do not reliably know which properties are infected or not. When you don't reliably know who is infected then the emphasis must be on sourcing animals from properties which provide a level of assurance or evidence that the disease is not present (low risk). As mentioned above it is often not possible to determine with a high level of certainty whether a property is infected and as such we refer to the risk of disease (not infection) being present on a property. In the One Biosecurity DRR categories there is a requirement for producers to investigate for disease should they have animals with the clinical signs.

Who can be an independent assessor?

This varies with the disease (details are provided with each disease module) and independent assessor must be accredited with One Biosecurity. There is no charge for an independent assessor to become accredited but they must undertake the required training. Any costs to producers for the independent assessment is an arrangement between the producer and the independent assessor. This is consistent with current arrangements for assurance programs such as Ovine Brucellosis or Johne's disease.

What if I am not happy with my disease risk rating?

Review the information regarding that disease and ensure you have answered the questions correctly. If you still don't achieve your expected disease rating then please contact One Biosecurity Support for assistance. Biosecurity SA can provide advice on improving biosecurity practices and how to progress to through to a low risk category. We will also be running workshops where you can get assistance on completing modules.

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What if the producer I would like to purchase animals from is not registered with One Biosecurity?

The minimum biosecurity practices tables for each disease can be used as a checklist to determine if the property meets a similar standard as to yourself, or you can use your own property summary to ensure they match your individual situation. If unsure you should seek additional advice before introducing the animals, additional testing/vaccination may be required to minimise the risk.

Summary statement of the biosecurity practices

The summary statement produced at the end of the module only includes the biosecurity practices that you undertake, not the ones that do not do. For example if you answer that you are <u>not</u> a closed flock it will not appear on the summary statement.

Text entered in comment boxes

Text entered into the comment box will only appear on the summary statement if the biosecurity practice is undertaken. For example if you answer that you are <u>not</u> a closed flock then any text entered in the box will not appear on the statement. However if you answer 'yes' then you can specify your specific situation – e.g. you have been a closed flock for 10 years and all new genetics are via embryo transfer.

Linked questions

Some questions within individual modules are linked. This means you only need to undertake one of the biosecurity practices for the purposes of meeting the essential requirements for the risk rating category. The linked questions will be on the minimum biosecurity practices table as an "either/or".

Repeated questions

You will find that there appears to be some repetition of questions within the module and also between modules. While this might be frustrating it has been done so that we can provide the most flexibility to adapt the system without having to undertake major developments. Once the content has been sufficiently trialed with a large number of producers we will then look to provide greater ability to develop intelligence into the program that will either allow these questions to only show when appropriate or to auto-populate.

Questions that are not applicable to you

Currently having a level of repetition allows for a more detailed level of information to be included on the summary statement. As above we will refine this during our review process where possible to remove the need to view questions that are not applicable to you. As there is a wider variety of biosecurity practices undertaken there will always be some level of questions that are not applicable to individuals.

Johne's Disease (JD) in Sheep

Independent assessors

Private veterinarians who currently undertake the Johne's disease Sheep Market Assurance Program (Sheep MAP) accreditation can also undertake One Biosecurity independent assessment.

How do I use the disease risk rating?

How you use the disease risk rating will depend on your own business situation. Please discuss with your local Animal Health Officer if you are unsure what risk this disease may pose to your business. Some general guidelines are available below.

If you wish to source animals that are lower risk of being <u>infected</u> with JD:	
Starting point: Independently assessed: very low risk.	
Additional factors to consider to further lower the risk: You should be able to find this information in the JD in sheep section of the property summary document. What level of testing has been undertaken? When was testing last undertaken? Regular pooled faecal testing for the bacterium provides greater assurance. How long has the property been testing for? The longer the property has been testing for the greater the assurance. Location/lifetime history. Lower rainfall areas have a lower risk of this disease occurring, as the environment and stocking rates are not ideal for transmission. Note: location for the whole lifetime of the animals must be known. Vaccination. Vaccination lowers the risk of disease occurring on the property. Note: vaccination will not prevent infection but is very effective at reducing the level of disease in the flock. Abattoir surveillance. Regular abattoir surveillance for JD provides assurance that disease is not occurring at a hig level.	
If you wish to source animals that are lower risk of being <u>diseased</u> with JD:	
Starting point: Self-assessed: low risk (or Independently assessed: very low risk)	
Additional factors to consider to further lower the risk: You should be able to find this information in the JD in sheep section of the property summary document. Has any monitoring been undertaken? Either disease investigations or faecal testing. Location/lifetime history. Lower rainfall areas have a lower risk of disease occurring, as the environment and stock rates are not ideal for transmission. Note: location for the whole lifetime of the animals must be known. Vaccination. Vaccination lowers the risk of disease occurring on the property. Note: vaccination will not prevent infection but is very effective at reducing the level of disease in the flock. How long has the property been vaccinating? Is the whole flock "approved vaccinates"? Abattoir surveillance. Regular abattoir surveillance for JD provides assurance that disease is not occurring at a hig level.	J
It is recommended that in higher rainfall areas that either vaccination or some form of monitoring is undertaken to be truly	

considered at low risk of disease. In low rainfall areas then location alone can provide sufficient low risk assurance for disease.

If you are an infected property and wish to source animals that have a low risk of developing disease:

Starting point: Managed: known risk (or Independently assessed: very low risk, or Self-assessed: low risk)

Additional factors to consider to further lower the risk:

You should be able to find this information in the JD in sheep section of the property summary document.

- Specific details of the individual management plan how are they managing JD and what stage are they at?
 - Location/lifetime history. Lower rainfall areas have a lower risk of disease occurring, as the environment and stocking rates are not ideal for transmission. Note: location for the whole lifetime of the animals must be known.

Vaccination. Vaccination lowers the risk of disease occurring on the property. Note: vaccination will not prevent
infection but is very effective at reducing the level of disease in the flock.
How long has the property been vaccinating? Is the whole flock "approved vaccinates"?
Abattoir surveillance. Regular abattoir surveillance for JD provides assurance that disease is not occurring at a high
level.

It is recommended that in higher rainfall areas vaccination is undertaken to lower the risk of disease. In low rainfall areas then location alone can provide sufficient assurance that only a low level of disease will occur.

Minimum biosecurity practices

The table on page 10 outlines the minimum requirements for the biosecurity practices that must be undertaken to achieve each category.

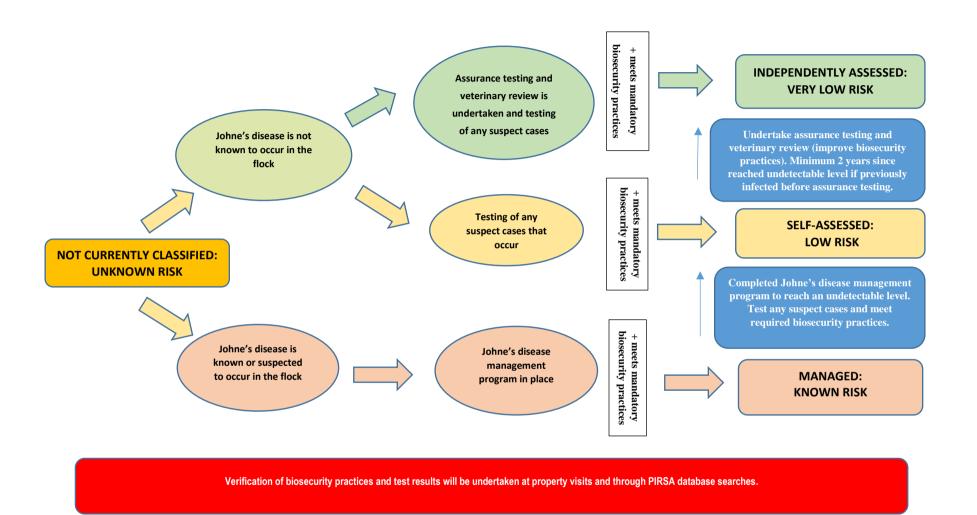
Progressing through the categories

On page 11, there is a diagram that shows how you can progress through the disease risk ratings. How far a producer wishes to progress through the categories will be determined by their individual business situation.

Johne's disease in sheep: disease risk rating – minimum biosecurity practices

	Independently assessed: very low risk	Self-assessed: low risk	Managed: known risk
Description Required biosecurity practices Note: these are the minimum	Johne's disease is not known to occur in this flock. This enterprise has high-level biosecurity practices, veterinary oversight and laboratory testing to support this claim. Suspect clinical cases will be tested by a veterinarian (and reported to PIRSA) No history of Johne's disease on the property in any sheep or if a history of Johne's then it has been reduced to an undetectable level through a PIRSA management program Undertake flock assurance testing	Johne's disease is not known to occur in this flock. This claim may only be based on the producer's own assessment. Biosecurity practices are in place to minimise the risk of introduction of Johne's disease. Suspect clinical cases will be tested by a veterinarian (and reported to PIRSA) No history of Johne's disease on the property in any sheep or if a history of Johne's then it has been reduced to an undetectable level through a PIRSA management program No history of unresolved traces to the property or	Managed: known risk Johne's disease is known or suspected to occur in this flock. This enterprise has biosecurity practices in place that minimise the risk and impact of the disease. □ A property disease management plan has been developed in consultation with PIRSA □ Any suspect clinical cases will be reported to PIRSA □ Closed flock or lifetime history of all introduced sheep is known and risk assessment was undertaken to ensure only sourced from herds with
practices required to attain the risk level. Additional practices may be undertaken which will be detailed in the summary document. All enterprises that do not meet one of these 3 categories will automatically default to 'Not currently classified'.	1. PFC350 (Sample test) 2. Maintenance testing or vaccination undertaken □ No history of unresolved traces to the property or unresolved positive or indeterminate test results for JD □ Closed flock or lifetime history of all introduced sheep is known and risk assessment was undertaken to ensure only sourced from herds with same or lower risk □ No co-grazing with dairy (or dairy cross) cattle, or if cograzing with dairy or dairy cross cattle they are dairy score 7 or above □ No co-grazing with any cattle, goats & alpacas that are known or suspected of being infected with Johne's disease □ Young animals intended to be used for breeding purposes are not grazed in high risk areas □ Risk assessment is undertaken for animals straying on or off the property and an action plan is in place □ There is no agistment of stock off the property, or agistment off the property is undertaken with prior risk assessment □ Boundary fences are kept inspected and maintained □ Boundary gates and grids (to grazing areas) are kept closed and maintained □ Biosecurity plan reviewed by veterinarian annually	unresolved positive or indeterminate test results for JD Closed flock or lifetime history of all introduced sheep is known and risk assessment was undertaken to ensure only sourced from herds with same or lower risk Not co-grazing with dairy (or dairy cross) cattle, or if co-grazing with dairy or dairy cross cattle they are dairy score 7 or above No co-grazing with any cattle, goats & alpacas that are known or suspected of being infected with Johne's disease Risk assessment is undertaken for animals straying on or off the property and an action plan is in place Boundary fences are kept inspected and maintained Boundary gates and grids (to grazing areas) are kept closed and maintained	same or lower risk Risk assessment is undertaken for animals straying on or off the property and an action plan is in place Boundary fences are kept inspected and maintained Boundary gates and grids (to grazing areas) are kept closed and maintained

Johne's disease in sheep: pathways for progression through disease risk rating categories



Ovine Brucellosis (OB)

Independent assessors

Private veterinarians who currently undertake Ovine Brucellosis accreditation can also undertake One Biosecurity independent assessment.

How do I use the disease risk rating?

How you use the disease risk rating will depend on your own business situation. Please discuss with your local Animal Health Officer if you are unsure what risk this disease may pose to your business. Some general guidelines are available below.

If you wish to source animals that are lower risk of being infected with OB:

Starting point: Independently assessed: very low risk.	
additional factors to consider to further lower the risk:	
ou should be able to find this information in the OB section of the property summary document.	
☐ When was testing last undertaken? Regular testing provides greater assurance.	
☐ How long has the property been testing for? The longer the property has been testing, the greater the assurance.	

If you wish to source animals that are lower risk of being diseased with OB:

Starting point: Self-assessed: very low risk (or Independently assessed: very low risk)

Additional factors to consider to further lower the risk:

You should be able to find this information in the OB section of the property summary document.

Has any monitoring been undertaken? Either disease investigations or blood testing.

Note: As Brucellosis may take a period of time from introduction to the presence of palpable lesions, just being free of lesions does not provide the same level of assurance as undertaking blood testing. It is recommended when introducing rams that they come from accredited flocks.

Minimum biosecurity practices

The table on page 13 outlines the minimum requirement for the biosecurity practices that must be undertaken to achieve each category.

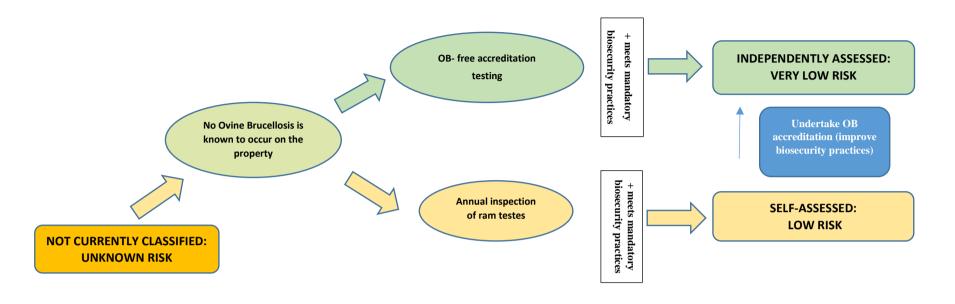
Progressing through the categories

On page 14, there is a diagram that shows how you can progress through the disease risk ratings. How far a producer wishes to progress through the categories will be determined by their individual business situation.

Ovine Brucellosis: disease risk rating – minimum biosecurity practices

	Independently assessed: very low risk	Self-assessed: low risk	Managed: known risk
Description	Ovine Brucellosis is not known to occur in this flock. This enterprise has high-level biosecurity practices, veterinary oversight and laboratory testing to support this.	Ovine brucellosis is not known to occur in this flock. This claim may only be based on the producer's own assessment. This enterprise has biosecurity practices in place to minimise the risk of introduction of ovine brucellosis.	Not available.
Required biosecurity practices. Note: these are the minimum practices required to attain the risk level. Additional practices may be undertaken which will be detailed in the summary document. All properties that do not meet one of these 2 categories will automatically default to 'Not currently classified'.	 □ All rams on this property are examined and tested by a veterinarian as per the requirements of the South Australian Ovine Brucellosis-free Accreditation Scheme □ Introducing sheep: 1. Rams and teasers are only sourced from accredited flocks or tested by a veterinarian while in isolation 2. Pregnant ewes are only sourced from accredited flocks or kept in isolation until 4 months after lambing, prior to joining again. Any ram lambs are also weaned early and isolated until they are tested for OB. 3. Non-pregnant ewes are sourced from accredited flocks and kept isolated for at least 4 months until joining 4. ALTERNATIVELY, the property runs a closed flock that introduces no sheep at all □ Any rams that leave the property for shows, sales, on loan etc. that are exposed to non-accredited stock are isolated on return and undergo testing □ Sheep straying onto or off the property are isolated from the mob and veterinary advice and assessment sought □ Boundary fences are kept inspected and maintained □ Boundary gates and grids (to grazing areas) are kept 	□ The testes of all rams on this property are examined annually prior to mating, and any lesions are tested by a veterinarian for Ovine Brucellosis □ Introducing sheep: 1. Rams and teasers are only sourced from accredited flocks or tested by a veterinarian while in isolation 2. ALTERNATIVELY, the property runs a closed flock that introduces no sheep at all □ Sheep straying onto or off the property are isolated from the mob and veterinary advice and assessment sought □ Boundary fences are kept inspected and maintained □ Boundary gates and grids (to grazing areas) are kept closed and maintained	
	closed and maintained		

Ovine Brucellosis: pathways for progression through disease risk rating categories



Verification of biosecurity practices and test results will be undertaken at property visits and through PIRSA database searches.

Footrot

Independent assessors

Private veterinarians and footrot contractors who undertake a theory and practical assessment can become accredited to undertake One Biosecurity independent assessment. Prior experience working with PIRSA on footrot will be taken into consideration. Contact the Biosecurity SA Footrot Program Manager or your local Animal Health Officer for accreditation or for a list of accredited assessors.

How do I use the disease risk rating?

How you use the disease risk rating will depend on your own business situation. Please discuss with your local Animal Health Officer if you are unsure what risk this disease may pose to your business. Some general guidelines are available below.

If you wish to source animals that are very low risk of being infected/diseased with footrot:

n you wish to source unimals that are very low list of selling intected/diseased with look of.
Starting point: Independently assessed: very low risk.
Additional factors to consider to further lower the risk: You should be able to find this information in the Footrot section of the property summary document. How long has the property been inspecting for with no footrot detected? The longer the property has been inspecting the greater the assurance. Location. The environment influences the expression of footrot. When did an ideal spread season last occur? If conditions have not been ideal for footrot then it could be difficult to detect. Introductions – how often and how many?
If you wish to source animals that are lower risk of being <u>diseased</u> with footrot:
Starting point: Self-assessed: low risk (or Independently assessed: very low risk).
Additional factors to consider to further lower the risk: You should be able to find this information in the Footrot section of the property summary document.

□ Introductions – how often and how many?

Due to the difficulty in detecting carrier animals, it is recommended that all introductions are isolated from the rest of your flock

☐ When did an ideal spread season last occur? If conditions have not been ideal for footrot then it could be difficult to

How long has the property been inspecting for with no footrot detected? The longer the property has been inspecting

If you are an infected property and wish to source animals that have a low risk of having the more virulent strains of footrot:

Starting point: Managed: known risk (or Independently assessed: very low risk, or Self-assessed: low risk)

Additional factors to consider to further lower the risk:

until after they have been inspected during a "spread period".

the greater the assurance.

detect.

You should be able to find this information in the Footrot section of the property summary document.

What testing has been undertaken on the property? It is not possible to reliably determine the virulence of the footroi
organism from the clinical presentation (footrot score).

How long ago was the laboratory	y testing undertaken? Bacteria evolve and the virulence can cha	nge.
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□ Location. The environment influences the expression of footrot.

□ Location. The environment influences the expression of footrot.

When did an ideal spread season last occur? If conditions have not been ideal for footrot then the clinical expression
may not reflect the virulence of the bacterium.
Host. British breeds or sheep that have been exposed to footrot for a long period will have greater immunity to the
bacterium. The lesion severity may not reflect the virulence of the bacterium
Footbathing. Footbathing can reduce the clinical signs of footrot. The bacterium present may be more virulent than the clinical lesions.

Additional biosecurity practices are recommended when introducing sheep. Isolation until after the spread season and careful inspection during the next spread season. Your sheep may have a different level of immunity to those you are introducing, so inspection of your older sheep can alert you to the introduction of a more virulent strain of footrot bacterium.

Minimum biosecurity practices

The table on page 17 outlines the minimum requirement for the biosecurity practices that must be undertaken to achieve each category.

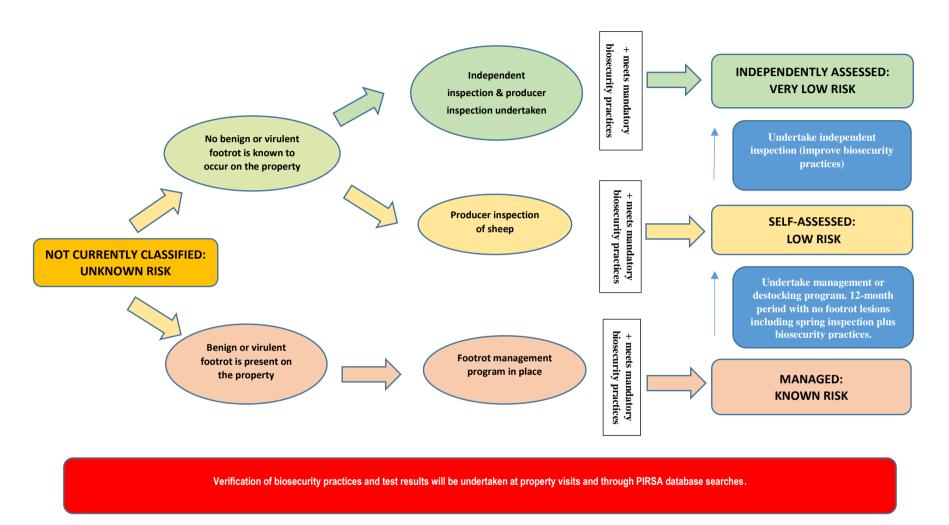
Progressing through the categories

On page 18, there is a diagram that shows how you can progress through the disease risk ratings. How far a producer wishes to progress through the categories will be determined by their individual business situation.

Footrot: disease risk rating – minimum biosecurity practices

	Independently assessed: very low risk	Self-assessed: low risk	Managed: known risk
Description	Benign or virulent footrot is not known to occur in this flock. This enterprise has high-level biosecurity practices and inspection by an independent assessor to support this claim.	Benign or virulent footrot is not known to occur in this flock. This enterprise has biosecurity practices in place that may only have been assessed by the producer to support this claim.	Footrot is known or suspected to occur on this property. This enterprise has biosecurity practices in place that minimise the risk and impact of the disease.
Required biosecurity practices.	 ☐ Throughout the year lame sheep or sheep with overgrown or misshapen hooves have been inspected by the producer and found to have no visible signs of benign or virulent footrot ☐ Flock is annually inspected by producer during the 	 ☐ Throughout the year lame sheep or sheep with overgrown or misshapen hooves have been inspected by the producer and found to have no visible signs or benign or virulent footrot ☐ Flock is annually inspected by producer during the 	 ☐ Footrot occurs on the property and a management program is undertaken ☐ Inspection is undertaken to monitor the clinical severity of footrot in the flock ☐ Any sheep with suspect Score 4 or 5 lesions are
Note: these are the minimum practices required to attain the risk level. Additional practices may be undertaken which will be detailed in the summary document.	spread period (Spring) and no visible signs of benign or virulent footrot detected □ Every 2 years the flock is visually inspected for signs of footrot by a One Biosecurity accredited assessor during the spread period (Spring) and found to have no visible signs of benign or virulent footrot □ Introducing sheep: 1. Introduced sheep are inspected on arrival (or prior to purchase) and then isolated until after a footrot spread season has past. They are inspected for signs of footrot during the spread period.	spread period (Spring) and no visible signs of virulent or benign footrot detected ☐ Introducing sheep: 1. Introduced sheep are inspected on arrival (or prior to purchase) and then isolated until after a footrot spread season has past. They are inspected for signs of footrot during the spread period. 2. Any sheep that cannot be isolated until after a spread period (i.e. rams) are individually inspected for foot lesions (100% of the mob to be inspected). 3. ALTERNATIVELY, this is a closed flock that	reported to PIRSA Introducing sheep: 1. Sheep are isolated and assessed for clinical severity of lesions (or no footrot lesions) during a spread season prior to introducing them to the existing flock. (Except rams, which may be individually inspected to have no footrot lesions) 2. ALTERNATIVELY, this is a closed flock that introduces no sheep at all.
All properties that do not meet one of these 3 categories will automatically default to 'Not currently classified'.	2. Any sheep that cannot be isolated until after a spread period (i.e. rams) are individually inspected for foot lesions (100% of the mob to be inspected). 3. ALTERNATIVELY, this is a closed flock that introduces no sheep at all. Sheep straying onto or off the property are isolated from the mob and appropriate treatment or inspection is undertaken. Boundary fences are kept inspected and maintained Boundary gates and grids (to grazing areas) are kept closed and maintained	introduces no sheep at all. ☐ Sheep straying onto or off the property are isolated from the mob and appropriate treatment or inspection is undertaken. ☐ Boundary fences are kept inspected and maintained ☐ Boundary gates and grids (to grazing areas) are kept closed and maintained	

Footrot: pathways for progression through disease risk rating categories



Lice

Independent assessors

Private veterinarians, agents, wool classers and others who regularly work with sheep can undertake a theory and practical assessment to become accredited and undertake One Biosecurity independent assessment. Contact the Biosecurity SA Lice Program Manager or your local Animal Health Officer for accreditation or for a list of accredited assessors.

How do I use the disease risk rating?

How you use the disease risk rating will depend on your own business situation. Please discuss with your local Animal Health Officer if you are unsure what risk this disease may pose to your business. Some general guidelines are available below.

If you wish to source animals that are very low risk of being infested with lice:

Independently assessed: very low risk.

If you wish to source animals that are low risk of being infested with lice:

Self-assessed: low risk (or Independently assessed: very low risk).

Low risk is <u>not</u> 'no risk' so it is recommended that all introductions are inspected on arrival and isolated for an appropriate period of time and re-inspected. Short wool or previous treatments may reduce lice to an undetectable level.

If you are sourcing animals from a property that is known to have lice:

Managed: known risk.

Additional factors to consider to further lower the risk:

Inspection of sheep on arrival. Treating animals on arrival or isolating until appropriate treatment can be undertaken
Manifeston and the attended for any characteristic plant and a consideration of the other

☐ Monitoring post-treatment for any chemical resistance – i.e. ensuring treatment is effective.

Minimum biosecurity practices

The table on page 20 outlines the minimum requirement for the biosecurity practices that must be undertaken to achieve each category.

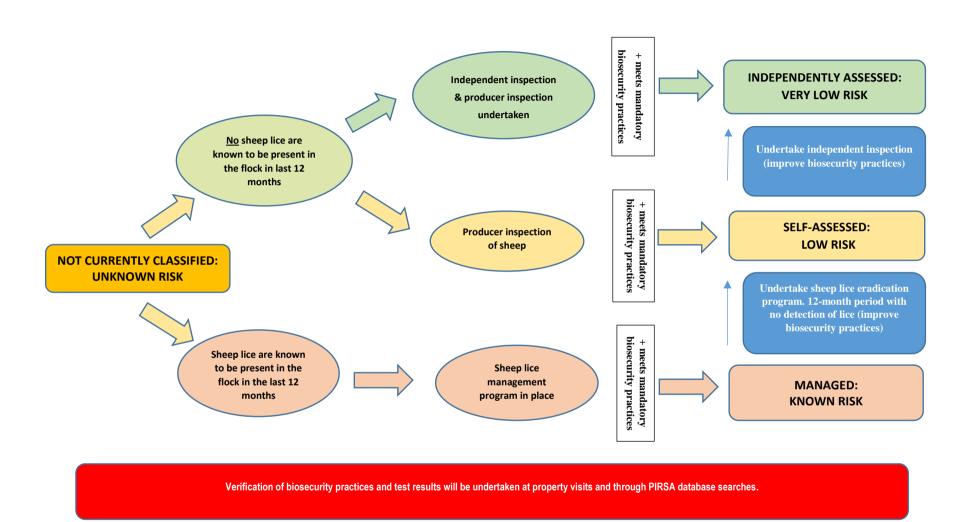
Progressing through the categories

On page 21, there is a diagram that shows how you can progress through the disease risk ratings. How far a producer wishes to progress through the categories will be determined by their individual business situation.

Lice: disease risk rating – minimum biosecurity practices

	Independently assessed: very low risk	Self-assessed: low risk	Managed: known risk
Description	Sheep lice are not known to be present in this flock. This enterprise has high-level biosecurity practices and inspection by an independent assessor to support this claim.	Sheep lice are not known to be present in this flock. This enterprise has biosecurity practices in place that may only have been assessed by the producer to support this claim.	Sheep lice are known or suspected to be present in this flock. This enterprise has biosecurity practices in place that minimise the risk and impact of the disease.
Required biosecurity practices. Note: these are the minimum practices required to attain the risk level. Additional practices may be undertaken which will be detailed in the summary document. All properties that do not meet one of these 3 categories will automatically default to 'Not currently classified'.	 □ In the past 12 months, flock checked for lice by an independent assessor on (date) and no lice found □ No lice detected in the last 12 months and at the last shearing □ Flock regularly inspected by the producer for signs of lice throughout the year (e.g. rubbing, wool in mouth) □ Suspect sheep are inspected thoroughly and no lice are detected □ Best practice protocol is followed for any sheep introduced to the flock □ If sheep are introduced, they are EITHER: 1. Isolated for at least six months and then inspected for lice OR 2. Isolated, shorn and treated effectively for lice before introducing them to the existing flock □ Sheep straying onto or off the property are isolated from the mob and appropriate treatment or inspection is undertaken □ Boundary fences are kept inspected and maintained □ Boundary gates and grids (to grazing areas) are kept closed and maintained 	 No lice detected in the last 12 months and at the last shearing □ Flock regularly inspected by the producer for signs of lice throughout the year (e.g. rubbing, wool in mouth) □ Suspect sheep are inspected thoroughly and no lice are detected □ Best practice protocol is followed for any sheep introduced to the flock □ If sheep are introduced, they are EITHER: 1. Isolated for at least six months and then inspected for lice OR 2. Isolated, shorn and treated effectively for lice before introducing them to the existing flock □ Sheep straying onto or off the property are isolated from the mob and appropriate treatment or inspection is undertaken □ Boundary fences are kept inspected and maintained □ Boundary gates and grids (to grazing areas) are kept closed and maintained 	 □ When lice are observed, sheep are treated as soon as appropriate with an effective product □ Best practice protocol is followed for any sheep introduced to the flock □ If sheep are introduced, they are EITHER: 1. Isolated for at least six months and then inspected for lice OR 2. Isolated, shorn and treated effectively for lice before introducing them to the existing flock □ Sheep straying onto or off the property are isolated from the mob and appropriate treatment or inspection is undertaken □ Boundary fences are kept inspected and maintained □ Boundary gates and grids (to grazing areas) are kept closed and maintained

Lice: pathways for progression through disease risk rating categories



Pestivirus in dairy and beef cattle

Independent assessors

Private veterinarians can undertake One Biosecurity independent assessment.

How do I use the disease risk rating when sourcing animals?

How you use the disease risk rating will depend on your own business situation. It is important that you know your property status when introducing naïve animals. If you have active infection occurring on your property introducing naïve animals can result in reproductive problems and abortions in the introduced animals. Please discuss with your local private veterinarian if you are unsure what risk this disease may pose to your business. Some general guidelines are available below.

If you wish to source animals that are a very low risk of being a <u>persistently infected (PI)</u> animal or having active pestivirus infection:

Indepe	endently assessed: very low risk
	Introducing a PI into a naïve herd can result in reproductive problems and abortions. Bulls are the most commonly introduced animal and it is recommended they are tested negative to pestivirus prior to introduction.
If you	wish to source animals that are lower risk of having active pestivirus infection:
Self-as	ssessed: low risk (or Independently assessed: very low risk).
	If there is no active pestivirus circulation then it is less likely that a PI animal is present on the property.
If you	are an infected or unknown status property and wish to source animals that have a level of immunity on arrival:
Manag	ed: known risk
	What testing has been performed to ensure adequate exposure to develop immunity has occurred? If exposure is not adequate then vaccination could be considered.
Self-as	sessed: low risk (or Independently assessed: very low risk)
	Has vaccination for pestivirus been undertaken?

Minimum biosecurity practices

The table on page 23 outlines the minimum requirement for the biosecurity practices that must be undertaken to achieve each category.

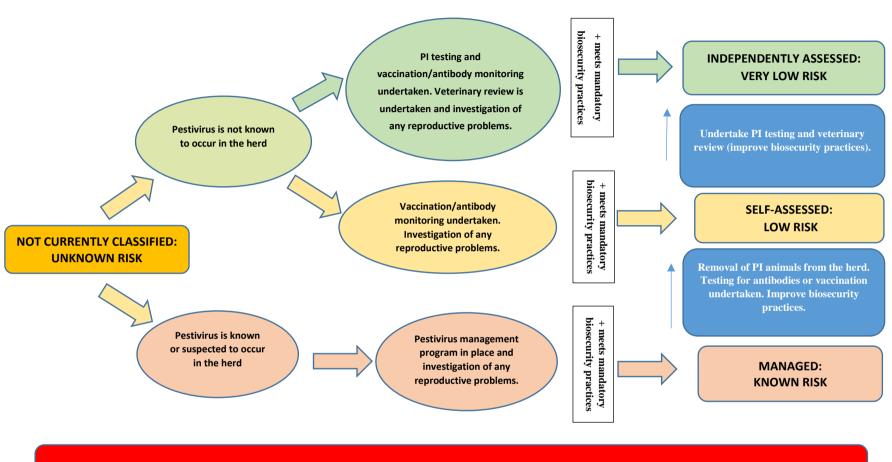
Progressing through the categories

On page 24, there is a diagram that shows how you can progress through the disease risk ratings. How far a producer wishes to progress through the categories will be determined by their individual business situation.

Pestivirus: disease risk rating – minimum biosecurity practices

	Independently assessed: very low risk	Self-assessed: low risk	Managed: known risk
Description	Pestivirus is not known to occur in this herd. This enterprise has high-level biosecurity practices, veterinary oversight and laboratory testing (PI and antibody testing) to support this claim.	Clinical pestivirus is not known to occur in this herd. This enterprise has biosecurity practices in place that may only have been assessed by the producer to support this claim.	Pestivirus is known or suspected to occur in this herd. This enterprise has biosecurity practices in place that minimise the risk and impact of the disease.
Required biosecurity practices. Note: these are the minimum practices required to attain the risk level. Additional practices may be undertaken which will be detailed in the summary document. All properties that do not meet one of these 3 categories will automatically default to 'Not currently classified'.	 □ Any reproductive problems in the herd, of unknown cause, are investigated by a veterinarian □ Annual testing is undertaken (for antibodies to pestivirus) of all breeding stock prior to mating, with no evidence of recent infection or vaccination □ Any cattle sold for breeding purposes are tested to ensure they are not persistently infected (PI) with pestivirus □ This is a closed herd OR all introduced cattle are not persistently infected (PI) and are isolated for 14 days before mixing with other cattle □ Risk assessment for animals straying on or off the property is undertaken and an action plan is in place □ There is no agistment of stock off the property OR agistment is undertaken with prior risk assessment □ Boundary fences are kept inspected and maintained □ Boundary gates and grids (to grazing areas) are kept closed and maintained □ Biosecurity plan or strategy for pestivirus is reviewed annually by a veterinarian 	□ Any reproductive problems in the herd, of unknown cause, are investigated by a veterinarian □ Annual testing is undertaken (for antibodies to pestivirus) of all breeding stock prior to mating, with no evidence of recent infection or vaccination □ This is a closed herd OR all introduced cattle are not persistently infected (PI) and are isolated for 14 days before mixing with other cattle □ Risk assessment for animals straying on or off the property is undertaken and an action plan is in place □ Boundary fences are kept inspected and maintained □ Boundary gates and grids (to grazing areas) are kept closed and maintained	 □ Any reproductive problems in the herd, of unknown cause, are investigated by a veterinarian □ A property disease management plan for pestivirus is in place □ Risk assessment for animals straying on or off the property is undertaken and an action plan is in place □ Boundary fences are kept inspected and maintained □ Boundary gates and grids (to grazing areas) are kept closed and maintained

Pestivirus: pathways for progression through disease risk rating categories



Verification of biosecurity practices and test results will be undertaken at property visits and through PIRSA database searches.

Johne's disease (JD) in beef cattle

Independent assessors

Private veterinarians can undertake One Biosecurity independent assessment.

How do I use the disease risk rating?

How you use the disease risk rating will depend on your own business situation. Please discuss with your private veterinarian if you are unsure what risk this disease may pose to your business. Some general guidelines are available below.

If

if you wish to source animals that are lower risk of being <u>infected</u> with JD:
Starting point: Independently assessed: very low risk
Additional factors to consider to further lower the risk: What level of testing has been undertaken? When was testing last undertaken? Regular testing for the bacterium provides greater assurance. How long has the property been testing for? The longer the property has been testing the greater the assurance. Location/lifetime history. Lower rainfall areas have a lower risk of disease occurring, as the environment and stocking rates are not ideal for transmission of the bacterium from animal to animal. Note: location for the whole lifetime of the animals must be known.
If you wish to source animals that are lower risk of being <u>diseased</u> with JD:
Starting point: Self-assessed: low risk (or Independently assessed: very low risk)
Additional factors to consider to further lower the risk: Has any monitoring been undertaken? Either disease investigations or faecal testing. Location/lifetime history. Lower rainfall areas have a lower risk of disease occurring, as the environment and stocking rates are not ideal for transmission of the bacterium from animal to animal. Note: location for the whole lifetime of the animals must be known. It is recommended that in higher rainfall areas that some form of monitoring is undertaken to be truly considered low risk of disease. In low rainfall areas then location alone can provide sufficient low-risk assurance for disease.
Sourcing animals from known infected properties:
Some extra care should be taken when sourcing animals from known infected properties but this can actually pose less risk than purchasing animals of an unknown risk status, as you can knowingly manage the risk. Have they removed all high risk animals from the property? (Low level of disease) Are they regularly checking for the presence of disease? Testing of clinical animals. (Low level of disease) Vaccination. Vaccination lowers the risk of disease occurring on the property. Note: vaccination will not prevent infection but is very effective at reducing the level of disease in the herd. How long has the property been vaccinating? Is the whole herd "approved vaccinates"? Your production system – are the animals likely to proceed to an abattoir (terminal production)?

Minimum biosecurity practices

The table on page 27 outlines the minimum requirement for the biosecurity practices that must be undertaken to achieve each category.

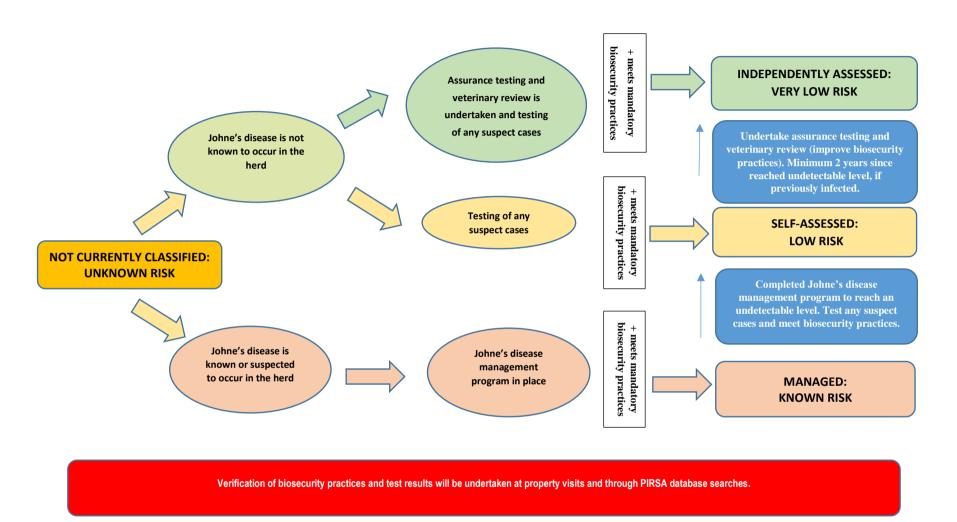
Progressing through the categories

On page 28, there is a diagram that shows how you can progress through the disease risk ratings. How far a producer wishes to progress through the categories will be determined by their individual business situation.

Johne's disease in beef cattle: disease risk rating – minimum biosecurity practices

	Independently assessed: very low risk	Self-assessed: low risk	Managed: known risk
Description Required biosecurity practices. Note: these are the minimum practices required to attain the risk level. Additional practices may be undertaken which will be detailed in the summary document. All properties that do not meet one of these 3 categories will	Johne's disease is not known to occur in this herd. This enterprise has high-level biosecurity practices, veterinary oversight and laboratory testing to support this claim. □ Suspect or clinical cases have been or will be tested by veterinarian (and reported to PIRSA) □ No history of Johne's disease on the property in any cattle OR if history of Johne's then has been reduced to an undetectable level through a PIRSA management program □ Undertake herd assurance testing (to J-BAS 7 or 8 standard, or higher) □ No history of unresolved traces to the property or unresolved positive or indeterminate test results for JD □ This is a closed herd OR the lifetime history of all introduced cattle is known and risk assessment was undertaken to ensure they were only sourced from herds with same or lower risk □ No co-grazing with dairy (or dairy cross) cattle, or if co-grazing with dairy or dairy cross cattle they are dairy score 7 or above □ No co-grazing with any cattle, sheep, goats & alpacas that are known or suspected of being infected with	Johne's disease is not known to occur in this herd. This claim may only be based on the producer's own assessment. Biosecurity practices are in place to minimise the risk of introduction of Johne's disease. Suspect or clinical cases have been or will be tested by veterinarian (and reported to PIRSA) No history of Johne's disease on the property in any cattle OR if history of Johne's then has been reduced to an undetectable level through a PIRSA management program No history of unresolved traces to the property or unresolved positive or indeterminate test results for JD This is a closed herd OR the lifetime history of all introduced cattle is known and risk assessment was undertaken to ensure they were only sourced from herds with same or lower risk No co-grazing with dairy (or dairy cross) cattle, or if cograzing with dairy or dairy cross cattle they are dairy score 7 or above No co-grazing with any cattle, sheep, goats & alpacas that are known or suspected of being infected with Johne's disease Young animals intending to be used for breeding	Managed: known risk Johne's disease is known or suspected to occur in this herd. This enterprise has biosecurity practices in place that minimise the risk and impact of the disease. Property disease management plan developed in consultation with private veterinarian or PIRSA Any suspect clinical cases will be reported to PIRSA This is a closed herd OR the lifetime history of all introduced cattle is known and risk assessment was undertaken to ensure they were only sourced from herds with same or lower risk Young animals intending to be used for breeding purposes are not grazed in high risk areas Risk assessment for animals straying on or off the property is undertaken and an action plan is in place Boundary fences are kept inspected and maintained Boundary gates and grids (to grazing areas) are kept closed and maintained
automatically default to 'Not	Johne's disease ☐ Young animals intending to be used for breeding	purposes are not grazed in high-risk areas. Risk assessment for animals straying on or off the	
currently classified'.	purposes are not grazed in high-risk areas ☐ Risk assessment for animals straying on or off the property is undertaken and an action plan is in place ☐ There is no agistment of stock off the property OR agistment is undertaken with prior risk assessment ☐ Boundary fences are kept inspected and maintained ☐ Boundary gates and grids (to grazing areas) are kept closed and maintained ☐ Biosecurity plan reviewed annually by a veterinarian	property is undertaken and an action plan is in place There is no agistment of stock off the property OR agistment is undertaken with prior risk assessment Boundary fences are kept inspected and maintained Boundary gates and grids (to grazing areas) are kept closed and maintained	

Johne's disease in beef cattle: pathways for progression through disease risk rating categories



Johne's disease (JD) in dairy cattle

Independent assessors

Private veterinarians who have participated in the former PIRSA Dairy ManaJD program can undertake One Biosecurity independent assessment. Contract the Biosecurity SA BJD Program Manager for accreditation or for a list of accredited assessors.

How do I use the disease risk rating?

How you use the disease risk rating will depend on your own business situation. Please discuss with your private veterinarian if you are unsure what risk this disease may pose to your business. The One Biosecurity DRR for Johne's disease in dairy cattle works the same as the former Dairy ManaJD program – trading like with like. Some general guidelines are available below.

If you wish to source animals that are lower risk of being infected with JD:

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Starting point: Independently assessed: very low risk
Additional factors to consider to further lower the risk: What level of testing has been undertaken? When was testing last undertaken? Regular testing for the bacterium provides greater assurance. How long has the property been testing for? The longer the property has been testing the greater the assurance.
If you wish to source animals that are lower risk of being <u>diseased</u> with JD:
Starting point: Self-assessed: very low risk (or Independently assessed: very low risk)
Additional factors to consider to further lower the risk: What monitoring has been undertaken? Sample Test or just Herd Environmental Cultures (HEC test). When was testing last undertaken? Regular testing for the bacterium provides greater assurance. How long has the property been testing for? The longer the property has been testing the greater the assurance.
Sourcing animals from known infected properties:
Some extra care should be taken when sourcing animals from known infected properties, but this can actually pose less risk than purchasing animals of an unknown risk status as you can knowingly manage the risk. Check the management plan to ensure they are undertaking similar practices to reduce the risk of clinical disease. What is your ultimate goal? If you are wishing to progress to lower risk levels, then sourcing animals from lower risk properties is recommended.

Minimum biosecurity practices

The table on page 30 outlines the minimum requirement for the biosecurity practices that must be undertaken to achieve each category.

Progressing through the categories

On page 31, there is a diagram that shows how you can progress through the disease risk ratings. How far a producer wishes to progress through the categories will be determined by their individual business situation.

Johne's disease in cattle-Dairy: Disease risk rating minimum biosecurity practices

	Independently assessed: very low risk	Self-assessed: low risk	Managed: known risk
Description	Johne's disease is not known to occur in this herd. This enterprise has high-level biosecurity practices, veterinary oversight and laboratory testing to support this claim.	Johne's disease is not known to occur in this herd. Biosecurity practices are in place to minimise the risk of introduction of Johne's disease.	Johne's disease is known or suspected to occur in this herd. This enterprise has biosecurity practices in place that minimise the risk and impact of the disease.
Required biosecurity practices. Note: these are the minimum practices required to attain the risk level. Additional practices may be undertaken which will be detailed in the summary document. All properties that do not meet one of these 3 categories will automatically default to 'Not currently classified'.	Suspect or clinical cases have been or will be tested by veterinarian No history of Johne's disease on the property in any cattle or if history of Johne's then has been reduced to an undetectable level through a PIRSA management program Undertake testing for Johne's disease, with history of more than THREE negative results. At least one of these tests must be a sample test. Ongoing biennial maintenance testing. No history of unresolved traces to the property or unresolved positive or indeterminate test results for JD This is a closed herd OR the lifetime history of all introduced cattle is known and risk assessment was under taken to ensure only sourced from herds with same or lower risk No co-grazing with any cattle, sheep, goats & alpacas that are known or suspected of being infected with Johne's disease Young animals intending to be used for breeding purposes are not grazed in high-risk areas Risk assessment for animals straying on or off the property is undertaken and an action plan is in place No agistment of stock off property OR agistment carried out with prior risk assessment Boundary fences are kept inspected and maintained Boundary gates and grids (to grazing areas) are kept closed and maintained	Suspect or clinical cases have been or will be tested by veterinarian No history of Johne's disease on the property in any cattle or if history of Johne's then has been reduced to an undetectable level through a PIRSA management program Undertake testing for Johne's disease, with at least ONE negative results. Most recent test must be within the last three years. HEC test may be used. No history of unresolved traces to the property or unresolved positive or indeterminate test results for JD This is a closed herd OR the lifetime history of all introduced cattle is known and risk assessment was under taken to ensure only sourced from herds with same or lower risk No co-grazing with any cattle, sheep, goats & alpacas that are known or suspected of being infected with Johne's disease Young animals intending to be used for breeding purposes are not grazed in high-risk areas Risk assessment for animals straying on or off the property is undertaken and an action plan is in place No agistment of stock off property OR agistment carried out with prior risk assessment Boundary fences are kept inspected and maintained Boundary gates and grids (to grazing areas) are kept closed and maintained	Property disease management plan developed in consultation with private veterinarian or PIRSA Herd has undergone whole herd or HEC testing to monitor for JD (at least every 3 years) Any suspect clinical cases will be reported to PIRSA This is a closed herd OR the lifetime history of all introduced cattle is known and risk assessment was under taken to ensure only sourced from herds with same or lower risk Young animals intending to be used for breeding purposes are not grazed in high-risk areas. Risk assessment for animals straying on or off the property is undertaken and an action plan is in place Boundary fences are kept inspected and maintained Boundary gates and grids (to grazing areas) are kept closed and maintained

Johne's disease in dairy cattle: pathways for progression through disease risk rating categories

