

Guidelines for the Implementation of Assurance Based Ovine Johne's Disease Management in Sheep

In accordance with the
2007-2012 OVINE JOHNE'S DISEASE
Management Plan (OJDMP)

4th Edition
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Introduction

This document comprises nationally accepted standards and practices upon which the States, Territories and Industry formulate disease management and control programs to suit their circumstances, and has been endorsed Animal Health Committee (AHC).

The OJD Management Plan 2007-2012 (the Plan) is designed to assist the management and control of ovine Johne's disease (OJD) in a nationally harmonious manner. It complements the Australian Sheep Johne's Disease Market Assurance Program (SheepMAP), which has been designed to provide a degree of assurance for the sale and movement of sheep from flocks which have a low risk of infection. State programs are designed to manage and control disease in known infected flocks. The national approach also describes the Assurance-Based Credit (ABC) Scheme for the facilitation of trade with regards to JD status.

The Plan refers to other authoritative documents including the Australia and New Zealand Standard Diagnostic Procedures (ANZSDPs) and the SheepMAP. The relevant definitions used in the SheepMAP have been incorporated.

Operational procedures developed for implementation of Johne's disease management and control programs are the responsibility of the animal health authorities in each State and Territory, who can provide advice as to the interpretation of this document.

The Plan will be progressively reviewed in light of anticipated progress with existing state Johne's disease control strategies, the SheepMAP, and in response to improvements in scientific knowledge and understanding of the disease in the various susceptible species. From time to time Animal Health Committee will endorse modifications to the approach contained in this document. The state policies for the control and management of ovine Johne's disease will reflect any changes to this document.

Note: this approach supersedes the 2nd edition of the Guidelines for the Implementation of Assurance-based OJD Management in Sheep.

1. Definitions

Assurance Based Credit Scheme (ABC Scheme)

The nationally agreed scheme of Assurance Based Credits for measuring the risk of OJD infection at the flock or group level. Using a uniform scoring system, assurance credit points are allocated by the flock owner based on a combination of flock or group characteristics, including location risk (area prevalence), testing results and vaccination. The details of the ABC Scheme are described in Table 1.

ABC Score

The total number of credit points allocated to a flock or group of sheep under the ABC Scheme and declared in Section 2 of the National Sheep Health Statement (See www.ojd.com.au).

Approved Property Disease Management Program

A program approved by the Chief Veterinary Officer, and implemented by the owner in conjunction with an approved veterinarian, to manage OJD in an infected or at-risk flock and to underpin the assignment of an ABC Score to sheep.

Approved Vaccinate flock

A flock comprising entirely of Approved Vaccinates, except for terminal lambs which are not required to be vaccinated

Approved Vaccinate

A sheep that is:

- vaccinated with an approved OJD vaccine by 16 weeks of age; or
- vaccinated with an approved OJD vaccine after 16 weeks of age where, in the written opinion of a SheepMAP approved veterinarian, vaccination occurred when there was a low risk of prior exposure to OJD

and is identified by an Approved Vaccination Tag.

Approved Vaccination Tag

An NLIS ear tag with the letter 'V' in a circle also stamped on the tag.

Certified low-risk sheep

Sheep which are sourced from a flock that is infected or suspected to be infected with OJD, and which are certified in writing as low-risk by a SheepMAP approved veterinarian on the basis of:

- a risk assessment, and
- an approved Property Disease Management Program that includes profiling and strategic culling, being implemented in the flock. Other strategies such as

vaccination of sheep which are unlikely to have been heavily exposed, may also be appropriate.

Credit points

Points allotted to sheep as per Category A, B, C and D of the ABC Score and in accordance with the ABC Scheme.

Direct line

A group of sheep consigned directly from one property of origin (PIC) to an abattoir and killed as one or more identifiable groups.

Eligible for Abattoir 500 status

At least 500 sheep over 2 years of age, have been submitted to an abattoir in the past 24 months, in 1 or more lots, and have been examined and all found negative for OJD. The sheep must have been on the property for at least 2 years.

Eligible for Abattoir 150 status

At least 150 sheep over 2 years of age, have been submitted to an abattoir in the past 12 months in 1 or more lots, and have been examined and all found negative for OJD. The sheep must have been on the property for at least 2 years.

Free Zone

An area declared to be a Free Zone in accordance with 'Criteria for a Free Zone' endorsed by the Primary Industries Standing Committee through the Animal Health Committee.

Indirect line

A group of sheep from one or more properties of origin that has not been consigned directly to an abattoir and are killed as one or more identifiable groups.

Infected flock

A flock in which:

- infection by the sheep strain of *M. paratuberculosis* has been identified, and there is evidence of, or likely potential for, transmission of infection within the flock

or

- infection by cattle strains of *M. paratuberculosis* has been identified and there is evidence of spread of such infection from sheep to sheep in the flock,

and the flock has not met the requirements for resolution of infection (refer 6.3).

Line

Is a group of 25 or more sheep killed as an identifiable group at an abattoir? A line may consist of sheep from one or more properties.

Nil assurance (NA) flock

A Nil Assurance flock is one which:

- has no official history of Johne's disease

or

- any suspicion of infection has been resolved to the satisfaction of the CVO, and which has not been assigned any other status.

Ovine Johne's disease

Infection with sheep strain(s) of the organism *Mycobacterium paratuberculosis*.

Owner

Includes the manager or the person in charge.

Positive line

Is a line containing at least one sheep with one or more lesions confirmed positive for Johne's disease by histopathology and/or microbiological culture.

PFC 350 test

Test of 350 representative sheep over 2 years of age (or all sheep over 2 years of age in smaller flocks) by Pooled Faecal Culture in pools of up to 50 sheep.

PFC 350 test Eligible for ABC credit

The test is one undertaken on a flock that is not known to be infected, or is undertaken more than 12 months after a previously infected flock has met the criteria for no longer being infected.

Prevalence Area

A defined geographic area with allocated assurance credit points for the purpose of the ABC Scheme and classified as either a High Prevalence Area, a Medium Prevalence Area or a Low Prevalence Area as determined by Animal Health Committee in accordance with Appendix 1.

Sample Test

Test of a sample of a flock, in accordance with the Sheep Market Assurance Program (SheepMAP) guidelines, which is undertaken within the flock's SheepMAP program.

Second Generation Approved Vaccinate Flock

A flock comprising entirely approved vaccinates (except terminal 'T-tag' lambs) which were born when the whole flock (except terminal 'T-tag' lambs) were approved vaccinates.

Sheep Health Statement

A declaration by the owner, vendor or person responsible for the husbandry of sheep that sets out the ABC Score applying to those sheep, in the form found at www.ojd.com.au.

Sheep MAP

The Australian Johne's Disease Market Assurance Program for Sheep coordinated by Animal Health Australia.

Suspected to be infected flock

A flock is suspected to be infected with OJD if the owner has reasonable grounds to believe that it has been exposed to OJD infection or that OJD may exist in the flock, based on:

- Trace back or trace forward contact with an infected flock
- Contact with OJD contaminated land or facilities
- a positive Johne's disease screening test
- The flock neighbours an infected flock
- The flock has introduced sheep with an ABC Score of 0
- Clinical signs of OJD
- advice from the relevant state agricultural department

and the flock has not met the requirements for resolution of suspicion (refer 6.4).

Terminal 'T' tag lambs

Lambs which are to be slaughtered before they cut their first permanent teeth and are identified by an NLIS (sheep) 'T' tag.

Tested Low Level Infected flock

An infected flock which has a history supporting a low level of infection, an approved Property Disease Management Program in place, and the most recent flock profile demonstrating a detection rate of not more than 1 of 7 pools by Pooled Faecal Culture within the previous 2 years.

2. Assurance Based Credit (ABC) Scheme for Movements of Sheep between Properties

- 2.1 The owner should assign an ABC score to sheep for sale or other movement between properties in accordance with the ABC Scheme as detailed in Table 1.
- 2.2 Credit points are assigned based on the estimated prevalence of OJD in the area of origin and on management measures undertaken to reduce disease risk. TABLE 2 provides examples of how ABC credit points are attained for different activities in various Prevalence Areas.
- 2.3 Credits for Prevalence Areas (Category A) are:
 - Low Prevalence Area 4
 - Medium Prevalence Areas 2
 - High Prevalence Area 0
- 2.4 Minimum ABC Scores may be defined for store sheep movements into and within Prevalence Areas and for certain saleyards or sales.
- 2.5 The use of pen stickers that outline the ABC scores should be encouraged at store sales.
- 2.6 Movement of sheep into flocks of the same or lower ABC score is permitted. Note: permits for such movements may be required in some jurisdictions.
- 2.7 Introductions of sheep with a lower ABC score than the flock is not recommended and may affect the flock's ABC score. A communication/awareness program will promote this recommendation.
- 2.8 When infection is identified or known to occur in a flock, the owner will allocate an ABC Score of 0 credit points unless or until such time as additional credit points are accrued in accordance with the scheme or the flock is no longer regarded as infected in accordance with 6.3.
- 2.9 For flocks that are suspected to be infected with OJD, the owner will allocate an ABC score of 0 credit points unless or until such time as additional credit points are accrued in accordance with the ABC Scheme, or suspicion has been removed to in accordance with 6.4.
- 2.10 A PFC350 test undertaken for the purposes of gaining recognition that a flock is no longer infected with OJD, or within the following 12 months, is not eligible for claiming ABC credits points in Category B of the National Sheep Health Statement.
- 2.11 Flocks undertaking a PFC 350 test as part of an investigation to resolve the suspicion of infection (with negative results) may claim 2 credits for this test in Category B).

- 2.12 Pathways for improving the ABC Score of flocks that are known or suspected to be infected with OJD will be in accordance with the ABC Scheme (Table 1).
- 2.13 Terminal lambs identified with an Approved NLIS “T” Tag may be moved/traded into any flock other than a flock in the Free Zone, irrespective of the ABC Score of the flock of origin. Terminal lambs must be slaughtered before cutting adult teeth.
- 2.14 Where Terminal Lambs have been introduced to a flock and are removed before cutting any adult teeth the flock’s credit rating (ABC Score) remains unchanged.
- 2.15 Jurisdictions may impose regulatory controls on the movement of sheep using the ABC Scheme. Those regulatory requirements should be the same for flocks with a particular ABC Score; ie both for movements into the jurisdiction and for movements within the jurisdiction.

Table 1

OJD Assurance Based Credit (ABC) Scheme : calculation of credit score.

OJD ASSURANCE ACTIVITY OR CRITERIA Select one line from each category if applicable then add for total credit rating	CREDITS
CATEGORY A: Prevalence area and flock history	
The area with the lowest credits from which the sheep are either being consigned, were bred or have resided in is:	
A Low Prevalence Area and the flock is not suspected/known to be infected	4
A Medium Prevalence Area and the flock is not suspected/known to be infected	2
A High Prevalence Area and the flock is not suspected/known to be infected	0
Any area and the flock is suspected or known to be infected	0
CATEGORY B: OJD Testing	
The flock is:	
In the SheepMAP and has had 3 negative sample tests (*see note)	4
In the SheepMAP and has had 2 negative sample tests *	3
In the Sheep MAP and has had 1 negative sample test *	2
Not in the SheepMAP but has had an eligible negative PFC 350 test in the last 12 months	2
Not in the SheepMAP but is eligible for Abattoir 500 status	2
Not in the SheepMAP but is eligible for Abattoir 150 status	1
A tested low level infected flock	1
None of the above	0
CATEGORY C: OJD Vaccination	
The flock is a second generation approved vaccinate flock	4
The consignment sheep are approved vaccinates and were born when the whole flock were approved vaccinates	3
The whole flock are approved vaccinates	2
The consignment sheep are approved vaccinates	1
None of the above	0
CATEGORY D: Consignment Sheep-risk assessment	
The sheep are sourced from a flock infected or suspected to be infected, but are certified low-risk by a SheepMAP approved veterinarian	1
None of the above	0

* MAP FLOCKS

The number of Sample Tests applies to the actual number of negative Sample Tests that contributed to attaining the current flock status. For most flocks this will be one for MN1, two for MN2 and three for MN3.

If the flock has re-entered the SheepMAP having previously had its status lapse or removed, only sample tests directly contributing to its current status will be eligible for credit points.

Table 2

Illustration of **Actual** Rating a Flock/mob would achieve in various regions depending on type of activity taken within the flock.

Activity	Credit for activity	Suspected/ Infected flock in any area	Area prevalence of flock status		
			NA flock in High Prevalence Area	NA flock in Medium Prevalence Area	NA flock in Low Prevalence Area
Nil Assurance		0	0	2	4
Nil Assurance		0	0	2	4
Approved Vaccinates	+1	1	1	3	5
Approved vaccinates from a certified low risk group within an infected flock	+2	2	2	2	2
Approved vaccinates from a certified low risk mob in Tested Low Level Infected flock	+3	3	3	3	3
Approved vaccinates from a certified low risk mob in Tested Low Level Infected flock	+3	3	3	3	3
Abattoir 150	+1	1	1	3	5
Approved Vaccinates + Abattoir 150	+2	2	2	4	6
Approved Vaccinates + Abattoir 150	+2	2	2	4	6
Negative PFC 350 Test in last 12 months	+2	2	2	4	6
Abattoir 500	+2	2	2	4	6
In the SheepMAP and has had 1 sample test	+2	N/A	2	4	6
In the SheepMAP and has had 2 sample tests	+3	N/A	3	5	7
In the SheepMAP and has had 3 sample tests	+4	N/A	4	6	8
From an Approved Vaccinate Flock	+2	2	2	4	6
Approved vaccinates born when the entire flock were Approved Vaccinates	+3	3	3	5	7
Second Generation Approved Vaccinate Flock with an eligible* negative PFC 350 Test in the last twelve months	+6	N/A:flock is no longer suspected or infected	6	8	10

* see 2.10 and 2.11

3. Sheep Health Statement

- 3.1 National industry bodies and industry and government organisations within jurisdictions will encourage the use of the Sheep Health Statement for sheep movements based on the ABC Scheme.
- 3.2 National industry bodies and industry and government organisations within jurisdictions will encourage receivers of sheep to request a Sheep Health Statement for all sheep they are considering purchasing or receiving onto their property.
- 3.3 Jurisdictions should audit and report compliance on the use and accuracy of Sheep Health Statement to stakeholders.
- 3.4 A Sheep Health Statement completed by the vendor of sheep will include the ABC Score for the sheep under the ABC Scheme and how the ABC Score was derived.
- 3.5 The Sheep Health Statement is underpinned by legislation making it an offence, with penalties, to make a false declaration.
- 3.6 The approved national Sheep Health Statement may be found at:
www.ojd.com.au.

4. Tracing and Surveillance

- 4.1 Where the owner of a flock associated with an abattoir detection of OJD can be identified the owner of the flock will be advised in writing in accordance with guidelines as agreed by AHC.
- 4.2 Other tracing and surveillance activities additional to abattoir surveillance may be carried out at the discretion of the Chief Veterinary Officer. Animal Health Committee may approve other methods of surveillance for the purposes of estimating flock prevalence.

5. Determining Prevalence Areas

- 5.1 A Free Zone will meet the requirements as set out in “Criteria for a Free Zone” endorsed by Primary Industries Standing Committee through the Animal Health Committee.
- 5.2 The following procedures will be used in abattoir surveillance for the purpose of area prevalence estimation.
- Only direct lines comprising 25 or more sheep will be used in the analysis of abattoir surveillance data for area prevalence estimation.
 - Data from multiple lines from each individual PIC will be aggregated and used as a unit of data for the Prevalence Area calculation.
 - Only sheep aged 2 years or older will be inspected.
 - Up to 3 sheep will be sampled from all lines with gross lesions consistent with Johne’s disease and samples submitted for laboratory investigation.
- 5.3 Prevalence Areas will be determined by Animal Health Committee in accordance with Appendix 1.

6. Infected Flocks and Flocks Suspected to be Infected with OJD

- 6.1 To sell sheep (other than Terminal Lambs or sheep directly to slaughter), the owner of an infected flock should provide a Sheep Health Statement to the agent acting on their behalf, the purchaser or the prospective purchaser.
- 6.2 Jurisdictions will encourage the owners of infected flocks to manage the perimeter of their properties to minimise the risk of spread of infection to neighbouring flocks.
- 6.3 Flocks that are infected with OJD are no longer regarded as infected when:
- the whole flock consists of Approved Vaccinates and has undertaken a PFC 350 Test with negative results, at a minimum of 2 years after the last detected infected animal has been removed; or
 - the whole flock is a Second Generation Approved Vaccinate Flock which has undertaken a PFC 350 Test with negative results; or
 - a destocking /decontamination program approved by the Chief Veterinary Officer of the jurisdiction, has been completed.
- 6.4 Flocks that are suspected to be infected with OJD are no longer suspected when
- suspicion has been removed to the satisfaction of the Chief Veterinary Officer; or
 - the whole flock consists of Approved Vaccinates and has been submitted to a PFC 350 Test with negative results, at a minimum of 2 years after the last detected infected animal has been destocked; or
 - the whole flock is a Second Generation Approved Vaccinate Flock which has been submitted to a PFC 350 Test with negative results; or
 - a destocking /decontamination program approved by the Chief Veterinary Officer of the jurisdiction, has been completed.

7. Vaccination

- 7.1 The use of vaccine in any jurisdiction may be subject to approval by the CVO.
- 7.2 Any restrictions on access to vaccine are at the discretion of the Chief Veterinary Officer, in accordance with any registration or label requirements of the vaccine.

8. Testing

- 8.1 Any tests used to confirm the presence of OJD infection in a flock, to remove an infection classification (as per 6.3), or to resolve suspicion of OJD infection (as per 6.4), will be approved by the Subcommittee on Animal Health Laboratory Standards (SCAHLs).
- 8.2 Animal Health Committee may approve additional tests for the purpose of assigning an ABC score.

Appendix 1 – Prevalence Areas

In areas other than a Free Zone, a Prevalence Area (PA) status for the purposes of the ABC Scheme will be determined by Animal Health Committee based on the estimated disease prevalence and the criteria agreed in the 2007-2012 OJDMP.

There will be three categories of Prevalence Area:

- High Prevalence Area (HPA)
- Medium Prevalence Area (MPA)
- Low Prevalence Area (LPA).

Prevalence areas will be assessed based on the upper 95% confidence limits for estimated flock prevalence in the area. The maximum estimated prevalence for each Prevalence Area is shown in Table 3.

The base credit points assigned for a Nil Assurance flock will be determined by the Prevalence Area in which the flock is located. These credit points are shown in Table 3.

Table 3

Prevalence Areas

Prevalence Area	Upper 95% confidence limit of estimated prevalence	Credit points for Nil-Assurance flock in the area
High Prevalence Area	Over 12.5%	0
Medium Prevalence Area	0.8%- 12.5%	2
Low Prevalence Area	<0.8%	4

Based on the low estimated disease prevalence of <0.8%, disease at the 95% confidence limit, and the importance of early detection of disease and resolution of disease status, the minimum criteria for the new *Low Prevalence Area* are:

- Notify owners of infection found in their flock or at abattoirs, and to encourage a risk assessment of newly identified infected flocks and suspect and at risk flocks, with follow up testing where appropriate.
- Strongly encourage the use of Property Disease Management Plans (PDMP) for infected flocks.
- The owners of infected flocks have a duty of care to advise that fact to prospective purchasers or prospective recipients of their sheep, and to the owners of flocks they know to be neighbours or traces from their flock.
- Minimum ABC scores are recommended for trading purposes to reduce the likelihood of incursions.

In the new *Medium and High Prevalence Areas*, the cut-off limits for the 95 % confidence limit for each have been determined as

- Medium Prevalence Area 0.8% - 12.5% and,
- High Prevalence Area >12.5%.

As there is general agreement that the disease is unlikely to be eradicable in the foreseeable future, the strategies for disease control and management should include biosecurity planning at the individual flock and regional level, with vaccination being one of a number of important tools.

Management in these areas will reflect the differing priorities of producers and extension messages will encourage producers to:

- consider vaccination of at-risk sheep,
- develop PDMPs for infected flocks,
- use abattoir surveillance information to identify negative lines of sheep for the purpose of gaining ABC credits for trade,
- provide a Sheep Health Statement with each lot traded (mandatory in some states),
- access advice on management options.

A. Prevalence Area status up to 30 June 2012

Revised Prevalence Areas became operational from 31 March 2008.

Prevalence Areas will be set for the duration of the program, unless Animal Health Committee endorse a change to the status of a prevalence area, or, the number of ABC credits allocated to an area in accordance with the business rules contained in the OJD Management Plan 2007 -2012.

B. Maintenance of Prevalence Area Classification

Based on the existing confidence limits to detect infection and maintain prevalence, a total of 7,000 lines will be examined annually, to be allocated proportional to the estimated numbers of flocks within each Prevalence Area. The lines identified in Tables 4a and 4b have been apportioned based on the total number of sheep flocks in each state, with the exception of Western Australia. Because of geographic isolation from the eastern states, and the minimal numbers of sheep are sent for slaughter outside the state, the number of lines allocated to Western Australia is 500. This is considered the minimum number of lines necessary to identify disease within the parameters for the Low Prevalence Area.

Table 4A

Allocation of lines to Prevalence Areas and States

Prevalence Area	State	Number of lines
High	NSW	500
Medium	NSW	94
	VIC	807
	TAS	84
	SA	16
	Sub-total	1001
Low	NSW	2399
	QLD	391
	VIC	426
	SA	1784
	Sub-total	5000
Low	WA	500
Total		7001

Based on data provided by state departments of primary industries

Table 4B

Numbers of lines by States

State	Total by State
NSW	2993
QLD	391
VIC	1223
TAS	84
SA	1800
Total	7001

Animal Health Australia will provide quarterly abattoir surveillance data reports to Sheepmeat Council of Australia, WoolProducers Australia and the OJD Management Committee and provide an annual report to Animal Health Committee of updated prevalence estimates based on this abattoir surveillance data.

The maintenance of Prevalence Areas will involve review of the abattoir surveillance data and any other data approved for the purpose by Animal Health Committee on an annual basis. However, unless other data supports a downgrade, the prevalence area

will not be downgraded to a higher risk Prevalence Area on the basis of these estimates unless the relevant prevalence cut-off has not been met for two consecutive years. This is to buffer random statistical variation.

Animal Health Committee should be satisfied that abattoir surveillance has been representative of the flocks in the Area and that there are no significant sheep producing areas within the Area that have not been sampled proportionately in the surveillance activity. If so, such sub-areas may not be included in the Prevalence Area or alternatively other methods based on flock sampling must be employed to achieve the required probability of detection.

C. Prevalence Area Re-classification

The status of an area may be downgraded or, the number of ABC credits allocated to an area decreased where the estimated prevalence exceeds the agreed cut off for two consecutive years, based on abattoir surveillance of direct lines and reported to stakeholders by the National Abattoir Surveillance coordinator.

An area may also be upgraded, or the number of ABC credits allocated to an area increased, on the basis of two consecutive annual prevalence estimates that indicate the criteria for inclusion in the area have been met.

Prevalence Area status will be determined by Animal Health Committee based on the upper 95% confidence limit of the prevalence estimate calculated from abattoir surveillance data for the two most recent calendar years. The upper 95% confidence limit of the estimated flock prevalence must not exceed the cut-off prevalence for a Prevalence Area. Animal Health Committee should also take into account events that may bias the prevalence estimate so that it may not be a true representation of the Area prevalence (eg destocking from large infected properties resulting in a number of positive lines going through abattoir).

The known prevalence in an area must also not exceed the cut-off prevalence for a Prevalence Area.

Appendix 2 – Reporting and Follow up of OJD Positive Lines detected by Abattoir Surveillance

A. Direct Lines

- (a) The jurisdiction will report positive data for direct lines to the identified flock owner.
- (b) The notification will:
 - (i) Include all the available information provided by the NASC to the state department that will assist the owner to relate their records to those of the NASC.

Information may include the PIC, the NVD serial number, the date of slaughter, the abattoir of slaughter, the number slaughtered in the line, the number in the line inspected, the number in the line with lesions, the number sampled, and the number positive on laboratory testing;
 - (ii) Seek confirmation that the slaughter details match or do not match those held by the owner and/or their agent;
 - (iii) Inform the owner that there are reasonable grounds to suspect OJD may be present in their flock/property;
 - (iv) Inform the owner that unless the tracing is found to be incorrect, there will continue to be grounds to suspect OJD may be present in the flock until an investigation by a sheep veterinarian provides sufficient evidence to resolve or confirm the suspicion;
 - (v) Inform the owner that until they are able to provide evidence to resolve the suspicion, their flock has zero (0) points in the Flock of Origin section (Category A) of the National Sheep Health Statement.
- (c) Where the tracing to a flock is confirmed, further communication with the owner in the:
 - (i) High Prevalence Areas will advise the owner of the signs of OJD, the implications of OJD on flock health management and to consult financial and farm management advisors;
 - (ii) Medium Prevalence Area, will advise the owner of the signs of OJD and the implications of OJD on flock health management and to consult financial and farm management advisors,
 - (iii) Low Prevalence Area, will advise the owner of the signs of OJD and the implications of OJD on flock health management, and consult financial and farm management advisors and encourage the owner to consult a sheep veterinarian who may undertake an investigation to determine if infection is present;
- (d) Guidelines for properties confirmed to be infected are found in Section 6 of these Guidelines.
- (e) The jurisdiction may undertake further investigation and action in accord with jurisdictional policy.

B. Indirect Lines Exclusively from the Low Prevalence Area

- (a) The jurisdiction will report positive data for indirect lines to identified flock owners in the Low Prevalence Area who, based on the data available, may have contributed sheep to the line except that a jurisdiction need not report such data if one of the contributing flocks is known or suspected to be infected, or has been recorded as contributing more than once to an infected indirect line.
- (b) The notification will include information provided by the NASC to the state department to assist the owner to relate their records to those of the NASC.
- (c) Information may include the PIC, the NVD serial number, the date of slaughter, the abattoir of slaughter, the number of flocks contributing to the line, the number slaughtered in the line, the number in the line inspected, the number in the line with lesions, the number sampled, and the number positive on laboratory testing.
- (d) Further communication with the owners will advise the owners of the signs of OJD and the implications of OJD on flock health management, and:
 - (i) Encourage the owner to carryout follow up testing if the owner considers the flock to be showing signs of OJD or to be at risk of being infected;
 - (ii) Encourage the owners to consult a sheep veterinarian to carry out a risk assessment as to whether or not infection may be present;
 - (iii) Advise the owner that where a risk assessment by a sheep veterinarian finds there to be reasonable grounds to believe that OJD is present in their flock/property, their flock has zero (0) points in the Flock of Origin section (Category A) of the National Sheep Health Statement until the suspicion is resolved;
- (e) Guidelines for properties confirmed to be infected are given in Section 6 of the 2005 Guidelines.
- (f) The jurisdiction may undertake further investigation and action in accord with jurisdictional policy.

