Discussion Paper:
Future National Management of Ovine Johne’s Disease

Released: 29 January 2018
Purpose

WoolProducers Australia (WPA) and Sheep Producers Australia (SPA) are seeking input from the sheep and wool industry on the future management of Ovine Johne’s disease (OJD) in Australia for three reasons:

1. The current National OJD Management Plan (NOJDMP) scheduled to run from 2013-2018 warrants review
2. The Sheep Market Assurance Program (SheepMAP) requires review to ensure it meets the requirements of industry
3. The cattle industry has conducted a review of Johne’s Disease (JD) management which impacts on both of the above programs

This discussion paper seeks to gather feedback on the first point, the review of the NOJDMP. More specifically, feedback is sought on the tools and elements that underpin the NOJDMP.

The feedback from this review will be used to determine if there is a need for a national framework for the management of OJD in Australia as well as identifying if there is a need to refine current management strategies.

A targeted review of the SheepMAP has commenced, please see notes below for further information.

Background

Johne's disease (JD) is caused by the bacterium, *Mycobacterium paratuberculosis*, which lives mainly in animal intestines, but can survive in the outside environment for several months. A number of strains of *M. paratuberculosis* have been identified and it is recognised that they are all capable of infecting a number of ruminant species. JD has been found in cattle, sheep, goats, deer and camelids.

Some studies have shown that the bacterium may be transmitted between cattle and sheep, where co-grazing occurs. This may affect properties that have both sheep and cattle, but if managed through approved vaccination and grazing management, the risk of cross-species contamination is minimised. For this reason, in 2016 the Australian cattle industry decided to not specify strain types of JD, recognising that cross-species contamination is possible.

OJD is endemic in some sheep production areas of Australia but in other areas the disease is not known to exist or exists at a very low level. If unmanaged, OJD can result in significant economic losses on infected farms due to sheep deaths, lost production and trading restrictions.

The current NOJDMP was prepared by WPA and SPA, after consultation with industry in 2012-13 to assist industry in managing OJD and helping to prevent its spread.

The 2013-18 NOJDMP has two main objectives:

- To minimise the risk of infection by the bacteria spreading to properties and regions that currently appear to be disease free.
- To reduce the financial impact and adverse animal health and welfare effects of the disease on individual flocks, and on the sheep industry as a whole.
Key features of the 2013-2018 NOJDMP are:

- A system that relies on a risk management approach to prevent further spread of the disease.
- That producers take responsibility for managing OJD within their flocks. The plan provides a national framework for states to work from in setting their OJD policies, and does not interfere with domestic trade.
- Development of risk assessment tools such as the Sheep Health Declaration (SHD) (previously Sheep Health Statement) to assist producers to make informed decisions when trading sheep.
- Provides a framework to assist producers in managing OJD individually or collectively and to develop Regional Biosecurity Plans (RBPs).
- Increased emphasis on extension and communication activities to assist producers and industry to understand the disease and its management.
- Abattoir monitoring as a means of providing individual producers and regions with information on the prevalence of OJD.
- Funding of OJD research and development work, with a greater emphasis placed on communicating these activities to industry.

What has changed since the start of the current NOJDMP?

Since the commencement of the current NOJDMP, there has been a greater emphasis placed on implementing the tools and management strategies to manage OJD, as well as other on-farm endemic diseases and conditions.

As a result of this, many of the tools and activities outlined in the NOJDMP have been managed and funded through the Sheep Health Project\(^1\) (SHP). The SHP is coordinated by Animal Health Australia (AHA) and the purpose is to provide the framework for a nationally integrated approach to sheep health conditions (endemic) and biosecurity within the Australian sheep industry. The SHP also manages other industry-funded projects such as the National Sheep Health Monitoring Project (NSHMP), and working groups for the Sheep Health Declaration, ovine brucellosis and footrot.

What are the key tools and management strategies?

The following tools and management strategies have been developed and implemented during the current and previous national OJD programs. SPA and WPA are interested in hearing from industry about the use, effectiveness and limitations of these tools and strategies.

1. The National Sheep Health Declaration

The National Sheep Health Declaration (SHD) (previously called Sheep Health Statement) is an important risk assessment tool to assist producers to make an informed decision about the health status and management history of the stock when trading sheep. It enables producers to assess the risk of diseases such as virulent footrot, lice, ovine brucellosis, Johne’s disease and other biosecurity risks.

As the declaration covers more than Johne’s disease the SHD is now managed through the Sheep Health Project.

These declarations are now available digitally and have been included as a pre-sale requirement in some electronic marketing platforms. The declaration is currently mandatory in South Australia and for entry of sheep into NSW.

Questions

A) How useful is the Sheep Health Declaration as a biosecurity tool for the sheep industry?
B) If any, what changes would you make to the Sheep Health Declaration?
C) What are the key issues or limitations that you see regarding the Sheep Health Declaration?

2. Vaccination

The OJD vaccine Gudair®, continues to be the most effective and valuable management tool to help control the spread of the disease. The use of Gudair® will significantly reduce production losses and mortalities compared to when the disease is uncontrolled. Vaccination has been shown to reduce mortalities due to OJD by 90%. Vaccinated animals are much less likely to shed Johne’s bacteria in the faeces if they do become infected. This reduces environmental contamination and provides less opportunity for disease transmission.

There has been widespread usage of Gudair® throughout the NOJDMP and previous national OJD programs. Long term, well-run vaccination programmes will lead to reduced clinical disease in a flock. It is important that producers continue vaccinating as the in-flock prevalence of the disease may increase if vaccination is ceased.

Questions

D) How effective is OJD vaccination as a management tool for OJD?
E) What are the key issues or limitations that you see regarding OJD vaccination?

3. Regional Biosecurity Plans

Regional Biosecurity Plans (RBPs) play a role in preventing the spread of the disease. The NOJDMP has guidelines to assist groups of producers in preparing RBP. The strength of these systems is enhanced when producers work together as a collective.

During the NOJDMP, RBPs were established in South Australia and Queensland, as well as parts of NSW and Victoria. Some have been active while others have fallen away, particularly once Queensland deregulated OJD control in July 2016. South Australia remains the only state with regulation for OJD control with state industry funding the program.

Participation in RBPs is voluntary for all producers. Under the NOJDMP there is no national funding or approval process for RBPs, with funding, approval and auditing of the plans being conducted amongst the groups that have RBPs.


Questions

F) Do you have an opinion on how effective Regional Biosecurity Plans are as a management strategy for OJD and other diseases and conditions?
G) What are the key issues or limitations that you see regarding Regional Biosecurity Plans?
H) Is there a need for ongoing national input into how Regional Biosecurity Plans should function in future?
4. Abattoir Monitoring

Abattoir monitoring is a practical and cost effective means of checking for OJD. Trained inspectors at abattoirs inspect lines of adult sheep (2 years or more) for visible signs of OJD in the intestines and lymph nodes.

Abattoir monitoring aims to identify infected flocks – this is particularly important for areas with little or no known prevalence. Abattoir monitoring can also be used to provide feedback to producers on the effectiveness of their management programs.

Abattoir monitoring for OJD is available for producers on request under the National Sheep Health Monitoring Project (NSHMP) when sheep are sent to participating abattoirs. It is only one disease of up to 20 diseases and conditions an inspector may be assessing for during inspection.

Information on the NSHMP is available at: www.animalhealthaustralia.com.au/nshmp/

Questions

I) How useful is abattoir monitoring feedback as a management tool for OJD and other diseases and conditions?

J) What are the key issues or limitations that you see regarding abattoir monitoring?

5. Communication

Whilst there has been some targeted communications on OJD, the majority of the communication messages have focussed on improving farm biosecurity in general. It is recognised that management for many diseases requires similar tools and therefore the focus should be about minimising risk for all diseases and conditions.

Specific communications about OJD and the strategies and tools to manage the disease are available at www.ojd.com.au and www.farmbiosecurity.com.au

Questions

K) What areas of communication about OJD (and other diseases) are needed and what is the most effective way to deliver this?

6. SheepMAP

The Australian Johne’s Disease Market Assurance Programs for sheep (SheepMAP) is a voluntary program for producers that aims to identify, protect and promote flocks that are at low risk of being infected with Johne’s disease. Producers can minimise the risk of purchasing infected sheep by sourcing replacement animals from MAP assessed flocks.

SheepMAP has continued throughout the duration of the NOJDMP and numbers of participants have recently stabilised, after falling for many years.

The review of SheepMAP has now concluded

Question

L) How important is it to have the option to purchase SheepMAP accredited breeding stock?
7. OJD Research

From 1 July 1999 until 1 March 2016, industry has invested approximately $21.5 million in 46 research projects on OJD and, to a lesser extent, bovine Johne’s disease (BJD). These research projects investigated the epidemiology, economic impact and pathogenesis of the disease; control and management options; and new diagnostic tests.

New research projects on diagnostics and resistance to JD are currently being contracted. There is currently no industry-funded research on OJD occurring through AHA.

Future national management of OJD

As well as identifying if there is a need to refine the current tools and management strategies (questions A to L above), SPA and WPA are also seeking views on how OJD should be managed/administered on a national basis in the future.

There are currently two broad options for consideration:

Option 1 - The current NOJDMP will cease with no replacement of a specific ‘national OJD plan’. Tools and strategies for managing OJD as outlined above, will continue to be managed and coordinated through the Sheep Health Project (SHP)

OR

Option 2 - A revised national framework for OJD will be developed based on the current NOJDMP, incorporating stakeholder feedback.

At a national level, the two options are not likely to vary considerably in cost for the sheep industry. A level of administration and oversight cost will be saved should stakeholders decide that the NOJDMP is no longer required.

Questions

M) Do you or your organisation have a preference for Option 1 or 2 (outlined above) and why?
N) Are there any issues that need addressing if the National OJD Plan ceases?
O) Is there another option that should be considered for the future national management of OJD?
P) Any other feedback or comments?

Consultation process

SPA and WPA are consulting with industry participants and other stakeholders to determine how OJD should be managed on a national basis into the future as well as identifying if there is a need to refine the current tools and management strategies.

SPA and WPA welcome feedback on any aspects of this discussion paper and in particular your responses to the questions from A to P. Note - You do not need to provide a response to all questions to contribute.
Questions:

A) How useful is the Sheep Health Declaration as a biosecurity tool for the sheep industry?

B) If any, what changes would you make to the Sheep Health Declaration?

C) What are the key issues or limitations that you see regarding the Sheep Health Declaration?

D) How effective is OJD vaccination as a management tool for OJD?

E) What are the key issues or limitations that you see regarding OJD vaccination?

F) Do you have an opinion on how effective Regional Biosecurity Plans are as a management strategy for OJD and other diseases and conditions?

G) What are the key issues or limitations that you see regarding Regional Biosecurity Plans?

H) Is there a need for ongoing national input into how Regional Biosecurity Plans should function in future?

I) How useful is abattoir monitoring feedback as a management tool for OJD and other diseases and conditions?

J) What are the key issues or limitations that you see regarding abattoir monitoring?

K) What areas of education and extension about OJD (and other diseases) are needed and what is the most effective way to deliver this?

L) How important is it to have the option to purchase SheepMAP accredited breeding stock?

M) Do you or your organisation have a preference for the future national management of OJD - option 1 or 2 (outlined above) and why?

N) Are there any issues that need addressing if the National OJD Management Plan ceases?

O) Is there another option that should be considered for the future national management of OJD?

P) Any other feedback or comments?

How to provide comment

- An online survey is the preferred method of receiving your feedback. This is available at https://www.surveymonkey.com/r/ojdplan

- Written submissions addressing the above questions and/or comments may be provided by email to: maria@agstarprojects.com.au Please include ‘OJD Review discussion paper’ in the email title. All material submitted will be acknowledged.

- Alternatively send by post to:
  OJD Discussion Paper
  AgSTAR Projects
  PO Box 384
  Coonabarabran NSW, 2357

- If you require a hard copy of the discussion paper and survey to be posted to you, please contact AgSTAR Projects on: 0411 961 545
Submissions/comments close Monday, 12 March 2018

Respondents should be aware that submissions may be made publicly available through AHA’s website.

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