

National Ovine Johne's Disease Management Plan (NOJDMP) 2013-2018 Consultative Review

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Executive Summary

The National Ovine Johne's Disease Management Plan (NOJDMP) 2013-2018 was developed by WoolProducers Australia (WPA) and Sheep Producers Australia (SPA), after consultation with industry in 2012-13 to assist industry in managing OJD and aiming to prevent its spread.

With the end of the current NOJDMP approaching, WPA and SPA requested Animal Health Australia (AHA) to commission a review of the NOJDMP 2013-2018. This involved the development of a discussion paper titled 'Future National Management of OJD', along with an online survey. These were distributed throughout industry and promoted via the rural media in January 2018 and was open for a six-week consultation period.

The aim of the review was for feedback from the consultation to be used to determine how or if OJD should be managed/administered on a national basis in the future, as well as identifying if there is a need to refine the tools and management strategies that underpin the NOJDMP.

A total of 227 online surveys were completed and 24 direct written submissions were received via email or post, involving submissions from producers, State Farming Organisations (SFOs), agencies, organisations, Regional Biosecurity Plan (RBP) areas, committees and agents.

The consultation process was based on a number of questions about the tools and management strategies and provided two options for the future management of OJD. Feedback provided was mostly qualitative feedback, which was collated and used to develop a number of recommendations to be considered by the national sheep Peak Industry Councils (bolded below).

National Sheep Health Declaration

The feedback from the consultation indicated that National Sheep Health Declaration (SHD) continues to be viewed by respondents as a valued risk assessment/ biosecurity tool for the sheep industry, which can be enhanced through increased producer uptake and livestock agent support; and via increased education to producers on how to use the document both when selling and purchasing sheep.

- 1. It is recommended that the information from the NOJDMP review regarding issues with the SHD be provided to the Sheep Health Project (SHP) Steering Committee to be considered in the next SHD review.**
- 2. The SHD should remain as a market driven management tool rather than becoming a mandatory document underpinned by regulation.**
- 3. An extension plan for the SHD should be developed and implemented. This should promote the benefits of the document, the legal ramifications, how to use and interpret the information and in particular how to use the E-NVD and SHD online platform. This should be targeted at both livestock producers and livestock agents.**

- 4. Discussion should be initiated with the Australian Livestock and Property Agents Association (ALPA) to investigate opportunities for the SHD to be provided to purchasers pre-sale and to encourage the promotion of the use of the SHD throughout industry via extension activities.**

Vaccination

The OJD vaccine continues to be the most effective management tool for OJD with evidence suggesting that the vaccine has greatly improved the welfare and productivity of OJD infected flocks.

- 5. Increase producer awareness of the OJD vaccine as part of the broader communication and extension plan.**

Regional Biosecurity Plans

Regional Biosecurity Plans (RBPs), also referred to as Regional Biosecurity Areas (RBAs), can play a role in preventing the spread of disease if executed properly and there is buy-in from all relevant producers. The NOJDMP has guidelines to assist groups of producers in preparing an RBP.

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.

During the consultation, there was support particularly through submissions from current RBP groups for the continuation of RBPs as a management tool. Concern was expressed about the lack of national oversight and input as well as the inconsistency between how the RBPs are implemented, supported and resourced.

- 6. If the Peak Industry Councils determine that RBPs will continue to be recognised as a management tool for OJD and other diseases, then it is recommended that the RBP Guidelines are reviewed and for RBP auditing, reporting and accountability to be improved.**
- 7. If RBPs are likely to remain as a tool for the management of OJD or other conditions, there should be a 'coordination group' to provide a platform for RBP assessment and accountability, to facilitate discussion between RBPs and where new RBPs can be considered. Support for this should be provided through the Sheep Health Project or the national OJD framework and should have clearly defined Terms of Reference developed.**

Abattoir Monitoring

Abattoir monitoring is a very useful surveillance tool for individual flock owners to gain information about the health status of their flocks both for initial diagnosis of disease, and for assessment of the effectiveness of their management programs. There were a number of limitations identified in the consultation process including the accessibility of the service in some areas.

8. **Abattoir monitoring for OJD should continue to be supported, promoted and funded under the NSHMP with feedback provided to producers.**
9. **There is a need for improved communications to producers on how to request OJD monitoring from abattoirs and what to do with the results.**
10. **Communication and extension should focus on encouraging producers to request OJD monitoring and to utilise the tool as a benefit to detect disease as early as possible.**

Communication and Extension

Producer understanding and knowledge was identified as a key limitation for uptake and effective use of a number of the OJD management strategies throughout the consultation. While improved communication will go some way in addressing these limitations, there needs to be a focus on the development and implementation of an effective extension strategy.

11. **A communication and extension strategy should be developed and implemented that covers the range of OJD management tools and strategies, and that is targeted at producers and livestock agents.**

SheepMAP

The majority of the written submissions indicated that providing the option to purchase SheepMAP accredited breeding stock was an important component of the NOJDMP.

Given that AHA has commissioned a separate, more detailed review of SheepMAP, no recommendations have been provided on the SheepMAP, other than the feedback suggesting that it was a useful tool.

Future national management of OJD

The aim of the consultation process was to assist industry to determine the future national management of OJD. Two options were identified for consideration in the consultation:

- 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.

From the survey responses 49% supported Option 2 and 19% were unsure. SFO's through consulting their members and committees, represent a large base of producers. From the SFO submissions, three were supportive of Option 1, one of Option 2 and two did not specify an option. There was no submission received from Livestock SA.

Of the remaining written submissions from organisations, agencies, RBPs and committees, that were all from NSW, three of these supported Option 1 and six supported Option 2.

Subsequently the combined results from the three categories (i.e. survey responses, SFOs, other groups) do not provide a conclusive result in supporting either option.

The feedback provided in the consultation process on the NOJDMP tools and management strategies and on the future national management of OJD varied considerably across industry. In particular, the views varied between areas of little or no known OJD prevalence to areas where OJD is managed as an endemic disease.

Whether the national Peak Industry Councils decide to support Option 1 or Option 2:

12. It is recommended that the chosen option:

- Remains as part of the Sheep Health Project at AHA;
- Aims to enhance the tools and management strategies from the NOJDMP;
- Has a logical format with clearly defined inputs, activities, roles, budget, outputs and objectives/outcomes;
- Incorporates a simple monitoring and evaluation (M&E) process; and
- Incorporates an extension and adoption strategy and implementation plan for industry.

Communications of the review outcomes

- 13. It is recommended that a communication plan be developed to accompany the release of the review outcomes and decisions of the Peak Industry Councils.**

Cross Species JD issues

- 14. Via AHA coordination, all affected livestock industries should work together on cross industry Johne's Disease issues including cross species transmission.**

The Standard Definitions Rules and Guidelines (SDR&G)

- 15. The Standard Definitions Rules and Guidelines (SDR&G) for the Management of ^{FIT}~~ISE~~OJD in Sheep and Goats should be revised to reflect the changes implemented from this review and the SheepMAP review.**

In conclusion, the feedback provided in the consultation process on the NOJDMP tools and management strategies and on the future national management of OJD varied considerably across industry. In particular, the views varied between areas of little or no known OJD prevalence to areas where OJD is managed as an endemic disease. The national future management of OJD should aim to ensure that tools and management strategies are available and extended to all sheep producing areas.

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1. Introduction

The National Ovine Johne's Disease Management Plan (NOJDMP) 2013-2018 was developed by WoolProducers Australia (WPA) and Sheep Producers Australia (SPA), after consultation with industry in 2012-13 to assist industry in managing OJD aiming to prevent its spread.

The 2013-18 NOJDMP had 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.

As the current NOJDMP is coming to an end, in 2017 WPA and SPA requested that Animal Health Australia (AHA) commission a review of the NOJDMP 2013-2018 and that it include the development of a discussion paper and an online survey to be distributed widely throughout industry.

The aim was for feedback from the consultation to 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 tools and management strategies that underpin the NOJDMP.

2. Methodology

The discussion paper 'Future National Management of OJD', was developed with input from SPA, WPA, AHA and the consultant. This contained information about the NOJDMP, the tools and management strategies and options for the future national management of OJD. The discussion paper was based on a number of questions, which are presented as headings throughout this document.

An online survey was developed using Survey Monkey to provide a quick and efficient platform for industry to provide a response. The survey (Appendix I) primarily focussed on the questions from the discussion paper.

The discussion paper and online survey link were distributed throughout industry and promoted via the rural media (including paid advertisements in major rural newspapers) at the end of January 2018. The consultation period was open for six weeks, closing on 12 March 2018. Respondents had the option of providing feedback via the online survey or via a written submission to be emailed or posted.

The review findings and recommendations are based on the feedback received via the online survey and from the written submissions for each discussion paper question.

3. Results/Discussion

The national management of OJD in the Australian sheep industry continues to be of interest to a relatively small number of sheep producers, stakeholders and organisations across Australia.

A total of 227 (n=227) online surveys were completed and 24 direct written submissions were received via email or post. Written submissions were received from six State Farming Organisations (SFOs), NSW DPI, three NSW Local Land Services (LLS), four Regional Biosecurity Area Committees/Groups, a producer representative group, NSW Country Women's Association, an agent and eight producers (see Appendix II for the list of written submissions).

It is important to note that the online survey was not a random sample of the population of producers; hence it is not possible to know how representative the responses were of the Australian sheep producer population. It must also be acknowledged that the total sample size is very small relative to the total number of sheep producers in Australia.

There was extensive qualitative feedback received via both the online survey and via written submissions. The collation process in this review has attempted to reflect the range and diversity of comments, understanding, views and feedback received across the submissions. Subsequently the qualitative information captured in the report for each question is lengthy (see Appendix III).

3.1 Survey demographics



Figure 1. Number of OJD survey respondents from each state in Australia.

It is important to note that throughout survey reporting, there were a very small number of respondents from Queensland (n=5), Tasmania (n=4) and Western Australia (n=9). As there were limited sample sizes in three states, this report will focus on national results and state based samples will not be reported on.

The survey respondents were able to select more than one option for their role in industry (Figure 2).

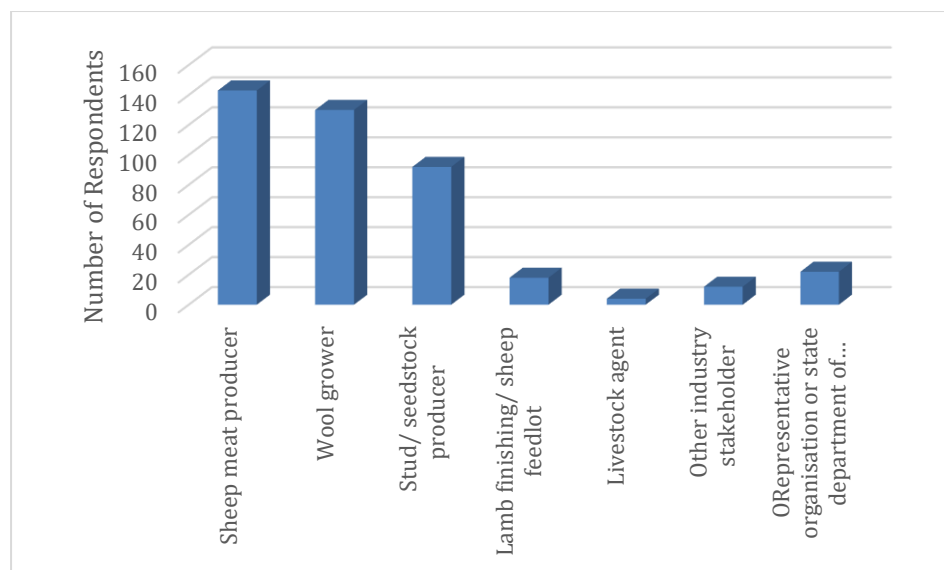


Figure 2. Survey respondents role in the Australian sheep and wool industry.

Producers who responded to the survey were asked a number of questions about OJD including ‘how relevant is the OJD status of the sheep when making purchasing decisions?’ and were given a scale rating of 1= not important to 100= very important. The average number for total responses (n=189) was 81.

A total of n=197 producers responded to the survey question about their awareness of the National OJD Management Plan (NOJDMP) 2013-18, with 89% indicating that they were aware of the plan (Figure 3). There was no trend in results by state or segment.

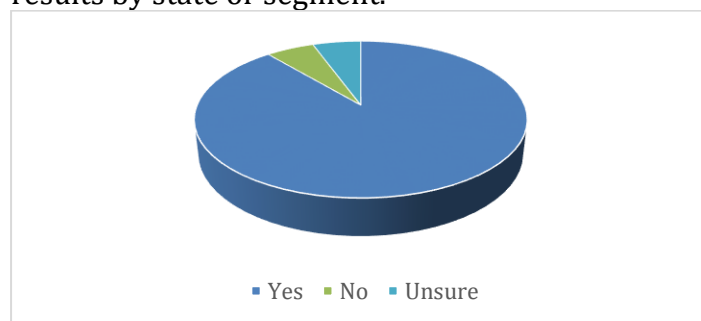


Figure 3. Producer survey response to ‘Are you aware that there is a National OJD Management Plan?’

Given that the producers who responded, are a population sample interested in the topic, the 89% level of knowledge about the NOJDMP is not surprising. It is also reasonable to assume that those impacted by OJD are more motivated to have filled in the survey.

3.2 The NOJDMP tools and management strategy

The consultation process included a range of questions about the current OJD management strategies and tools including the National Sheep Health Declaration (SHD), OJD vaccination, abattoir monitoring, SheepMAP, Regional Biosecurity Plans (RBP) and industry communications.

The below graph (Figure 4) includes the collective survey respondent results for four management strategies. The RBP question was not asked in a quantifiable manner.

From the survey respondents, OJD vaccination rated the highest, followed by abattoir monitoring feedback, SHD and then SheepMAP accredited breeding stock.

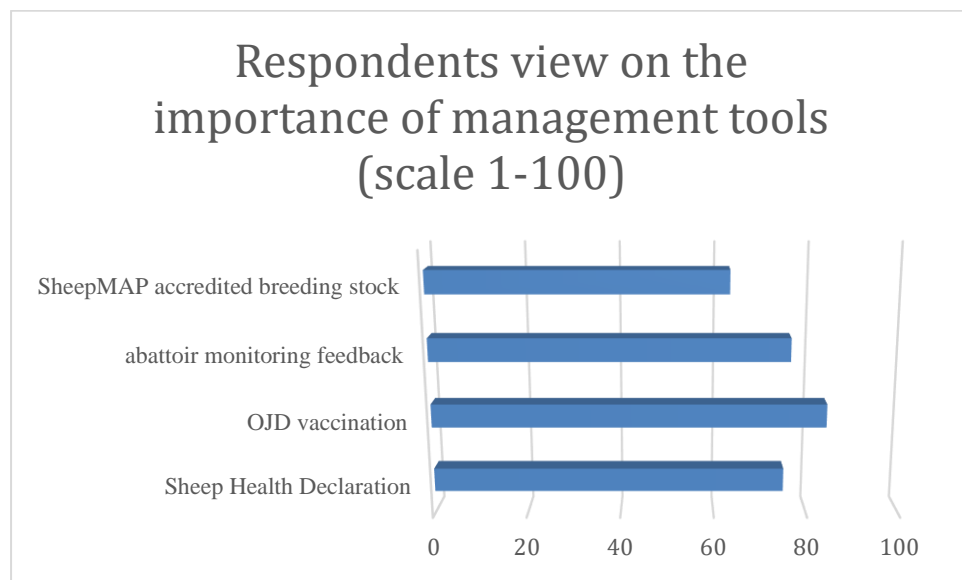


Figure 4. Average number (scale 1-100) when producers were asked 'how useful or effective each of the tools were for the management of OJD.

3.3 The National Sheep Health Declaration

The National Sheep Health Declaration (SHD) (previously called Sheep Health Statement) continues to be 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 currently managed through the *Sheep Health Project* at Animal Health Australia.

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

The survey question 'How useful is the Sheep Health Declaration as a biosecurity tool for the sheep industry?' had a scale rating of 1= not useful to 100= very useful. The average number for total survey responses (n=200) was 75.

The summarised key themes from the survey comments and written submissions for this question included:

- Respondents value the SHD as a **risk assessment/biosecurity tool** for the sheep industry.

- There was an acknowledgement that there is currently **poor uptake** by producers and agents using and requesting the document (with the exception of regulatory or market requirements).
- It was noted that there is a **general lack of understanding** in industry of how to use the SHD both in filling one out and interpreting the information.
- A number of submissions noted that the new **farm biosecurity plan** requirements in the Livestock Production Assurance (LPA) program has raised the profile of biosecurity amongst producers including the use of the SHD as a tool in the farm biosecurity plans.
- Some submissions such as the NSWFA submission indicated that the document should be made **mandatory** when selling breeder or restocker sheep and VFF Livestock Group indicated 'where market led signals have failed, the use of the SHD should be mandated'.
- For the SHD to be most useful, producers should have the opportunity to **see a copy of the declaration pre-purchase** of the sheep. This is currently identified as a limitation that needs to be addressed.

Overall the SHD continues to be viewed by respondents as a valued risk assessment/ biosecurity tool for the sheep industry, which can be enhanced through increased producer uptake and agent support; and via increased education to producers on how to use the document both when selling and purchasing sheep.

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

The question on what changes would you make to the SHD received 119 responses from the online survey and feedback in the written submissions on all sections of the SHD and the Explanatory Notes. The collated feedback is in Appendix III, which will be provided to the next SHD review process for consideration.

Specific feedback on the JD section included:

- Concern about producer confusion regarding the terms livestock biosecurity plans, regional biosecurity plans and the new LPA farm biosecurity plans.
- The need to change the terminology from 'Approved vaccinates' to 'Approved QJD vaccinates.
- Concern was expressed about the *definitions of 'Infected' and 'Suspected'*. These terms are referenced from the Standard Definitions Rules and Guidelines (SDR&G) for the Management of ¹⁷~~16~~ QJD in Sheep and Goats. These terms should be reviewed as part of the SDR&Gs review.
- There was a suggestion that the JD section should commence with a simple question - '*Is the flock low risk of Johne's Disease?*' with a yes or no response indicated, if Yes – *how has this been determined? Then ask the*

extra questions to allow buyers to assess the degree of risk.

- There was a suggestion for the inclusion of *an option to tick whole flock vaccination.*
- There were some requests for the *previous point system to be returned.*

The Assurance Based Credit (ABC) point system was a key element of previous national OJD programs. It was removed at the inception of the NOJDMP due to industry research that demonstrated that there was not enough knowledge of the system, with people declaring higher points than they were due, therefore leading to an ineffective tool. It would not be recommended to re-implement the point system.

- There was concern that for *"rare breed" sheep, Negative Faecal 350 and Negative Abattoir 500 and 150 are not useful as they do not have that number of sheep.* Some respondents requested a new classification for smaller numbers.

This requires a technical viewpoint, but smaller numbers would undoubtedly have a lower assurance. This should be considered further through the SHD review process.

- Regarding the SheepMAP, there was a suggestion to *include the MAP accreditation number* and that the Explanatory Notes should provide more information about MAP statuses.

This will largely depend on the findings of the separate SheepMAP review.

- There was a suggestion of some industry confusion about T-tag lambs. If T-tag lambs are to remain as an option on the SHD, communication surrounding this is required.

Key themes on the format of the SHD included:

- A need to *simplify the questions and language.*
- There was considerable feedback requesting printed carbon copy books, while other feedback suggested making it an electronic declaration only and to be compatible with tablets and phones.
- There were also a large proportion of the online survey comments and numerous written submissions that suggested *combining or linking the SHD with the NVD.*

DISCUSSION

The feedback on the question 'what changes would you make to the SHD?' provided via the consultation, should feed into the SHD review process via the Sheep Health Project (SHP) Steering Committee.

The review process should include testing the SHD with a pilot group of producers including at least some producers who are unfamiliar with the document.

The SHD and NVD have two distinct purposes and it is appropriate that they

remain as separate documents.

The wide support from the consultation for the SHD to be printed in books similar to the NVD, may increase use of the SHD throughout industry, however this would require significant resources and costs for printing and distribution. This also creates issues with version control and making future updates to the document. This effort and cost would be better focussed on promoting the use of the SHD through the E-NVD platform, which has the functionality to be sent direct to the purchaser/agents pre-sale.

RECOMMENDATIONS

National Sheep Health Declaration

1. It is recommended that the information from the NOJDMP review regarding issues with the SHD be provided to the Sheep Health Project (SHP) Steering Committee to be considered in the next SHD review.

The review process should include testing the SHD with a pilot group of producers including at least some producers who are unfamiliar with the document.

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

The summarised key themes from the online survey and the written submissions on the 'key issues and limitations for the SHD' include:

- There is a need for **improved understanding** of the SHD benefits and how to use it amongst producers and agents.
- It needs to be **market driven**; however some respondents signalled that it should be mandatory.
- It is essential to get **livestock agent involvement** and support for the use and promotion of the document.
- To get the true value of the tool, producers **need to request the SHD prior to purchasing** the livestock.
- Concern was expressed about the document relying on the **integrity of the producers**.
- Limited levels of abattoir feedback can inhibit the accuracy of information that can be provided on the SHD.

DISCUSSION

From the consultation process it is clear that a key limitation for the uptake and use of the SHD throughout industry includes a lack of understanding of the benefits from using the document and how to use and interpret the information on the SHD.

As part of the SHD review process, testing the SHD with a cohort of producers who are unfamiliar with the document, should help to identify issues with the questions and barriers to uptake. This testing should be conducted prior to the development of communication and extension activities.

Given that producer integrity in filling out the form was a concern raised, there should also be opportunity to include the 'legalities of the document' in future communication and extension activities.

Livestock agents are an essential element in the chain to provide the SHD to potential buyers of livestock. Subsequently livestock agents should also be a key target of any communication, extension and promotion of the tool.

SPA and WPA should continue to engage in relevant industry discussions aimed at improving the online functionality of the E-NVD and the SHD including providing offline capability.

The introduction of Farm Biosecurity planning under the LPA program may encourage the use of the SHD as producers become more biosecurity savvy with their purchasing of sheep. The Auctions Plus requirement for the SHD, provides an example of a market driven approach, which is likely to increase in the future.

It is unlikely that mandating the SHD use would result in consistent implementation across each state's regulations, which would add to the confusion amongst industry. With the exception of the Waybill section of the National Vendor Declaration (NVD), the use of the NVD is not underpinned by state legislation.

RECOMMENDATIONS

National Sheep Health Declaration

- 2. The SHD should remain as a market driven management tool rather than becoming a mandatory document underpinned by regulation.**
- 3. An extension plan for the SHD should be developed and implemented. This should promote the benefits of the document, the legal ramifications, how to use and interpret the information and in particular how to use the E-NVD and SHD online platform. This should be targeted at both livestock producers and livestock agents.**
- 4. Discussion should be initiated with the Australian Livestock and Property Agents Association (ALPA) to investigate opportunities for the SHD to be provided to purchasers pre-sale and to encourage the promotion of the use of the SHD throughout industry via extension activities.**

3.4 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.

Trial work has shown how vaccination of all sheep on a farm for a period of five or more years can reduce the prevalence of infected sheep to undetectable levels. Vaccination largely obviates the need to use grazing management as a control measure and buyers of restocker sheep pay more for Gudair-vaccinated than unvaccinated sheep especially if they are "Approved Vaccinates" (2018 SheepMAP Review, GHD)

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

The survey question 'How effective is OJD vaccination as a management tool for OJD?' had a scale rating of 1= not effective to 100= very effective. The average number for total responses (n=129) was 84.

The written submissions generally included feedback that the Gudair® vaccine remained as a significant and effective tool for the management of OJD. This effectiveness is highlighted by reports that *the vaccine has markedly improved welfare and productivity of OJD-infected sheep flocks in the previously identified high prevalence areas.*

There was concern regarding some of the key issues and limitations (outlined below), such as vaccinated sheep having the potential to continue to shed bacteria.

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

The summarised key themes from the online survey and the written submissions are:

- **Cost of the vaccine** was raised as an issue including the pack sizes and price making it unlikely to be used by smaller producers and hobby farmers.
- Concern was expressed about **human safety due to incorrect vaccination technique.**
- Concern that **vaccinated sheep may still shed the bacteria** and be a potential source of infection.
- There is a need for **improved communication** and extension on vaccine use.

- There was also some feedback suggesting that the vaccine should be subsidised, while other submissions went further to say that the vaccine should be mandated.

DISCUSSION

The OJD vaccine continues to be the most effective management tool for OJD with evidence suggesting that the vaccine has greatly improved the welfare and productivity of OJD infected flocks.

User safety remains a limiting factor in the use of the vaccine. This could be minimised by including information on recommended vaccination techniques in future communications. This should include recommended vaccination procedures including vaccinating at lamb marking to reduce exposure to the bacteria.

The survey currently being conducted by University of Sydney, funded by Meat & Livestock Australia on Gudair effectiveness should also produce valuable information that can be provided to producers to assure them that the vaccine is a cost-effective and important tool to manage JD.

As with the other OJD management tools and strategies, it is recommended that OJD vaccination should be market driven rather than mandated and the sheep industry is unlikely to have sufficient levies available to consider subsidising vaccination as some respondents suggested.

RECOMMENDATION

Vaccination

5. Increase producer awareness of the OJD vaccine as part of the broader communication and extension plan.

As outlined in the communications/extension recommendation, for OJD vaccination, this should involve messages targeted at producers in the:

- i) disease-free areas,
- ii) suspect areas; and
- iii) endemic areas.

3.5 Regional Biosecurity Plans

Regional Biosecurity Plans (RBPs), also referred to as Regional Biosecurity Areas (RBAs) can play a role in preventing the spread of disease if executed properly and there is buy-in from all relevant producers. The NOJDMP has guidelines to assist groups of producers in preparing an RBP.

The NOJDMP included the development guidelines to assist groups of producers in preparing RBP –

<http://www.ojd.com.au/trading-sheep/regional-biosecurity-plans/>

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.

In recent years the RBPs have become less active, at least from outward appearances. The Queensland RBP has not been active since the state deregulated OJD in 2016. The NSW and Victorian ones have continued, but have no external auditing or approval process in place. This leaves South Australia, which is regulated and hence not a voluntary RBP for producers, as the most active one.

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.

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

There were 161 survey comments for this question. The summarised key themes from the online survey and the written submissions are:

- RBPs vary in how they function and the effectiveness is greatly dependent on **producer ownership and involvement** as well as **coordination support**.
- Concern was expressed that about the **lack of reporting and auditing** by RBPs.
- Feedback suggested that there is **opportunity to expand** current RBPs from OJD **to other endemic diseases** and for potential Emergency Animal Diseases.
- There was concern about **inconsistency between states** and the level of support and input provided by government veterinarians.
- Feedback also noted **that data and testing to support and underpin RBPs is limited**.

DISCUSSION

Given the vastly mixed responses from the submissions as well as the limited auditing, monitoring and evaluation of the RBPs, it is difficult to know how effective RBPs have been at meeting the objectives of the RBPs under the NOJDMP or for the sheep industry in general.

Feedback suggested that RBPs can work effectively if:

- They are instigated by producers;
- There is strong ownership by all producer members of the plan;
- A high level of compliance by all parties with the recommended risk management strategies;
- Regular audits and sufficient surveillance to evaluate whether the plan is working effectively; and
- Clear, consistent mechanisms for dealing with non-compliance or issues identified at audit.

Member support for RBPs and the effectiveness of the RBPs at meeting their

objectives have not been evaluated hence it is difficult to make a recommendation.

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

The survey response received 155 comments to this question. The summarised key themes from the online survey and the written submissions are:

- The effectiveness of RBPs are **dependent on producer ownership** and involvement and **having coordination support** (i.e. government staff maintaining the RBA requirements).
- Numerous submissions outlined the need for **adequate oversight, leadership & resources** to monitor movements into RBPs.
- Concern was expressed that the **limited surveillance and testing** undertaken has generally involved insufficient flocks within an RBP to give confidence in the regional prevalence of infection.
- It is understood that **regular audits and compliance checks have mostly not been conducted**.
- Feedback suggested the **need for a consistent auditing process** to be developed and applied to all RBPs.
- Feedback noted that there has been a **reliance on producer integrity** (without supporting regulation) to manage biosecurity threats including high risk movements into the RBPs.
- There is a **need for ongoing evaluation** of the support and effectiveness of all RBPs.
- Some respondents indicated the need for enforcement and regulation. However other feedback throughout the consultation process indicated that there was little, if any support of further regulation.

DISCUSSION

As outlined as an earlier discussion point, the limited auditing, monitoring and evaluation of the RBPs, make it difficult to know how effective RBPs have been at meeting the objectives of the RBPs under the NOJDMP or for the sheep industry in general.

From the consultation, it seems that a number of the RBPs rely heavily on coordination support from state government/LLS staff (NSW). If this support is not continued in the future, industry will need to demonstrate how they will meet any RBP requirements. For example, LLS has indicated *'that whatever scheme is introduced it must be able to be entirely industry driven and self-sufficient. LLS are happy to provide technical assistance to any producer with questions about OJD or any other disease, and general biosecurity principles, but we are not in a position to organise groups, monitor sheep introductions or write audit reports.*

During the consultation, concern was expressed about the lack of national oversight and input as well as the inconsistency between how the RBPs are implemented, supported and resourced. If RBPs continue to be recognised as a management tool available for the sheep industry and producers within RBP areas receive favourable trading conditions because of the RBP status, then it is essential for the Guidelines to be reviewed and for RBP auditing, reporting and accountability to be improved.

The consultative review process did not investigate the number of functioning RBPs in place, whether they are conducting audits, what the audit results are, whether RBPs have been an effective OJD management tool or whether there is ongoing support from RBPs participants.

RECOMMENDATION

Regional Biosecurity Plans

6. If the Peak Industry Councils determine that RBPs will continue to be recognised as a management tool for OJD and other diseases, then it is recommended that the RBP Guidelines are reviewed and for RBP auditing, reporting and accountability to be improved.

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

A total of 189 survey respondents answered the question 'is there a need for ongoing national input into how future RBPs should function'. The majority 60% indicated yes, 21% indicated no and 19% were unsure (Figure 4).

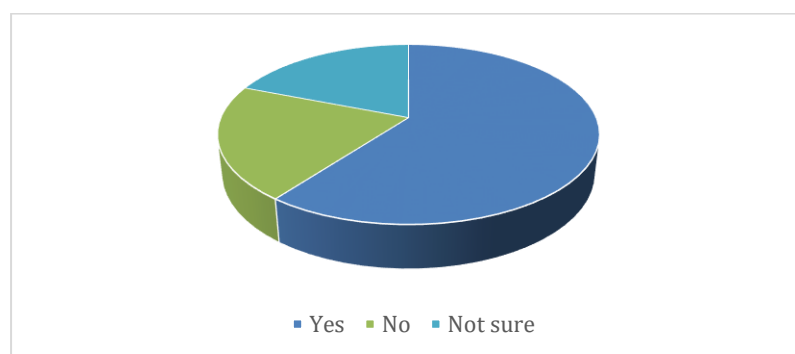


Figure 4. Survey response to the question 'Is there a need for ongoing national input into how future RBPs should function?'.

The survey response received 155 comments to this question. The summarised key themes from the online survey and the written submissions are:

- Numerous submissions indicated that that national input is essential to ensure **consistency between RBPs**.
- Feedback included that national input should be directed towards ensuring that the plans are **outcome focussed, effectively reviewed and evaluated** and that participating members remain committed to the goals of their RBP.
- **National oversight** is needed to ensure that all regions are meeting their obligations and that currently there is no accountability required.

- Some submissions indicated the need for a national coordinator for RBPs while other submissions indicated that RBPs should function at the local level.

DISCUSSION

From the online survey, 60% of the 189 respondents indicated that there is a need for national input and the majority of the written submissions also supported this.

The review highlighted that there is inconsistency in how the current RBA's are operated, administered, reviewed and evaluated.

RECOMMENDATION

7. **If RBPs are likely to remain as a tool for the management of OJD or other conditions, there should be a 'coordination group' to provide a platform for RBP assessment and accountability, to facilitate discussion between RBPs and where new RBPs can be considered. Support for this should be provided through the Sheep Health Project or the national OJD framework and should have clearly defined Terms of Reference developed.**

3.6 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.

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

The survey question 'How useful is abattoir monitoring feedback as a management tool for OJD and other diseases and conditions?' had a scale rating of 1= not useful to 100= very useful. The average number for total survey responses (n=141) was 76.

The summarised key themes from the online survey and the written submissions are:

- Feedback indicated that abattoir monitoring is a **very useful surveillance tool for individual flock owners** to gain information about the health status of their flocks both for initial diagnosis of disease, and for assessment of the effectiveness of in-flock control.

- Other feedback suggested that abattoir surveillance is **less useful as a surveillance tool for district prevalence estimation** and to assess prevalence for RBAs because insufficient numbers of flocks are included and the sensitivity of the test is not 100% allowing some infected flocks to remain undetected and a risk for further spread to other flocks.
- Concern was expressed via numerous submissions about the **difficulty of getting abattoir monitoring** particularly in NSW.
- Numerous submissions supported an increase in funding to expand the level of abattoir monitoring.

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

The survey response received 138 comments to this question. The summarised key themes from the online survey and the written submissions are:

- The **cost of abattoir monitoring** for the national sheep industry was recognised as a limitation however numerous submissions recognised that it was worthwhile expense for industry.
- Concern was expressed about the **limited number of participating abattoirs** and the impact that this has on providing information for other tools such as the SHD and the RBP assurance.
- The value of providing **timely feedback** to producers was noted in numerous submissions.
- There was some misunderstanding amongst SFOs about how the NSHMP functioned and the role that state departments played. This should be addressed via improved communications.
- The limitations of abattoir surveillance included the **sensitivity of the testing**.
- Concern was expressed about the consequences and stigma for producers testing positive to OJD and subsequently **producers avoiding certain abattoirs to avoid detection**.
- The **limitation for producers with rare breeds and small flocks** was recognised.
- **Producer awareness** was also identified as an issue with some producers indicating that they did not know how to access abattoir monitoring, while others indicated little understanding amongst industry that producers need to request OJD testing.
- Concern was raised about **mental health issues** for producers whose sheep test positive.

DISCUSSION

Abattoir monitoring is a very useful surveillance tool for individual flock owners to gain information about the health status of their flocks both for initial diagnosis of disease, and for assessment of the effectiveness of their management programs. There are a number of limitations with abattoir monitoring that continue to be managed through the NSHMP.

The submissions indicated that there is a level of misunderstanding amongst some industry stakeholders as to how the NSHMP (including the monitoring for

OJD) is run and the process to provide feedback to producers. This knowledge gap should be addressed with improved communications.

RECOMMENDATIONS

Abattoir Monitoring

8. **Abattoir monitoring for OJD should continue to be supported, promoted and funded under the NSHMP with feedback provided to producers.**
9. **There is a need for improved communications to producers on how to request OJD monitoring from abattoirs and what to do with the results.**
10. **Communication and extension should focus on encouraging producers to request OJD monitoring and to utilise the tool as a benefit to detect disease as early as possible.**

3.7 Communications

Whilst there has been some targeted communications on OJD throughout the NOJDMP 2013-18, the majority of the communication messages focussed on improving farm biosecurity in general. It is recognised that management for many diseases requires similar tools and therefore the focus has been about minimising risk for all diseases and conditions.

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

The survey question 'What areas of communication and education about OJD (and other diseases) are needed?' received n=185 survey responses. Respondents were able to select more than one option.

Figure 5 shows 71% selected 'General on-farm biosecurity', 61% selected 'How to implement farm animal health places i.e. vaccination strategies' and 57% selected 'how to use and interpret the Sheep Health Declaration'.

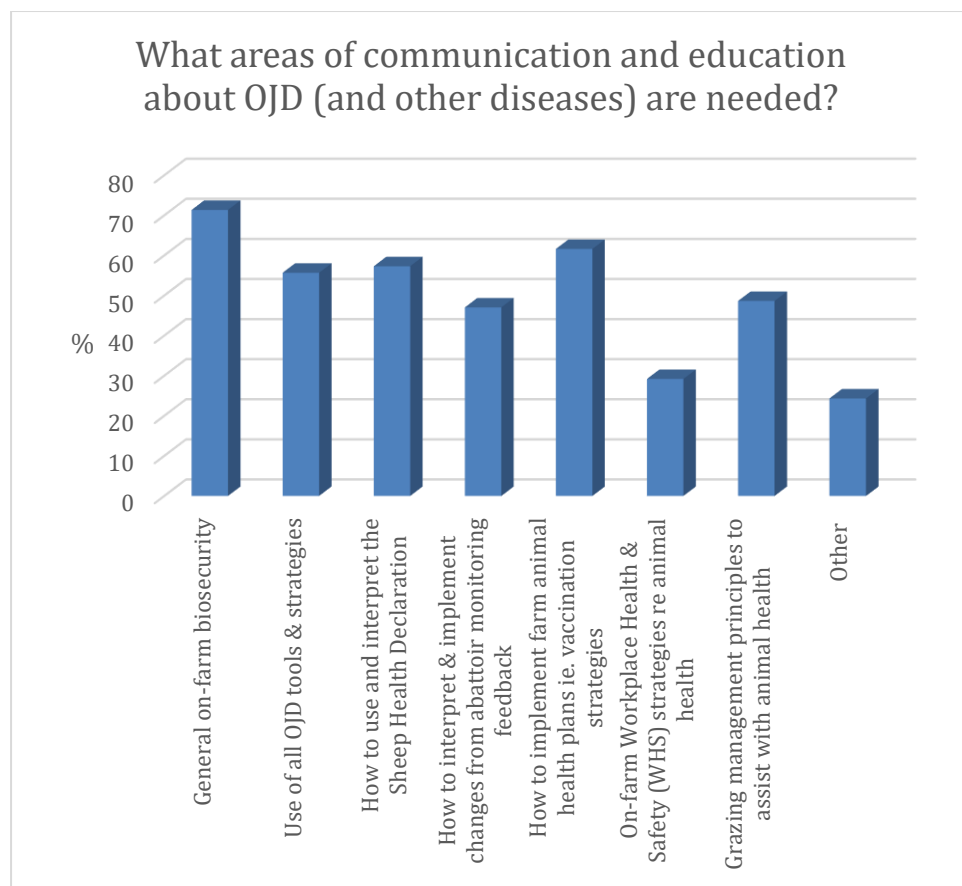


Figure 5. Survey respondents were asked ‘what areas of communications and education about OJD and other disease are needed?’ with provided options.

The question ‘What is your preferred method of receiving animal health communications?’ received n=189 survey responses. Respondents were able to select more than one option. Figure 6 shows 67% selected ‘Email updates’ as their preferred method, followed by 41% selecting ‘Online (i.e. Farm Biosecurity website), and 40% for ‘animal health sessions at field days’, ‘From their state department of agriculture/LLS in NSW’ and ‘printed publications and media’.

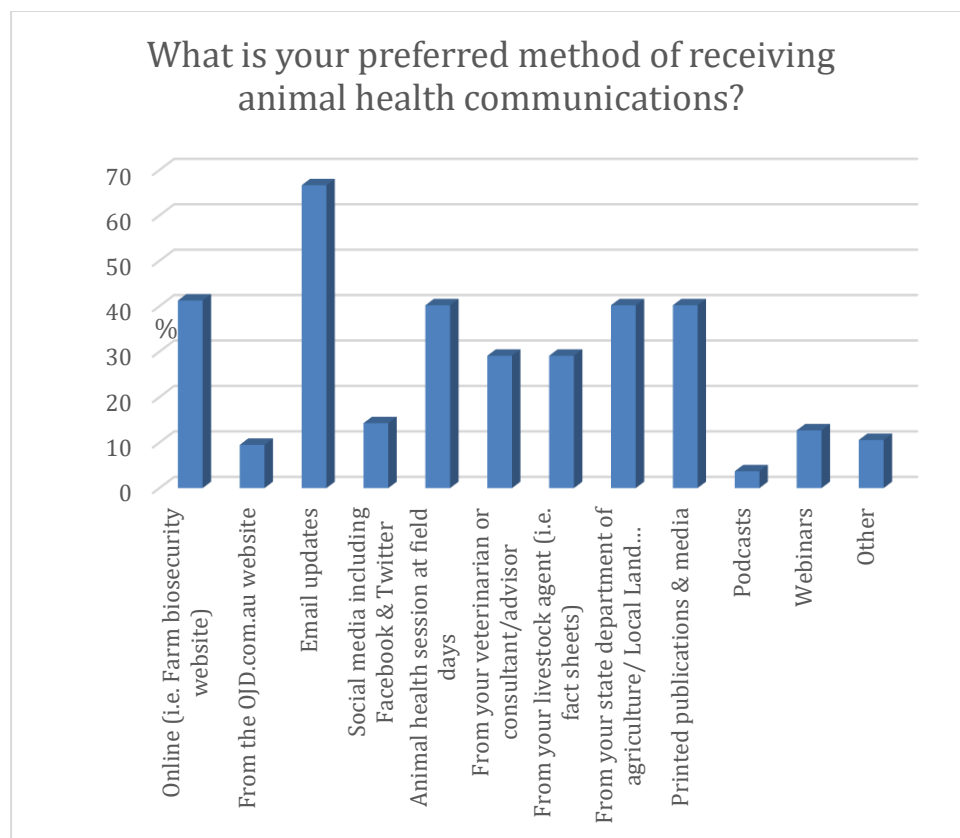


Figure 6. Survey respondents were asked ‘what is your preferred method of receiving animal health communications?’

DISCUSSION

Producer understanding and knowledge was identified as a key limitation for uptake and effective use of a number of the OJD management strategies throughout the consultation.

While improved communication will go some way in addressing these limitations, there needs to be a focus on the development and implementation of an effective extension strategy.

The development of a communication tools/packages should aim to utilise existing channels of delivery i.e. DPIs, LLS, Livestock Biosecurity Network, sheep advisors and consultants, grower network coordinators, SFOs etc.

RECOMMENDATION

Communication and Extension

- 11. A communication and extension strategy should be developed and implemented that covers the range of OJD management tools and strategies, and that is targeted at producers and livestock agents.**

The strategy should include, but not be limited to the following:

- Target and package the information for producers to understand how to manage OJD in i) disease-free areas, ii) suspect areas, and iii) endemic areas.
- Support routine risk assessment of OJD + other diseases by producers, including biosecurity risks from neighbours, movement of stock on roads, and purchase and introduction of livestock
- How to use and interpret Sheep Health Declarations including promoting effective use of them and reinforcing their benefits to livestock agents. This should include the use of the NSHD via the E-NVD platform
- Promote safe and effective use of the OJD vaccine
- How to access and then interpret abattoir monitoring feedback and the benefit of using this tool for early flock detection
- The development of a range of communication tools/packages that can be provided to stakeholders who can help deliver the information i.e. DPs, LLS, Livestock Biosecurity Network, sheep advisors and consultants, grower network coordinators, SFOs etc.

3.8 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.

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

The survey question 'How important is it to have the option to purchase SheepMAP accredited breeding stock?' had a scale rating of 1= not important to 100= very important. The average number for total survey responses (n=181) was 63.

The majority of the written submissions indicated that providing the option to purchase SheepMAP accredited breeding stock was an important component of the NOJDMP.

The key feedback themes in the survey comments and written submissions included:

- RBP groups who provided feedback indicated that it is **essential to have SheepMAP accredited breeding stock** available to purchase.
- It was acknowledged in numerous submissions that producers in SheepMAP have committed significant funds and passion for many years.

- Multiple submissions also outlined that it is **expensive** to become SheepMAP accredited and that maintaining membership of the current SheepMAP is **costly and potentially onerous**.
- Numerous submissions identified the opportunity for SheepMAP to expand to **incorporate other disease and conditions**.
- A suggestion that industry should **retain SheepMAP as a basis to export live animals** into JD sensitive markets.
- Some feedback questioned the **integrity of the program** and the participants, as well as the low accuracy of the tests.

DISCUSSION

The majority of the written submissions indicated that providing an option to purchase SheepMAP accredited breeding stock was an important component of the NOJDMP.

In areas where OJD is endemic, the demand for SheepMAP accredited breeding stock is not likely to be high. However in the low prevalence areas where management and surveillance are the main control tools, there will likely be more demand for low risk and tested negative stock.

There were a number of online survey comments indicating that SheepMAP 'guarantees OJD freedom'. This highlights the need for improved communication to industry that the sensitivity of testing for SheepMAP is not 100% and that there may still be a risk that MAP flocks, including high status ones (MN3) could be infected. Such limitations should form part of any communication messages regarding the SheepMAP.

Given that AHA has commissioned a separate, more detailed review of SheepMAP, no recommendations have been provided on the SheepMAP, other than the feedback suggesting that it was a useful tool.

4. 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 were also seeking views on how OJD should be managed/administered on a national basis in the future.

Two broad options were identified 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.

4.1.1 M) Do you or your organisation have a preference for Option 1 or 2 (outlined above) and why?

Survey participants were asked whether they preferred option 1 (current NOJDMP to cease with no specific OJD replacement plan) or option 2 (a revised national OJD framework). This question had n=177 responses with 49% supporting option 2, 32% supporting option 1 and 19% unsure (see Figure 13).

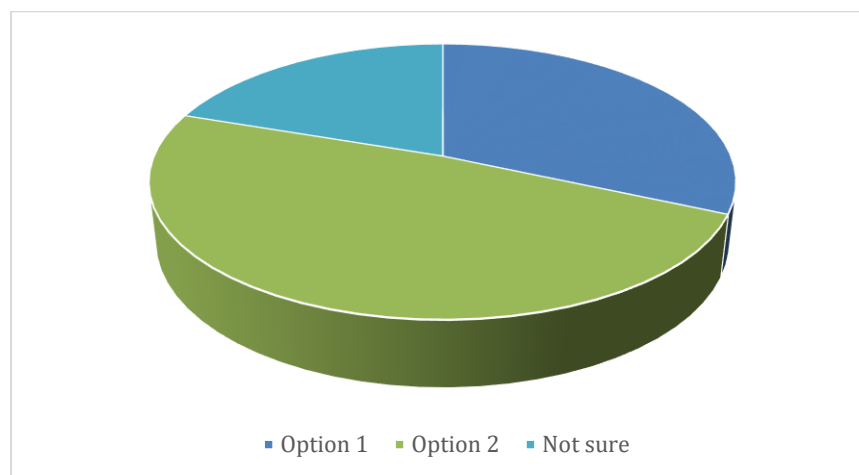


Figure 13. Survey respondents were asked 'Do you or your organisation have a preference for option 1 or 2?'

100 survey comments were provided as 'why' for the selected options. Of the survey comments that were in **support of option 1**, the reasons are summarised into the following key areas:

- Producers should manage the disease via **risk assessment** and utilising the **management tools**.
- Many of the comments strongly advocated the **use of vaccination**.
- It should be the **responsibility of individual producers** to manage the disease.
- It should be treated like **other endemic diseases**.
- Some submissions commented that option 1 has less regulation. However neither of the proposed options suggested increasing any regulation.

Of the survey comments that were in **support of option 2**, the reasons are summarised into the following key areas:

- A large number of the comments were that OJD needs a **national coordinated approach** to prevent further spread.
- That there is a need for **national oversight and policy**.
- That a national plan is needed for Australia's **international** reputation.

From the survey comments that were **unsure**, the reasons are summarised into the following key areas:

- A number of the comments indicated that there was **not enough information** provided on the two options to make a decision.
- The remaining comments were mostly indicating the need for a national plan or that neither of the options were strong enough.

Written Submissions

There were 14 written submissions from organisations, agencies, RBP areas, committees or representative groups.

From the State Farming Organisation's (SFO) submissions, three supported Option 1, one supported Option 2, and the other two did not specify either option (see Table 1).

Table 1. State Farming Organisations (SFO) preferred options

SFO	Preferred option	Comments
PGA of WA	Option 1	
VFF Livestock Group	Option 1	
AgForce Sheep & Wool	Option 1 (Provided through the online survey)	
WAFarmers	Option 2	
TFGA	No option specified but supportive of current NOJDMP	<i>If the NOJDMP were to continue we would like to see assurance that all producers, are able to maintain flexible trading options while also maintaining adequate safeguards. The NOJDMP can assist growers in Tasmania to manage their flocks that are affected by the disease.</i>
NSW Farmers	No option specified	<i>Regardless of whether the NOJDMP is retained, it is necessary to strengthen the tools that currently underpin the Plan and to consider opportunities to expand these to capture other diseases. NSW Farmers supports the current tools and notes that there is scope to improve all the tools through increasing uptake across the industry...</i>

Note – no submission was received from Livestock SA.

Table 2. OJD Review written submissions from organisations, committees and agencies

Agency	Preferred option
NSW DPI	Option 1 <i>If however there is a strong industry push for a national plan (Option 2) with achievable outcomes, NSW DPI would support such a move and provide technical assistance.</i>
Central West LLS	Option 1
Coonamble RBA Committee	Option 1

South East LLS District Veterinarians	Option 2
Western Local Land Services Board	Option 2
The Nyngan OJD RBA Committee	Option 2
Riverina Sheep Biosecurity Area.	Option 2
Northern Tablelands OJD Advisory Committee & Northern Tablelands LLS	Option 2
Pastoralists' Association of West Darling (PAWD)	Option 2

DISCUSSION

The aim of the consultation process was to assist industry to determine the future national management of OJD. From the survey responses 49% supported Option 2. 19% were unsure, with quotes suggesting that not enough information was provided on each option, while others suggested the need for a national plan or that neither of the options were strong enough.

SFO's through consulting their members and committees, represent a large base of producers. From the SFO submissions, three were supportive of Option 1, one of Option 2 and two did not specify an option. There was no submission received from Livestock SA.

Of the remaining written submissions from organisations, agencies, RBPs and committees, that were all from NSW, three of these supported Option 1 and six supported Option 2.

Subsequently the combined results from the three categories (i.e. survey responses, SFOs, other groups) do not provide a conclusive result in supporting either option.

However it must be noted that the proponents for Option 2, including the 49% from the survey as well as the six organisations, agencies, RBPs and committees from NSW, provided very strong and consistent comments in support of maintaining a national management plan for OJD, particularly to ensure national coordination and consistency.

It is assumed that the current NOJDMP management tools and strategies will, with some refinement, continue to be supported and that regardless of what option is chosen, they will fall under the SHP as either individual 'projects' (Option 1) or under the banner of a National OJD Framework (Option2).

The NOJMP 2013-2018 did not have any form of monitoring and evaluation framework developed as part of the overarching document and subsequently measuring the impact and the effectiveness or otherwise, of the five-year NOJDMP and the management tools was difficult. It is recommended that whatever option the peak industry councils determine, that a simple M&E process be developed at the inception.

RECOMMENDATION

Future national management of OJD

Whether the national Peak Industry Councils decide to support Option 1 or Option 2:

12. It is recommended that the chosen option:

- **Remains as part of the Sheep Health Project at AHA;**
- **Aims to enhance the tools and management strategies from the NOJDMP;**
- **Has a logical format with clearly defined inputs, activities, roles, budget, outputs and objectives/outcomes;**
- **Incorporates a simple monitoring and evaluation (M&E) process; and**
- **Incorporates an extension and adoption strategy and implementation plan for industry.**

Communications of the review outcomes

13. It is recommended that a communication plan be developed to accompany the release of the review outcomes and decisions of the peak industry councils.

Given that there is likely to be strong media interest in the review outcomes, the communications must aim to be proactive so that reactive communication from the peak industry councils is minimised.

People who provided contact details (email addresses) from the survey and indicated that they 'would like to be kept up to date on the outcomes of the consultation process' should receive communications about the outcomes.

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

There were 86 survey responses to this question and numerous written submissions. The majority of the submissions were already captured through the consultative questions for the tools and management strategies. There were some submissions suggesting that the OJD ABC point system from pre-2013 be re-introduced.

The ABC point system was a key element of previous national OJD programs. It was removed at the inception of the NOJDMP due to industry research that demonstrated that there was not enough knowledge of the system, with people declaring higher points than they were due, therefore leading to an ineffective tool. It would not be recommended to re-implement the point system.

4.1.3 P) Any other feedback or comments?

The option for any other feedback or comments was provided in the online survey and the discussion paper. In summary the key issues identified were:

- JD in cattle, the Johne's Beef Assurance Score (J-BAS) and the impact that this would have on sheep
- Strains of JD. The role of cattle as a source of infection for sheep needs to continue to be monitored.
- The issue regarding OJD being a notifiable disease was raised in the consultation process, however this is outside the scope of this review.
- A list of potential research topics was also collated in the consultation, which may be used by industry in the future (see Appendix III).
- The Standard Definitions Rules and Guidelines (SDR&G) for the Management of ^[1]_[5]OJD in Sheep and Goats should also be revised to reflect the changes implemented from this review and the SheepMAP review.

RECOMMENDATION

Cross Species JD issues

14. Via AHA coordination, all affected livestock industries should work together on cross industry Johne's Disease issues including cross species transmission.

The Standard Definitions Rules and Guidelines (SDR&G)

15. The Standard Definitions Rules and Guidelines (SDR&G) for the Management of ^[1]_[5]OJD in Sheep and Goats should be revised to reflect the changes implemented from this review and the SheepMAP review.

Appendix

I. OJD Review Survey Questions

The following survey questions, along with an explanation of each management strategy/tool, were added to the Survey Monkey online platform.

1. What is your role in the Australian sheep and wool industry?

- | | |
|--|--|
| <input type="checkbox"/> Sheep meat producer | <input type="checkbox"/> Lamb finishing/ sheep feedlot |
| <input type="checkbox"/> Wool grower | <input type="checkbox"/> Livestock agent |
| <input type="checkbox"/> Stud/ seedstock producer | <input type="checkbox"/> Other industry stakeholder |
| <input type="checkbox"/> Representative organisation or state department of agriculture (please specify) | |

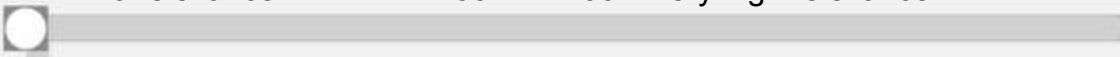
2. What state are you from?

- | | |
|--|---|
| <input type="radio"/> New South Wales/ ACT | <input type="radio"/> South Australia |
| <input type="radio"/> Victoria | <input type="radio"/> Western Australia |
| <input type="radio"/> Tasmania | <input type="radio"/> Queensland |

3. Please enter your postcode

4. When purchasing sheep, how relevant is the OJD status of the sheep when making your purchasing decision?

1 = no relevance 50 100 = very high relevance



5. Do you vaccinate against OJD?

- | | |
|--|---|
| <input type="radio"/> Annually vaccinate all lambs against OJD | <input type="radio"/> Never vaccinate against OJD |
| <input type="radio"/> Annually vaccinate all lambs against OJD (except terminal lambs) | |
| <input type="radio"/> Vaccinate lambs against OJD some years & not other years | |

Comments/feedback

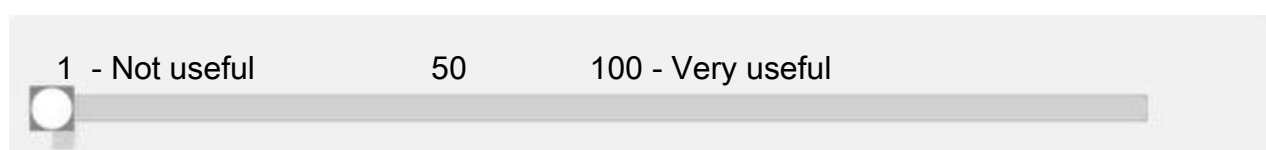
6. Are you aware that there is a National OJD Management Plan (NOJDMP) 2013-18 in place?

Yes

No

Unsure

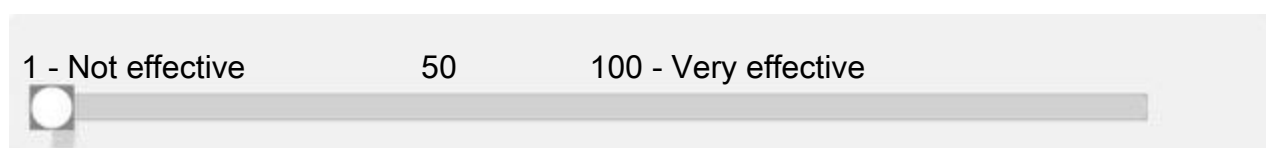
7. How useful is the Sheep Health Declaration as a biosecurity tool for the sheep industry?



8. If any, what changes would you make to the Sheep Health Declaration?

9. What are the key issues or limitations that you see regarding the Sheep Health Declaration?

10. How effective is OJD vaccination as a management tool for OJD? (Note: If you do not vaccinate against OJD please skip this question)



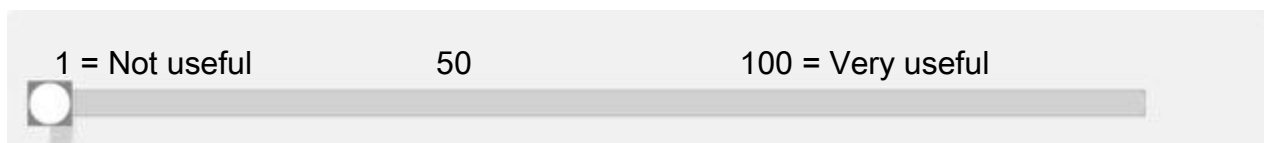
11. What are the key issues or limitations that you see regarding OJD Vaccination?

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

13. What are the key issues or limitations that you see regarding Regional Biosecurity Plans?

14. Is there a need for ongoing national input into how future Regional Biosecurity Plans should function?

15. How useful is abattoir monitoring feedback as a management tool for OJD and other diseases and conditions? (if you do not use abattoir monitoring please leave this question blank).



16. What are the key issues or limitations that you see regarding abattoir monitoring?

17. What areas of communication and education about OJD (and other diseases) are needed?

- General on-farm biosecurity
- Use of all OJD tools & strategies
- How to use and interpret the Sheep Health Declaration

How to interpret & implement changes from abattoir monitoring feedback

- How to implement farm animal health plans ie. vaccination strategies
- On-farm Workplace Health & Safety (WHS) strategies re animal health

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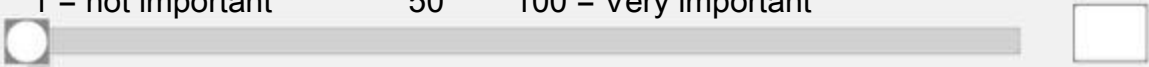
- Grazing management principles to assist with animal health
- Other (please specify)

18. What is your preferred method of receiving animal health communications?

- Online (i.e. Farm biosecurity website)
- From the OJD.com.au website
- Email updates
- Social media including Facebook & Twitter
- Animal health session at field days
- From your veterinarian or consultant/advisor
- From your livestock agent (i.e. fact sheets)
- From your state department of agriculture/ Local Land Services in NSW
- Printed publications & media
- Podcasts
- Webinars
- Other (please specify)

19. How important is it to have the option to purchase SheepMAP accredited breeding stock?

1 = not important 50 100 = Very important



20. Feel free to provide any comments about SheepMAP?

21. Which option do you or your organisation have a preference for? And why?

Option 1

Option 2

Not sure

Why?

22. Are there any issues that need addressing if the National OJD Plan ceases?

23. Is there another option that should be considered for the future national management of OJD

24. Please feel free to provide additional feedback or comments

25. If you would like to be kept up to date on the outcomes of the consultation process, please provide your contact details.

II. List of written submissions

Written submission were received from the following:

1. NSW Farmers' Association
2. PGA of WA
3. Tasmanian Farmers & Graziers Association
4. VFF Livestock Group
5. WAFarmers
6. NSW Department of Primary Industries
7. Central West Local Land Services
8. Western Local Land Services
9. South East Local Land Services Veterinarians
10. Riverina Sheep Biosecurity Area
11. Nyngan RBA Committee
12. Coonamble Regional Biosecurity Area Committee
13. Northern Tablelands OJD Advisory Committee.
14. The Pastoralists' Association of West Darling (PAWD)
15. CWA Agricultural and Environmental Committee
16. Andrew Bickford, Branch Manager, Elders Bathurst
17. Rosemary Gausson
18. Dr P.B. Carter, Wellington NSW
19. Terry Cotter, Gilgandra, NSW
20. Pergunyah Perendale Stud – Maureen Nissen
21. Neville and Jill McKenna, Mount Gambier, SA
22. Steven Harrison
23. John Karlsson
24. A member from the Australian Perendale Association Inc

