

# JD NEWS

Official Newsletter of the National Johne's Disease Control Program

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## New Look *JD News*

The *JD News* has received a makeover with a fresh new look and layout. *JD News* is an important means of providing up to date information about the national Johne's disease programs to producers, veterinarians, departmental staff and rural businesses.

From the next issue, *JD News* will be available in both electronic or hard copy format and will now be circulated on an issues basis, approximately six monthly. If you have colleagues who would like to receive this publication then please have them contact Animal Health Australia. ■

## Would you like to Receive the *JD News* by Email?

Animal Health Australia is increasingly communicating with its stakeholders and producers using the Internet and email. We would like to offer this service to the readers of the *JD News*.

If you would prefer to receive the *JD News* via email please contact Jane McBride, email [jmcbride@animalhealthaustralia.com.au](mailto:jmcbride@animalhealthaustralia.com.au), stating your contact details and email address or complete the form inserted with this edition of the *JD News* and return via fax on (02) 6232 5511. The *JD News* will continue to be distributed in hardcopy to those producers and stakeholders who prefer to receive the newsletter by post. ■

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## The OJD Management Program in Western Australia

In November 2003, ovine Johne's disease (OJD) was detected in Western Australia (WA) through random abattoir surveillance. Risk assessments were done on several hundred tracings going back ten years and over 80 higher risk properties were tested. This tracing and testing program was particularly thorough as Western Australia has the ability to trace sheep through saleyards. There are now 18 known OJD infected properties in 11 shires in WA. OJD is considered endemic on seven properties (six of them neighbours) and was detected, only in purchased sheep on 11 trace forward properties. None of the 18 flocks is known to be the source of infection in WA.

Clinical evidence of OJD has only been reported in flocks on two of the known infected properties. Many of the infected trace forward properties have destocked the infected mobs and others have commenced using vaccine.

No positive lines have been detected in over 1,400 lines of mature sheep inspected at abattoirs in WA since January 2004. In addition, approximately 35,000 sheep have been inspected for OJD at abattoirs in the eastern states with no positive detections.

The Department of Agriculture and industry have carried out an extensive communications program. It included the development and distribution of a series of five fact sheets on OJD, a copy of the OJD Animal Health Statement (AHS), a brochure on how to fill out the AHS and the delivery of numerous presentations and the provision of displays. It also included providing information to farmers on the options for increasing the number of OJD risk points of their flock in order to facilitate interstate movements.

### The WA Program

The WA OJD Program to implement the National Approach to the Management of OJD was developed by the OJD Advisory Committee (OJDAC), an industry based committee. The OJDAC identified that the situation in WA was not the same as that in other states and that WA needed a program that took into account its specific disease situation as well as the experience of the eradication and control measures in other states.

The OJDAC took into account that the basis of the new national approach was to transfer responsibility for the management of OJD to the farm gate, and move away from regulatory control programs. The Committee noted that through the availability of the Market Assurance Program, Animal Health Statements (AHS), abattoir surveillance, and free access to vaccine, owners had the tools to be able to best manage their businesses to deal with their biosecurity risks, and the disease if their flock was or became infected.

The OJDAC was sensitive to the enormous personal and social trauma and cost that had resulted from regulatory control measures in Australia. The Committee also took into account the results from a number of epidemiological models of the disease in Western Australia and a benefit-cost analysis of control and eradication options.

The OJDAC agreed on a non regulatory, risk based trading and management option that harmonises with the national framework and enables individual farm businesses to make risk based business decisions to suit their own businesses and flocks.

OJD remains a notifiable disease but known infected properties are not placed under trading or movement restrictions. Tracing sheep movements from known infected properties and associated notification of subsequent owners is the responsibility of the owner of an infected property.

Abattoir surveillance is conducted on 1,000 lines of sheep over two years of age each year to underpin area prevalence classification and owners are notified in writing if OJD is detected. Individual flock abattoir inspection for Abattoir 200 and 700 status is available by arrangement on a fee for service basis.

Initially an OJD AHS was available for use by owners as part of their biosecurity measures. However, a more generic AHS that includes details on other animal health issues such as lice, internal parasites and footrot, has now been developed.

SheepMAP vets have been accredited to assist producers and OJD vaccine is available to producers through private veterinarians. ■



*The cull for age ewe flock detected with OJD at the abattoir.*

*Contributed by Fiona Sunderman - Senior Veterinary Officer, Department of Agriculture, Western Australia.*

## Q-Alpaca Commences in 2005

Following a period of intense testing and culling, there are currently no known infected alpaca in Australia. To preserve this status and protect the industry, the Australian Alpaca Association (AAA) has developed a BJD Quality Assurance program, *Q-Alpaca*.

Animal Health Committee has endorsed the AAA proposal that alpaca herds will qualify for recognition under its biosecurity program, *Q-Alpaca*, if they comply with the following elements.

1. Eligible herds would not be known or suspected to be infected with Johne's disease.
2. A written agreement between the owner and an approved veterinarian.
3. A Herd and Property Management Plan to a standard comparable to that in the AlpacaMAP.
4. Records of animal identity, origin and destination for movements into and out of the herd.
5. Post-mortem examination of any animal over 12 months old that dies or is euthanased and of any cria under 12 months old that is showing emaciation or diarrhoea and dies or is euthanased.
6. Where clinical signs are suggestive of Johne's disease, post-mortem investigation will be undertaken and samples collected for culture and histopathology as described in AlpacaMAP Section 7 and Appendix 10.
7. Where the *Q-Alpaca* herd's approved veterinarian is not always available to conduct post-mortem examinations for *Q-Alpaca*; he or she may authorise another veterinarian who is approved for MAPs in alpaca or other species to undertake them on his or her behalf.
8. *Q-Alpaca* herds do not automatically qualify as being equivalent to MN1 in the AlpacaMAP. However, a *Q-Alpaca* herd would qualify for equivalence to MN1 if it:
  - a) is not run with other susceptible animals, or
  - b) is run with sheep with a minimum ABC score of 2 (ie the number of credits for a sheep flock in SheepMAP that has had one Sample Test), or
  - c) is run with animals, classified as eligible animals in the AlpacaMAP, that are part of a MAP herd or flock or any other herd or flock that would be eligible for unrestricted entry to a MAP herd or flock. (Note: "Unrestricted entry" means that the numbers and types of animals are not restricted and are not subject to additional testing or management rules by the MAP. Rules for introduction to CattleMAP herds are being reviewed in light of new assurance base trading schemes.)
9. Alpaca could be introduced to *Q-Alpaca* herds from:
  - a) AlpacaMAP herds
  - b) *Q-Alpaca* herds that have been enrolled in *Q-Alpaca* for at least 6 months
  - c) Non-Assessed alpaca herds, subject to isolation and a negative faecal culture.

Animals that are sourced from *Q-Alpaca* flock achieve a credit status into the MAP.

For further information about *Q-Alpaca* please contact Dr Richard Dixon, The Registrar, *Q-Alpaca*, email: [randjd@optusnet.com.au](mailto:randjd@optusnet.com.au) ■

## OJD eUpdate 5

This update provides a summary of the findings from two important research projects funded by the national sheep industry and MLA. If you would like to receive the eUpdate please contact Eileen Leung, email: [eleung@mla.com.au](mailto:eleung@mla.com.au).

### A Study of the Biological and Economic Impact of OJD in affected Sheep Flocks in NSW (OJD.023)

This study provides industry with factual information about the impact of OJD on farms in southern Australia. This is needed to assess the magnitude of the OJD problem and to direct control and management programs. On 12 farms, the average OJD mortality rate based on inventory records was 6.2% (range 2.1% to 17.5%), more than twice the accepted mortality rate (from all causes) for Australian sheep flocks. OJD losses accounted on average for 70% (range 17% to 100%) of the estimated total economic loss associated with sheep deaths over this 12-month study. In addition this project confirmed that prevalence based on pooled faecal culture (PFC) could be used as an indicator of OJD mortality level and provided support for further investigation of several risk factors in a future study focused on a specific sheep cohort and involving a larger number of farms. We recommend that producers, through industry extension activities, be informed of the substantial losses associated with OJD and be encouraged to implement control measures on their farms. We also recommend the development of a model to predict on-farm economic impact of OJD.

### Field evaluation of OJD control using Gudair (OJD.009)

A five-year field trial was undertaken to determine the efficacy of a killed *M. a. paratuberculosis* vaccine, Gudair™, for the control of OJD in Australian merinos. The vaccine stimulated cell-mediated and humoral immune responses. Gudair™ reduced mortalities due to OJD by 90% and delayed faecal shedding for the first year post-vaccination (pv). Thereafter, the prevalence of shedders among vaccinates was reduced by 90%.

The numbers of *M. a. paratuberculosis* excreted by the vaccinated groups were also reduced by at least 90% at most sampling times. However, high levels of excretion by vaccinates occurred on some occasions, and although only 7 of 600 vaccinates died from OJD, all had multibacillary disease. Thus there remains a risk that some vaccinated sheep could transfer the disease. Small reductions in live weight gain were found in vaccinated lambs in the first year pv, but there was little effect on condition score or wool production. Vaccine injection site lesions were detected in almost 50% of sheep 2 months pv, and these persisted for at least 4 years in 20-25% of vaccinates. Data from this trial enabled the registration of Gudair™ in Australia in 2002 and underpins the pivotal role of vaccination in the current management of OJD. ■

# DISEASE STATISTICS



## CATTLE

**Table 1** Number of known infected cattle herds, March 2005 (NAHIS)

	March 05	June 04	June 03
NSW	130	132	136
VIC	1034	1119	1124
TAS	16	24	20
SA	41	53	50
NT	0	0	0
QLD	0	0	0
<b>Total</b>	<b>1221</b>	<b>1328</b>	<b>1330</b>

**Table 2** Numbers of assessed herds in CattleMAP, March 2005

	MN1	MN2	MN3	
NSW	169	236	316	<b>721</b>
VIC	137	130	61	<b>328</b>
TAS	41	45	13	<b>99</b>
SA	107	133	47	<b>287</b>
QLD	0	0	0	<b>0</b>
<b>Total</b>	<b>454</b>	<b>544</b>	<b>437</b>	<b>1435</b>

## SHEEP

**Table 3** Number of known infected sheep flocks, March 2005 (NAHIS)

	March 05	June 04	June 03
NSW	1287	335*	1150
VIC	347	204	98
TAS	43	45	40
SA	70	57	55
WA	18	18	0
<b>Total</b>	<b>1765</b>	<b>659</b>	<b>1343</b>

\* When comparing NSW data as at June 2004 with other data, please note that the reported number of infected flocks excluded flocks in the former NSW Residual Zone/Management Area.

**Table 4** Number of SheepMAP Assured flocks, March 2005

	MN1	MN2	MN3	
NSW	82	106	197	<b>385</b>
VIC	9	27	54	<b>90</b>
TAS	9	11	11	<b>31</b>
SA	44	70	127	<b>241</b>
QLD*	-	-	-	<b>-</b>
<b>Total</b>	<b>144</b>	<b>214</b>	<b>389</b>	<b>747</b>

\* The status of SheepMAP flocks in Queensland is currently under an administrative review.

## GOATS

**Table 5** Number of known infected goat herds, March 2005 (NAHIS)

	March 05	June 04	June 03
NSW	11	10	10
VIC	9	7	6
TAS	3	6	6
SA	1	3	6
QLD	1	0	0
WA	0	0	0
<b>Total</b>	<b>25</b>	<b>26</b>	<b>28</b>

**Table 6** Numbers of assessed herds in GoatMAP, March 2005

	MN1	MN2	MN3	
NSW	22	20	6	<b>48</b>
VIC	1	0	0	<b>1</b>
TAS	1	0	0	<b>1</b>
SA	6	11	0	<b>17</b>
QLD	0	0	0	<b>0</b>
<b>Total</b>	<b>30</b>	<b>31</b>	<b>6</b>	<b>67</b>

## ALPACA

**Table 7** Number of known infected alpaca herds, March 2005 (NAHIS)

	March 05	June 04	June 03
NSW	0	0	0
VIC	0	2	2
TAS	0	0	0
SA	0	0	0
<b>Total</b>	<b>0</b>	<b>2</b>	<b>2</b>

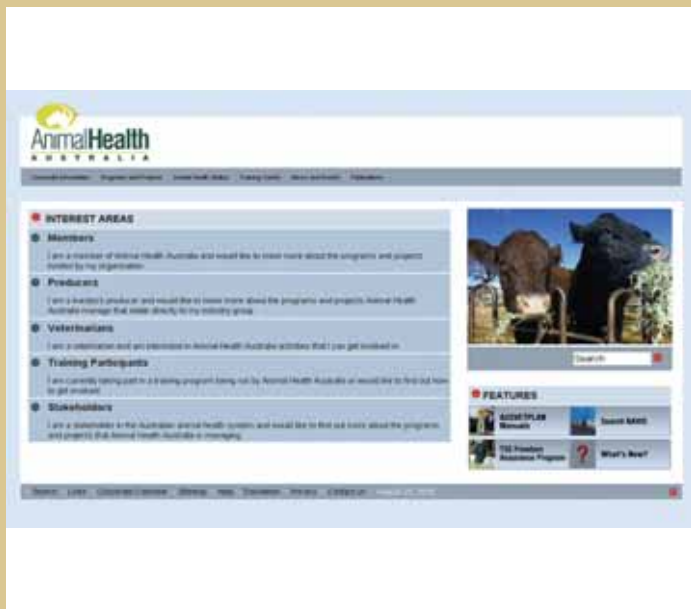
**Table 8** Numbers of assessed herds in AlpacaMAP, March 2005

	MN1	MN2	MN3	
NSW	8	31	66	<b>105</b>
VIC	5	8	12	<b>25</b>
TAS	0	0	1	<b>1</b>
SA	5	5	28	<b>38</b>
QLD	0	0	0	<b>0</b>
<b>Total</b>	<b>18</b>	<b>44</b>	<b>107</b>	<b>169</b>

## DEER

**Table 9** Number of known infected deer herds, March 2005 (NAHIS)

	March 05	June 04	June 03
NSW	1	1	1
VIC	7	7	8
TAS	0	0	0
SA	3	2	2
Qld	0	0	0
<b>Total</b>	<b>11</b>	<b>10</b>	<b>11</b>



## New Website for Animal Health Australia

Animal Health Australia launched a new website on 1 July 2005 with a new address: [www.animalhealthaustralia.com.au](http://www.animalhealthaustralia.com.au)

The layout of the site has been substantially changed to reflect the range of animal health programs and issues Animal Health Australia manages.

The Johne's disease and MAP section has been updated and contains a number of downloadable publications as well as all of the MAP manual updates.

The National Johne's Disease Database and order forms for manuals and posters are also located in this section.

[www.animalhealthaustralia.com.au](http://www.animalhealthaustralia.com.au)

## International Developments

**The 8th International Colloquium on Paratuberculosis was held in Copenhagen in August 2005. A large contingent of Australian veterinarians and producers attended the colloquium to both present and discuss new research and developments in the control and management of Johne's disease.**

Although the suggested link between Crohn's disease and Johne's disease remains unsubstantiated, there is renewed interest internationally in the management of Johne's disease, and a number of Australia's trading partners have implemented enhanced management arrangements. The risk to international trade has the potential to increase as several countries including the Netherlands, Japan, United States, Britain and Canada implement or develop national programs. The United States government has committed \$40 million for assurance and control of Johne's disease at the state level and has established the Johne's Disease Integrated Program to evaluate and coordinate R&D programs. The program on molecular biology and proteomics may yield new tools to assist control.

At the producer organisation level the UK Beef Association has commissioned a review to consider a direction for the beef industry in direct response to concerns about trade access. In Canada, industry has focussed on the dairy sector, although Johne's disease has also severely affected some beef herds. There is a nationally coordinated approach to the control of Johne's disease and a herd certification program is in place. ■

## Registration of Logo

**Animal Health Australia has lodged an application for the registration of the Johne's Disease Logo as a trademark.**

The application has progressed through the consultative processes required by IP Australia and Animal Health Australia has recently received notification that the application has entered the final phase of the registration process, having successfully passed scrutiny by the ACCC. Draft rules for the use of the Trademark have been posted to the Animal Health Australia website. ■

## Gate Signs Available

**If you hold a current certificate for the MAP did you know you are able to obtain plastic gate signs free of charge from Animal Health Australia?**

These signs include the MAP Logo. To protect the reputation of MAP herds and flocks, the signs must be used in accordance with the rules developed for the use of a trademark (available from the Animal Health Australia website). ■

## The Market Assurance Programs Review of 2004-2005

**The Cattle, Sheep and Alpaca MAP manuals have been amended to reflect changes arising from altered trading arrangements in each of these industry sectors.**

The MAP application and manual order form is now available on the Animal Health Australia website. Producers wishing to enter the MAP need to complete this form and mail it with the required payment to Animal Health Australia. Replacement or additional manuals can also be ordered through the same process. The handling of MAP applications and manual orders has been centralised to enable Animal Health Australia to provide accurate and timely updates to all producers who are participating in the MAP.

A third party audit of randomly selected properties participating in the MAP was conducted in 2004 and the results identified a pattern in the non-compliances identified. A number of the non-compliances that were reported resulted from producer confusion about the records required for the MAP. It is anticipated that reformatting the manual and reviewing the training program for approved veterinarians will assist in clarifying these matters.

In line with the recommendation of the MAP Reference Group, producers have been notified that third party audits will now form part of the normal business arrangements of an enterprise. Third party audits are scheduled once every three years and Animal Health Australia will ensure producers are notified when an audit is due. Currently Animal Health Australia is seeking to extend the number of auditors available to undertake this role. ■

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