



**Voluntary Farm-level Assurance  
For Johne's Disease**

**A Perspective**



  
**AnimalHealth**  
**A U S T R A L I A**

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Published July 2003  
© Animal Health Australia 2003  
ISBN 1876714522

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*We are now embarking on a new and potentially more sustainable and effective approach to managing Johne's disease in Australia; but it will take a major shift in understanding how the infection behaves and in ownership of Johne's disease control if this approach is to succeed...a genuine cultural change.*

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During the past two years the Australian livestock industries have increasingly demanded that trading restrictions for Johne's disease (JD) in the south-eastern infected regions be based on more accurate estimation of the risk that individual herds and flocks are infected. This has been in response to perceived inequities and deficiencies of the system that has restricted trading based on the officially known or suspected infection status of the herd or flock and on the zone status.

Specifically, in the dairy industry, a minority of infected herds that are officially known to be infected are restricted and required to undertake control programs while the majority of infected herds (but that are not officially known to be infected) are allowed to trade without any restrictions within the zone and continue to spread infection.

A similar situation exists in the sheep industry, but also the extensive surveillance undertaken as part of the NOJDP has demonstrated that the regulatory approach to control employed since the mid 1990's has not been effective in controlling the spread of OJD to new areas and flocks.

In both industries the impact of regulatory control has impacted severely on the farm businesses that have been restricted.

The situation in the beef industry is different. The herd prevalence of infection in pure beef herds in south-eastern Australia (that have had no contact with dairy herds) is believed to be very low, yet their trade to higher status zones has been regulated because they are located in zones whose status has been determined primarily on the occurrence of infection in dairy herds.

Similarly, after the initial outbreak of JD in alpaca in the early 1990's, the infection in this industry now appears to be rare. The goat industry has been especially affected as this species is considered to be susceptible to both BJD and OJD and is doubly affected by zoning that was developed separately for cattle and sheep.

## **IMPLICATIONS OF REGULATORY CONTROL**

Attempting to control spread by quarantine of known infected and suspect herds and flocks and by zoning has had the added affect of government effectively “taking ownership” of the control programs for JD, or at least being seen as being the major driver for control. Hence JD control became a “government problem” and many people became pre-occupied with the minimum official requirements for trading across lines drawn by government; either the border of the quarantined property or of the zone. For producers, control was focused on what individual vendors had to do to be able to sell stock, rather than on what actions purchasers should take to manage their JD risk.

Although the livestock industries have strongly supported the control of JD, the largely regulated approach diluted producers' ownership of JD and its control. Many producers who were not directly affected by the regulations have exercised little or no control on movements from unrestricted herds and flocks within zones and some producers have probably ignored the interzone movement requirements.

Many producers only took an interest in JD and its control when they had to; that is, when changes in zone boundaries interrupted their hitherto free trade or when infection was found in their herd or flock by surveillance, tracing or investigation. When this occurred some regions and people felt victimised, increasing alienation with the regulated control program.

## **FARM BASED RISK ASSESSMENT AND ASSURANCE BASED TRADING**

The first steps to implementing a standard approach to farm level JD assurance in Australia were taken in 1995 when the National JD Coordinating Committee (established by the National Farmers Federation) and governments started developing the National Johne's Disease Market Assurance Program for cattle. This MAP was launched in 1996 and other MAPs followed for sheep, alpaca and goats over the following three years and a DeerMAP is currently being written.

The MAPs aim to identify, protect and promote low risk sources of breeding animals. They provide a transparent, voluntary means for herds and flocks to assess and manage their risk of being infected with JD and demonstrate an objectively assessed level of assurance. Cost and management considerations mean that most herds and flocks enrolled are studs or large commercial breeders whose investment can be recouped by access to otherwise closed markets in the higher status zones or by premiums on sales. In the early stages in particular, communication strategies aimed to educate buyers about the MAPs and that buying animals from MAP herds and flocks reduced their risk of buying in infection significantly compared to Non Assessed herds and flocks.

To address the needs for lower levels of assurance since then, various herd and flock status based on negative testing have been developed including,

- Check Testing (CT) of a relatively small biased sample of adults
- Testing to MAP Standard (TMS) for herds and flocks unable or unwilling to implement the MAPs management requirements
- The Beef Cattle Trade Assurance Scheme (BC-TAS) for beef herds that have had no recent contact with dairy cattle and check test negative.

These were developed largely for regulated interzone trading and are defined in the Standard Definitions and Rules (SDRs), not in the MAPs.

### **STATUS WITHIN INFECTED HERDS AND FLOCKS ON CONTROL PROGRAMS**

Development of national standards for the regulatory control of JD followed the MAPs. Before that time, regulatory control was based at the State level with any on-farm programs and restrictions on imported animals managed by the State unilaterally.

The national SDRs for JD in cattle (BJD) and sheep (OJD) and the respective susceptible species, defined zones and developed another set of herd/flock status, mainly to reflect and encourage progress towards eradication in the regulatory control programs on known infected farms. These included Tested Low Prevalence (TLP) and Restricted 1 and 2 (RD1 and RD2) for cattle herds undertaking control programs that achieved low reactor rates or negative results on herd tests.

Latterly, the goal of resuming trading has become more important and on-farm disease control such as vaccination of lambs has opened up markets in some regions where OJD is endemic. Also restrictions have been eased on young animals that will be slaughtered before adulthood (and likely shedding of *M paratuberculosis*).

### **A NEW APPROACH?**

In some respects, the new national approach to farm based assurance is not so new. In many ways it is a return to the philosophy of the early days of the national JD program in 1996-97 where sellers of breeding stock were encouraged to voluntarily demonstrate a transparent level of assurance (through the MAP) and buyers were encouraged to buy from herds and flocks that could provide that assurance.

In the past five years however, this philosophy and message has been largely lost in the regulated environment. Even the MAP has come to be driven to a large extent by interzone movement requirements.

What is significantly different about any new voluntary approach is that it would attempt to engage the great majority of livestock producers, their veterinarians and agents in south-eastern Australia in implementing voluntary farm-level assurance based trading.

For this to succeed, benefits, rather than regulations, will have to drive buyers to understand risk and to seek assurance and vendors will respond by providing that assurance. Rather than the government setting zone boundaries and minimum requirements, owners will have to manage their risk at their front-gate and boundary fence. To achieve this change in approach will require a major change in producer awareness and attitudes to JD control.

In 1996, the NJDCC commissioned a communication strategy (by Baron Strategic Services) to accompany the launch of the first MAP. It noted that changing people's attitudes and behaviour to JD would be a very challenging task and prescribed an extensive and, for the time, relatively expensive communication program. Only some aspects of that communication program were implemented at the time. It may be timely to review those recommendations as we move into major re-education of producers and their advisers.

#### **REQUIREMENTS FOR A NEW VOLUNTARY FARM-BASED APPROACH TO RISK ASSESSMENT AND ASSURANCE**

The following elements will be needed to underpin credible systems within each industry if they are going to limit the spread and effects of JD and not unnecessarily disrupt trade:

1. Sellers and buyers and their advisers must (be educated to) understand the system
2. All breeding herds and flocks must be easily and objectively categorised
3. Systems for different species may differ but must be complementary
4. Systems must be agreed nationally and recognised by all States and Territories
5. Assurance categories and their relative rankings must reflect the risk that animals originating from the herd or flock are infected
6. Categories must enable and encourage progression along a pathway to lower risk
7. The means of assessing risk and categorising herds and flocks must be standardised and simple, so that producers can assign their own category in a consistent manner
8. There must be means of monitoring and detecting changes in true herd and flock status
9. The means of declaring an assurance category must be simple and standardised so as to educate rather than confuse users

10. The declaration should enable buyers to assess the risk posed by the seller's animals to his or her herd
11. There must be means of assuring industry, government and buyers that the system is credible
12. Producers and their advisers must come to "own" the system in the short term
13. Compliance must be able to be independently assessed.

This will require dovetailing levels of assurance that may be attained under on-farm programs to control and monitor infection with the current voluntary QA programs such as the MAPs and, in the dairy industry, the JD Calf Accreditation Program (JD-CAP).

#### **KEY MESSAGES FOR COMMUNICATION**

The key messages to be communicated to producers and their advisers should include:

- Control of JD will only be effective if producers take responsibility for managing their own risk
- JD spreads primarily by animal movements
- Buyers need to understand their own current JD situation and the consequences to their current businesses and future opportunities if JD was introduced
- The likelihood of buying infected animals increases with:
  - increasing likelihood of infection in the herd of origin, and
  - increasing the numbers of animals introduced
- Higher assurance should be sought for breeding animals, which present a higher risk as they stay longer and have closer contact with susceptible animals
- Groups of animals managed within a herd or flock to reduce the incidence of infection (eg by calf rearing, vaccination) may be a lower risk than the rest of the herd or flock
- The likelihood of transmitting JD from introduced animals can be reduced by management
- As audited QA programs, the MAPs provide a high degree of assurance.

This is a cultural change in the management of Johne's disease.  
Careful planning and enthusiasm will make it successful.

