



# NSW Johne's Disease Calf Accreditation Program (JDCAP) Guidelines

An accreditation program for minimising the risk of  
Johne's disease infection in calves

## Developed by

NSW Department of Primary Industries

Australian Veterinary Association

Adapted from Department of Environment and Primary Industries (Victoria)



## Foreword

The Johne's disease calf accreditation program (JDCAP) is a calf-rearing program designed to minimise the risk of spreading the bacteria that causes bovine Johne's disease (BJD), should it be present, from adult cattle to the replacement calves bred within the herd. The program requires the herd owner/manager, in consultation with their veterinarian, to establish a set of procedures for the rearing of replacement calves, document the steps taken, and monitor the program on an ongoing basis.

JDCAP was developed by the Victorian Department of Environment and Primary Industries working with industry partners as a specific initiative of the Victorian dairy industry. The NSW JDCAP Manual has been adapted from the Victorian Manual with assistance from the veterinary profession and dairy industry organisations in NSW. The Program is managed by the NSW Department of Primary Industries (DPI).

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## Objective

This calf-rearing program is designed to minimise the risk of spreading Johne's disease, should it be present, from adult cattle to the replacement calves reared within your herd.

Calves produced under an accredited rearing system have a lower risk of infection than calves from similar herds not participating, particularly in areas where the disease is prevalent.

- This program will benefit you if you wish to sell cattle and provide purchasers with some assurance about the Johne's disease status and rearing of the cattle.
- It will benefit buyers who can seek JDCAP calves by preference.
- This program will benefit your herd if infection is present but has not yet been detected, because it will reduce the risk of your replacement calves becoming infected.
- The program will also benefit your herd if it is not currently infected because it will protect your calves should an infected animal be inadvertently introduced in the future.
- Herds that are known to have Johne's disease can also benefit from implementing this program because it will minimise the risk of spread of the disease to replacements, and allow enhanced trading options.

The JDCAP does not guarantee the production of Johne's disease free calves. However, when implemented, the program will provide calves of lower Johne's disease risk than calves from non-participating herds of equivalent Johne's disease status.

## Background

BJD is an infectious disease of cattle, goats and alpacas. BJD is silent, but can be costly. Infected animals may look healthy, but shed high numbers of bacteria particularly in the 12 months before they show signs of disease. While generally infected early in life, it is unusual for bacteria to be passed in the faeces before 24 months of age. Under the right conditions the bacteria can survive in the environment for long periods (up to 12 months).

Australia has a national plan to minimise the risks BJD poses to our animals and avoid restrictions on market access for our products. The livestock industries are working together to effectively manage BJD. Further details on Johne's disease and the National plan can be found at:  
[http://www.animalhealthaustralia.com.au/programs/jd/jd\\_home.cfm](http://www.animalhealthaustralia.com.au/programs/jd/jd_home.cfm).

Young calves from birth to 12 months of age are most susceptible to Johne's disease infection. Thus the JDCAP program targets calves in their first 12 months of life.

The Johne's disease bacterium is spread from infected cattle to young calves by:

- Being swallowed – when calves suckle on a cow's manure-covered teats, or consume pasture, water, supplements or hay contaminated with faecal material from an infected adult animal, the Johne's disease bacterium is swallowed.
- Drinking contaminated colostrum/milk - the bacterium may be present in the colostrum/milk produced by an infected cow.
- Across the placenta – infection may pass to the calf of an infected cow before the calf is born.
- In later life, Johne's disease is spread to older calves by the ingestion of feed, pasture or water contaminated with the manure of infected adult cattle.

## Definitions

### Adult animal

An animal that is older than 24 months. It is rare for infected animals to pass significant quantities of the bacteria till they become adults.

### Approved veterinarian

A veterinarian who is registered with the NSW Veterinary Practitioners Board and authorised by the state coordinator of the NSW JDCAP.

### Chief Veterinary Officer

The person appointed under the *Animal Disease and Animal Pests (Emergency Outbreaks) Act 1991 No 73* to be the Chief Veterinary Officer The senior government veterinarian who is responsible for the administration of animal health legislation, including his/her delegate.

### Cancellation

Removal of accreditation under the JDCAP. This can be voluntary or imposed as a result of non-compliance with this program's guidelines.

### Colostrum

Colostrum is the substance that provides the antibodies that form the main protection from infectious diseases for the calf in the first 6 weeks of life, until the calf can develop antibodies of its own. Without colostrum, a calf is likely to die. Antibody is at its strongest concentration and highest quality at the point of calving.

### DAS

National BJD Dairy Assurance Scheme (DAS) score

### DPI

NSW Department of Primary Industries

### High risk cattle

Cattle that are in Infected (IN), Restricted (RD) and Tested Low Prevalence (TLP) herds which have been so designated in accordance with the national rules for bovine Johne's disease on the basis of history of past infection in the herd.

### Market Assurance Programs (MAP)

MAPs are voluntary programs for producers which enable them to identify and promote their cattle have a low risk of being infected with the bacteria that causes BJD.

### MAP Administrator

The NSW Department of Primary Industries Market Assurance Program Administrator who is responsible for the administration of the NSW Johne's Disease Calf Accreditation Program.

### *Mycobacterium paratuberculosis*

The bacterium that causes Johne's disease. Abbreviations used: *M. paratuberculosis* and Mptb.

### Suspension

Temporary withdrawal of accreditation. This occurs during investigation of a suspected infection or non-compliance with JDCAP requirements.

## Getting Started

Read through these JDCAP guidelines. Is this something you could manage on your farm? Do you feel it is worth the work to gain and maintain calf accreditation?

The JDCAP is a long-term program requiring commitment from everyone on the farm involved with calf and heifer rearing.

The program requires the herd owner/manager to establish a set of procedures for the rearing of replacement calves, document the steps to be taken, and monitor the program on an on-going basis.

All herds are eligible to join the accreditation program, regardless of their Johne's disease status.

You may wish to talk to other dairy farmers or advisers including your veterinarian. General information on bovine Johne's disease is available on the NSW Department of Primary Industries (DPI) website at: <http://www.dpi.nsw.gov.au/agriculture/livestock/health/specific/cattle/bjd>.

If you decide to proceed, contact a veterinarian of your choice who is trained and approved for the Australian Johne's Disease Market Assurance Program Cattle MAP. A list of Approved Veterinarians is available on the Animal Health Australia website at: <http://www.animalhealthaustralia.com.au/maps>

Part of being in JDCAP is having an approved veterinarian who will support your participation in the program and monitor your involvement. As well as answering questions you might have about how JDCAP operates, you need to work with the approved veterinarian to complete the *Owner Agreement* which is the first stage of the program.

Consider your record keeping and other management systems and see how much you will need to modify them to meet the requirements of JDCAP. You may already be recording some or all of the information needed. Once you are enrolled in JDCAP there is no need to duplicate this; just ensure your records are easily accessible for reviewing purposes by your veterinarian, as well as for your own farm management.

## Prevention of spread of Johne's disease infection to calves

- Cattle infected with Johne's disease may excrete *Mycobacterium paratuberculosis* bacteria in large numbers in their manure.
- Young calves from birth to 12 months of age are most susceptible to Johne's disease infection. The first six months of life are the 'window' of maximum susceptibility but the minimum recommended time for complete separation of young stock from adults is the first 12 months of life. **The longer the complete separation of young stock and adults can be maintained, the lower the risk of spreading infection to the herd replacements.**
- Calves should be born in a clean, dry environment that has minimal adult manure. Prompt removal of the newborn calf from its mother (within 12 hours of birth) is essential for effective control of Johne's disease.
- On-farm hygiene and control of the effluent from the dairy shed and yards are major factors in preventing the transmission of Johne's disease to the next generation of replacement stock.
- Manure contamination of the calf rearing area by adult cattle must be avoided by applying the following important guidelines:

## Pre weaning

- The calf rearing facilities for replacement stock should be physically separated from the rest of the farm.
- The water, milk and feed for the calves must not be contaminated by manure from adult cattle.
- Separating calves from their mothers at the dairy yards should not be practiced as this may expose the calves to very significant numbers of bacteria in the laneways and yards. Calves should be removed from their mothers in the calving paddock, and conveyed to the rearing shed in a clean trailer.
- On irrigation properties, drinking water for calves, including water for mixing with calf milk replacer, is best obtained from a rainwater tank or bore rather than from a channel due to the possibility of the channel water being contaminated with manure.
- Overalls and rubber boots worn in the calf shed should be kept for that purpose alone, and changed every time a person enters or leaves the facility. Otherwise, it is essential that rubber boots be cleaned/ disinfected when entering the facility. These simple hygiene procedures must also apply to all visitors to the calf shed, including 'farm-walk' participants and veterinarians.
- Farm vehicles, especially tractors and motor bikes, can transfer manure into calf rearing paddocks. Their entry should not be permitted unless the vehicles have no contact with land contaminated by adult cattle manure, or they are cleaned (especially the tyres) before entry.
- Adult cattle must never be allowed to graze calf paddocks.
- As goats, deer, alpaca and llamas can also carry the bacteria that causes Johne's disease, these animals should also be kept away from calf rearing areas.

## Post weaning

- Adult cattle must never be allowed to graze calf paddocks. Post-weaning grazing of replacement stock on pastures only used for that purpose (perhaps on an agistment or run-off block) provides the lowest possible risk of exposing the calves to contaminated pasture. Where adult cattle have been grazed on pastures intended for subsequent grazing calves/heifers, **a period of 12 months must elapse between the presence of adult cattle and grazing by calves.**
- Keep goats, deer, alpaca and llamas away from calf rearing areas.
- Calves need a water supply free of contamination with manure from adult cattle. Contamination of the water supplies can occur when water troughs are used in common with adult cattle, or dams, ponds or creeks taking water run-off from paddocks on which adult cattle are grazed, are located in calf rearing areas.
- Particular attention needs to be paid in irrigation areas to prevent irrigation overflow from cow paddocks running into calf paddocks, and to prevent irrigation water to calf paddocks becoming contaminated by the manure of adult cattle. This may require fencing to prevent cows defaecating in farm channels supplying irrigation water to calf paddocks.

## Management of milk/colostrum intended for calf consumption

Johne's disease infected cattle may excrete the bacterium in their colostrum and milk. Excretion of the bacteria in milk happens most often in cows with clinical signs of Johne's disease, but may also occur when infected cows show no obvious clinical sign of the disease.

As a consequence, to reduce the risks of infection as much as possible, the feeding of raw milk and natural suckling of calves should be done in accordance with the following guidelines:

1. **Colostrum**, the antibody rich milk produced by cows for the first few days after giving birth is critical to the health and survival of all newborn calves. It is essential that all calves receive an adequate amount of colostrum in the first 12 hours following birth. However colostrum can contain *Mycobacterium paratuberculosis*.

Calves should be allowed to naturally suckle their dam to receive an adequate amount of colostrum. Calves must be removed to the rearing area by 12 hours after birth.

If colostrum is fed to calves:

- **thoroughly clean the udder and teats** of the cow before collection of colostrum and prevent contamination of the colostrum with manure during the milking process,
  - only use colostrum from cows that are at low risk of being infected. Examples include cows from a Check Test herd or better ie DAS 7-10 or from an individual animal that has tested negative for BJD in the previous 12 months. In addition, colostrum that has been carefully heat treated (60°C for 60 minutes) or pasteurised can be used. Also acceptable is colostrum from the calf's dam (unless the dam is high risk).
2. **Milk/milk replacers:** Artificial milk replacers are free of Johne's disease bacteria provided they are reconstituted with water from an uncontaminated source. Where feeding calf milk replacers is not practiced, only use milk from cows that are at low risk of being infected. Examples include herds with DAS of 7-10 or from an individual animal that has tested negative for BJD in the previous 12 months. In addition milk that has been carefully heat treated (60°C for 60 minutes) can be used.

## Documentation of calf rearing system – isolation, housing, feeding

The calf-rearing system intended for use with replacement dairy stock should be documented by keeping records which include the following:

### Monitoring of calving paddock

- The calving environment should be dry and it should be large enough to ensure faecal contamination in any one area is minimal. As a guide, 2 cow pats/square metre should be the maximum load. While desiring some shelter for cows and their calves, permanently shaded or damp areas should be avoided. Calving in a shed, unless the shed is cleaned out every week during calving, should be avoided.
- The calving paddock should be inspected at least once every 8 to 12 hours during the calving season to identify calves born during the previous 8 to 12 hour period. This will allow the farm owner/manager to also estimate time of birth of the calves, assess amount of colostrum ingested, and determine the time for calf to be removed to the calf rearing unit. The inspection routine for the calving area should be documented, as should the routine calf management procedures (removal from the cow, transportation to the calf shed).

### Colostrum and milk feeding

Feeding practices on the farm should be recorded. A calf should only receive colostrum\* from its own dam, from a cow where there is evidence that it has a low risk of being infected (Check Test herd or better, individual animal test negative in the previous 12 months) or colostrum that has been carefully heat treated (60°C for 60 minutes).

\* If the dam is regarded as high risk of infection, minimise the time the calf with the dam and provide colostrum from other cows.

Feed milk designated as low risk sources or feed calf milk replacer mixed according to the manufacturer's instructions with tank or other uncontaminated water.

### Roughage, calf pellets, and fresh water

The feeding regime for calves should be recorded. Care must be taken to prevent hay, other straw roughage, calf pellets or other foods becoming contaminated with manure prior to feeding to calves.

## Housing

The arrangements for housing calves should be documented. Calf paddocks need to be isolated from laneways and cow paddocks by double fencing or other suitable barrier. All visitors to the calf shed or paddock, including the persons caring for the calves, need to ensure no adult manure enters the area. Best practice is changing into fresh overalls and rubber boots only used in the calf shed. As a minimum, it is essential that rubber boots be thoroughly cleaned and disinfected before entering the calf shed and clothing should be clean.

## Weaning

The arrangements for rearing weaned calves should be documented. Grazing areas for weaned calves must be kept free of any drainage, effluent, or sprayed recycled effluent/water. If calves are trucked to a run-off block, the trucks should be disinfected/ washed and be free of adult manure before use. No adult cattle must be pastured on the heifer-rearing area.

## Mating

By the time of joining, heifers will be >12 months age and are regarded as being relatively resistant to infection. Thus bulls can run with heifers at joining. However if paddocks are rotated, planning is required to ensure paddocks in which bulls have run are not used for heifers <12 months age.

## Records required

### Birth and pre-weaning records

The essential records that must be kept are

- Calf to dam identification ie ear tag numbers, photographs
- Date of birth
- Calf rearing group
- Date of weaning

These records need to be kept either in a book, shed sheet or on a computer.

### Post-weaning, paddock rearing and mating record

The dates when calves are moved between paddocks or out blocks should be recorded.

### Monitoring record

The person in charge of calf rearing needs to regularly monitor compliance with the program and take corrective action if required. Any issues should be recorded and the steps taken to correct problems noted.

The form *JDCAP Audit Plan* is intended as a guide to assist documenting how this will be done on your farm and who is responsible.

The incident report form *JDCAP Incident Report Form* is intended to be used to document incidents if they occur during the year.

### Independent on-farm audit of calf-rearing system and records

The calf rearing system and records may be audited periodically by an external auditor:

- during the pre-weaning stage of calf rearing by an independent auditor, and/or
- at any other time nominated by the Chief Veterinary Officer (or a representative of the Chief Veterinary Officer).

Minor non-compliance with the program detected by an auditor or the approved veterinarian will require corrective actions to be taken. The incident report form *JDCAP Incident Report Form* should be used to record the non-compliant incident details and the corrective action discussed with the veterinarian who must then sign off on the corrective action taken by the herd owner/manager.

If the incident is more complex or multi component, the form *JDCAP Corrective Action Report* should be used to detail actions required to resolve the non-compliance issues. Failure to deal with minor

compliances may lead to suspension of accreditation. Major non-compliance will result in cancellation of accreditation.

## Checklist of requirements for accredited herds

Participating owners must also agree to adhere to the following conditions. This list is available as a form (JDCAP Audit Plan).

1. All replacement calves separated from their mother within 12 hours of birth.
  - minimising the contact between calf and mother reduces the opportunity for spreading Johne's disease to calves;
  - calves must receive sufficient good quality colostrum.
2. Cows to calve down only in a clean area that is free of dairy effluent or large amounts of manure.
  - minimising exposure in the calving area minimises exposure to adult manure. The calving environment should be dry and it should be large enough to ensure faecal contamination in any one area is minimal. As a guide, 2 cow pats/square metre should be the maximum load.
  - Some shelter for cows and their calves is desirable but permanently shaded or damp areas should be avoided. Calving in a shed, unless the shed is cleaned out every week during calving, should be avoided.
3. The calf rearing area is free of any dairy effluent or cow manure.
  - the calf rearing area must not have had adult cattle in it for at least 12 months;
  - the calf rearing area must not have adult manure or dairy effluent draining or sprayed onto it.
4. Only clean water, preferably tank, town or bore water, supplied for calves for drinking and for use with calf milk replacers.
  - a clean water supply free of adult manure contamination is essential to break the cycle of transmission;
  - tank, town supply or bore water are the safest for calves.
5. Only feed milk or colostrum from cattle designated low risk or calf milk replacer is fed to calves.
  - cows of higher risk of being infected with Johne's disease if present in the herd need to be identified-do not feed milk or colostrum from such cows to calves.
  - calf milk replacer is an effective way of breaking the spread of Johne's disease to calves through milk.
6. No adult animals of susceptible species (cows, bulls, goats, alpacas, llamas, and deer) permitted in the calf rearing area including pens and paddocks.
  - goats, llamas alpacas and deer can also be infected with bovine Johne's disease;
  - these animals as well as adult cattle must not graze the calf paddock.
7. The calf rearing area (ie areas where calves are raised until weaned) is double fenced (or have other suitable barrier from manure/effluent spillage) from cattle laneways including those used by tankers and farm vehicles.
  - calf paddocks bordering laneways and roadways need to have barriers that prevent splashing of faecal material:
  - double fencing and plantation or galvanised iron provides suitable barriers.
8. Weaned calves must not graze paddocks that have contained adult cattle, or goats, alpaca, llama or deer, within the previous 12 months.
  - it is important that weaned calves do not graze paddocks used by susceptible species until at least 12 months and preferably 18 months of age.
9. The grazing area for weaned calves is free of any drainage, effluent, or sprayed recycled effluent.

- the grazing area for weaned calves must not have drainage contaminated with adult effluent or be sprayed with recycled effluent.
10. If agistment is used, calves are only agisted with other calves that would minimise the possibility of transmission in infection were present.
11. Calf introductions only permitted if the calves were from Cattle MAP herds, Non assessed herds in the Protected or Free Zone, Check tested Herds or were born and reared in JDCAP in either a herd of the same or higher status for Johne's disease.
- protecting your herd status for Johne's disease depends on buying replacement stock (calves or adults) from herds of a similar or higher status herds. Your approved veterinarian can provide advice.
12. Approved veterinarian notified of any adult cattle showing signs suspicious of Johne's disease.
- the early signs of Johne's disease are inability to maintain weight and milk production;
  - the later signs of Johne's disease are severe weight loss, persistent watery scour but bright appearance;
  - rapid identification of BJD will limit the spread of the disease in your herd.
  - for herds where Johne's disease has not been detected, your veterinarian will report the suspicion to the District Veterinarian.
13. Calves from an accredited herd exhibited at any Show or Sale are kept separated from all adult cattle and from other calves unless they originate from JDCAP or Cattle MAP herds. Accredited herds must ask the organiser of the show or sale for an Australian Johne's Disease Market Assurance Program for Cattle (Cattle MAP) Show, Sale & Exhibition Certificate of Compliance.
14. Approved veterinarian must complete the *JDCAP Owner Agreement and Veterinary Report and Recommendation for Initial Accreditation* or *JDCAP Owner Agreement and Veterinary Report and Recommendation for Re-accreditation* to provide evidence that the above management principles have been adhered to by the herd manager.
15. MAP Administrator will issue a JDCAP Compliance Certificate on receipt of the JDCAP Owner Agreement and Veterinary Report and Recommendation for initial or Re-accreditation from the approved veterinarian. This is recorded in the Stock MAP database. The certificate is signed by the approved veterinarian and kept by the herd owner/manager.
16. The property is subject to inspections and approval by an approved veterinarian or other person authorised by the Chief Veterinary Officer prior to the commencement of accreditation. An agreed calf rearing management plan which takes in the particular circumstances of the farm will be drawn up by the approved veterinarian.

## Guidelines for Approved Veterinarians

As the principles involved with BJD are included in the Cattle MAP Manual, there are no specific training requirements for veterinarians in addition to that required to be approved as a Cattle MAP veterinarian.

If veterinarians have technical queries relating to the JDCAP, they should contact the BJD Coordinator (Phone 02 62391 3455 or [graham.bailey@dpi.nsw.gov.au](mailto:graham.bailey@dpi.nsw.gov.au)).

Queries relating to administration of the JDCAP should be addressed to: MAP Administrator, NSW Department of Primary Industries, PO Box 3415, Albury NSW 2640 Phone: 0428 489729 / 6051 7708 Fax: 02 6051 7728 Email: [julie.wright@dpi.nsw.gov.au](mailto:julie.wright@dpi.nsw.gov.au)

Clients looking to achieve JDCAP accreditation are likely to be farmers looking to increase their National BJD Dairy Assurance Scheme (DAS) score. When providing advice to farmers, veterinarians should be familiar with the DAS and BJD assurance categories (see

<http://www.dpi.nsw.gov.au/agriculture/livestock/health/specific/cattle/bjd/assurance-categories>)

Participation in the JDCAP is available to all dairy herds irrespective of their BJD status. It is the responsibility of the herd owner/manager to ensure that an annual review (review) is conducted by their

approved veterinarian within 10 to 14 months of the last audit. Ideally the review should be undertaken when the calves are being reared. The task may be done in conjunction with a farm visit for some other purpose provided the herd owner/manager agrees to the review/audit at that time.

## Joining the JDCAP

Documentation required for JDCAP is:

### Forms sent to the MAP Administrator

- The signed *JDCAP Owner Agreement* made between the herd owner and an approved veterinarian.
- Veterinary report and recommendation for initial accreditation
- Payment of \$176.00 accreditation fee (includes gst)

### Forms/maps completed by the farmer and made available to the approved veterinarian

- A calf rearing plan that addresses all the elements of JDCAP. The *JDCAP Audit Plan Form* provides a check list against the JDCAP Guidelines. The completed form states what will be done and who will be responsible. The completed form is kept on farm and can be referred to during the year.
- A farm map showing paddocks, effluent drainage and any significant features of the farm. This will assist approved veterinarians understand how the separation of calves from adult cattle will be achieved.

The calf rearing plan should provide for regular monitoring which should be undertaken by the person primarily responsible for the calf rearing. Any incidents resulting in breaches of calf/cow separation should be recorded along with the corrective action that was undertaken. Likewise, any alterations to the agreed plan should be noted. A dedicated JDCAP diary or a note similar to the incident report form, are suitable for this purpose.

Events should be recorded within 48 hours of their occurrence. The incident report form should be reviewed by the farm's approved veterinarian on their next visit to the property. The approved veterinarian should initial each event line to indicate that it has been discussed and the future management of the calves has been reviewed.

## Renewal of JDCAP

Once a farmer has joined the JDCAP, in order to maintain accreditation, an annual review is required. As part of the annual review, the approved veterinarian must:

- Visit the property and examine the calf rearing facilities and paddocks grazed by weaned calves.
- Ensure that accurate and complete records are kept by the herd owner/manager.
- With the farmer, address non-compliance with the agreed program:
  - Minor non-compliance with the program will require corrective actions to be taken. The vet should complete a *JDCAP Corrective Action Report* if required and ensure that a realistic timeframe is set for the corrective action to be completed. The herd owner/manager must sign the bottom of the *Corrective Action Report* form and receive a copy. The approved veterinarian must ensure that any required 'corrective actions' are resolved by the next annual audit. A copy of this report should be forwarded to the MAP Administrator.
  - Major non-compliance may result in loss of accreditation. Any major non-compliance should be reported to the MAP Administrator.
- Update the calf rearing plan with the herd owner as necessary.
- Complete a *JDCAP veterinary report and recommendation for re-accreditation* form. A copy of this completed form must be forwarded to the MAP Administrator prior to the expiry date
- The client is responsible for forwarding the owner agreement and payment to the MAP administrator prior to expiry date
- On receipt of the *JDCAP veterinary report and recommendation for re-accreditation*, owner agreement and payment, the MAP Administrator will send a *JDCAP Certificate of Compliance* to the approved

veterinarian. The approved veterinarian then signs the *JDCAP Certificate of Compliance* and sends to client

## **Colostrum and milk**

Colostrum in particular presents a significant risk because any batch is usually from a single cow. If that cow is infected, the colostrum is likely to have relatively high numbers of *M. paratuberculosis* (Mptb).

It is anticipated there will be significant advances in colostrum management over the next decade. Some dairy farmers are introducing pasteurisation of milk or careful heat treatment (60°C for 60 minutes) which greatly reduces the risk that calves will be infected by Mptb or other enteropathogens. These treatments if performed correctly retain antibody concentration and quality.

Till these measures become widespread, farmers will need to rely on traditional methods. A calf should only receive colostrum from its own dam or from a cow where there is evidence that it has a low risk of being infected (Check Test herd or better, individual animal test negative in the previous 12 months).

Further information on colostrum is available from Dairy Australia ([www.dairyaustralia.com.au](http://www.dairyaustralia.com.au)).

Artificial milk replacers are free of Mptb provided they are re-constituted with water from an uncontaminated source. Where feeding calf milk replacers is not practiced, veterinarians should provide advice to farmers as to appropriate on milk sources.

In known infected herds, high-risk of infection animals include:

- the dam and all remaining progeny of clinical animals,
- the dam and immediate progeny (latest calf) of test positive animals, and
- any other animals the veterinarian considers to be primary high-risk.

Of lesser, but still high risk include:

- any other progeny of test positive animals not included in the primary high-risk list,
- animals raised as the cohort age group of an animal/s with clinical BJD.

Calves must **not** be fed milk from high-risk animals. If high risk animals are retained in the herd, particular attention should be made in the peri parturient period so the calves can be removed preferably with no but at least minimal ingestion of its dam's colostrum.

## **Agistment**

Many farmers agist heifers on holdings where there are no cattle from other properties.

However some farmers may have arrangements where heifers from other dairy farms co-graze with heifers from your client's herd. As the agistment property is generally outside the approved vet's area, it is necessary to satisfy yourself that the arrangements in place satisfy the JDCAP Guidelines.

The "National Johne's Disease Program Standard Definitions, Rules and Guidelines for Cattle and for goats, deer and camelids infected with cattle strains of *Mycobacterium paratuberculosis*" 8<sup>th</sup> edition 2012 (SDR&Gs) provides guidelines for reducing Johne's disease risk when agisting cattle. That is the low or no-risk of infection of adult cattle (i.e. 12-months– of-age or older), and the very low rate of shedding of bacteria by young animals (i.e. less than two-years– of-age). Farmers who use agistment need to discuss arrangements with their veterinarian to ensure calves are protected by these arrangements.

Properties offering agistment must be aware that if calves/heifers from Cattle MAP herds co graze with calves/heifers of lesser status such as Check tested herds or JDCAP herds, the Cattle MAP herds will lose their accreditation. In addition if the agistment herd is a *Beef Only* property, agisting dairy cattle will affect the *Beef Only* status unless a management plan is in place.

## **Administration of JDCAP**

The DPI MAP Administrator will keep a register of all herds accredited in the JDCAP in the Stock MAP database and will maintain overall administration of the program.

A list of herds accredited with the JDCAP will be available on the DPI website and will be regularly updated. Only those herds whose owners/managers have given permission for their details to be published will be included in this list.

Details of approved JDCAP veterinarians are available on the Animal Health Australia website.  
<http://www.animalhealthaustralia.com.au/maps>

Herds wishing to join the JDCAP will be assessed by the approved veterinarian, given an initial accreditation status for 12 months and issued a Certificate of Compliance (Initial Accreditation) by the MAP Administrator, which is signed by the veterinarian. The *JDCAP Owner Agreement* is completed by the herd owner/manager and the veterinarian to gain initial accreditation.

Subsequent accreditation will be granted annually once the veterinarian has reviewed the operation of the JDCAP (including maintenance of records) for each herd and submitted the *JDCAP Veterinary report and recommendation for re-accreditation* to the MAP Administrator. A Certificate of Compliance (Annual Accreditation) will be issued by the MAP Administrator on receipt of the Owner agreement, payment and the veterinary report and recommendation for re-accreditation. The veterinarian will sign the certificate and send it to the herd owner/manager.

Internal monitoring must identify when 'short-cuts' or omissions occur which jeopardise the integrity of the program and farmers must document the steps taken to overcome non-conforming practices.

DPI determines the fees that must be paid for initial and reaccreditation and reserves the right to reassess and modify the requirements of the JDCAP and fees at any time.

External auditing of the program may be conducted to provide confidence in the program for potential purchasers of cattle and to ensure the maintenance of program standards.

## Further Information

### Websites

The DPI website is the source of current information relating to the accreditation program. Please check here for the JDCAP current forms and BJD related information. See  
<http://www.dpi.nsw.gov.au/agriculture/livestock/health/specific/cattle/bjd>.

The Animal Health Australia website is the source of current information relating to Johne's disease in Australia, BJD in Australia, Johne's disease Market Assurance Programs and related information. See  
[http://www.animalhealthaustralia.com.au/programs/jd/jd\\_home.cfm](http://www.animalhealthaustralia.com.au/programs/jd/jd_home.cfm).

### Forms

The forms required for the JDCAP and available on the DPI website are:

*JDCAP Owner Agreement (signed by herd owner and veterinarian)*

*JDCAP Audit Plan (completed by herd owner/manager and reviewed by veterinarian)*

*JDCAP Incident Report Form (completed by herd owner/manager and reviewed by veterinarian)*

*JDCAP Corrective Action Report (completed by herd owner/manager and veterinarian)*

*JDCAP Veterinary report and recommendation for initial accreditation (completed and reviewed by veterinarian)*

*JDCAP Veterinary report and recommendation for re accreditation (issued by MAP administrator with reminder. Reviewed by veterinarian, completed and returned to MAP administrator)*

*JDCAP Compliance Certificate (issued by MAP administrator and signed by veterinarian)*

National BJD Dairy Assurance Score information (<http://www.farmbiosecurity.com.au/toolkit/declarations-and-statements>)

### Contacts

#### MAP Administrator

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Disclaimer: The information contained in this publication is based on knowledge and understanding at the time of writing (October 2015). However, because of advances in knowledge, users are reminded of the need to ensure that information upon which they rely is up to date and to check currency of the information with the appropriate officer of the Department of Primary Industries or the user's independent adviser.

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