Ministry for Primary Industries
Manatū Ahu Matua

Guidance Document

Meat Code of Practice

Post-mortem Dispositions

.

A guidance document issued by the Ministry for Primary Industries

New Zealand Government

Title

Guidance Document: Meat Code of Practice

About this document

There is general agreement that most food-borne diseases cannot be detected by post-mortem examination. At times there may be procedures other than post-mortem examination that enhance food safety or the safety of food for pets. In addition to the safety of consumers, the safety of meat workers and personnel carrying out post mortem examination under the Occupational Health and Safety legislation should be considered.

Some post-mortem examination procedures require handling of product. This results in potential cross-contamination of the product, which should be minimised.

Post-mortem examination can include both examination of individual items and sampling.

Related Requirements

Change history

Previous Version Date	Current Version Date	Section Changed	Change(s) Description

Contact Details

Disclaimer

This guidance does not constitute, and should not be regarded as, legal advice. While every effort has been made to ensure the information in this guidance is accurate, the Ministry for Primary Industries does not accept any responsibility or liability whatsoever for any error of fact, omission, interpretation or opinion that may be present, however it may have occurred.

Copyright

Contents Page

1 Purpose

The purpose of this document is to set out the procedures for the disposition of animal products following post-mortem (PM) examination. Final disposition must be made on a basis of fitness for intended purpose.

2 Mandatory Requirements

2.1 Human Consumption

2.1.1 HC Spec 75

Animal material from farmed mammals, farmed birds must comply with the relevant PM regulations and specifications prior to release of the resulting animal product from the final primary processor.

2.1.2 HC Spec 82

Animal material from killed wild mammals must comply with the relevant PM regulations and specifications prior to release of resulting animal product from the final primary processor.

2.1.3 HC Spec 89

Animal material from killed game estate mammals must comply with the relevant PM regulations and specifications prior to release of resulting animal product from the final primary processor.

2.1.4 HC Spec

Animal material from killed farmed mammals that have become feral, must comply with the relevant PM regulations and specifications prior to release of resulting animal product from the final primary processor.

2.1.5 Disposition of Product

See Appendix 2 for the dispositions to be used.

Subsequent to a disposition, adequate procedures must be in place to control product to ensure the product will not be disposed of in an unauthorised manner.

Product may be retained as per Chapter 9. Inventory records of such product must be maintained by the Operator or a person with appropriate delegated authority.

2.1.6 Retain rail procedures

No un-passed carcasses or parts are to be left on or beneath the retain rails or on viscera tables or buggies during work breaks unless they are under the direct control of an inspector or denatured in an approved manner.

2.2 Animal Consumption

2.2.1 General

Animal material intended as petfood, including both minimal risk and medium risk raw material, must be stained black unless they are:

a) Packaged and marked with a broad red band and labelled “Inedible Not for Human Consumption” at the source premises for transfer between premises for further manufacture; or
b) Sealed with an approved seal in leak proof bulk bins labelled “Inedible Not for Human Consumption” for transfer between premises for further manufacture; or
c) Marked with a stamp in black letters not less than 19mm high “Inedible Not for Human Consumption” and the official number of the source premises. Carcasses must be marked in several places and all cuts after debasing and offal must bear a similar mark.

Petfood may be stained black using either stains formulated according to Approved Maintenance Compounds (Non-Dairy) Manual, Part A, 4.9.

2.2.2 Collection of Blood and other Tissues for Pharmaceuticals Purposes from Immature Calves

Carcasses may be designated for use as petfood.

Carcasses, blood and other tissues of these calves must not enter the edible human food chain Refer chapter 5, Slaughter and Dressing.

2.2.3 Pet Food Carcasses

Certain categories of carcasses which would otherwise be condemned may be salvaged for petfood at company discretion. These categories include;

- Ovine carcasses with more than 5 T. ovis cysts in the skeletal muscle, excluding the diaphragm;
- Very poor carcasses with chronic arthritis;
- Poor carcasses with chronic caseous lymphadenitis [CLA] lesions;
- Carcasses with 4 or more extensive CLA lesions affecting most of a carcass or viscera lymph node;
- Parasitic lesions in a carcass where by extensive removal by trimming renders the carcass unsightly;
- Carcasses with generalised sarcocystis infestation.

For disease statistics, petfood carcasses must be recorded as condemned.

The PM examiner must make one knife slash per side of petfood carcasses from, and including, the hind leg, along the back and over the shoulder to end at the neck and elbow.

It is then the responsibility of the operator to:

- excise all lesions and immediate surrounding tissue, placing them in a condemned container or chute;
- make a second knife slash per side parallel to the first one;

- brand the carcass with the petfood stamp, using black ink, four times per side [leg, loin, rack and shoulder] so that the ink penetrates the identification slashes.

These procedures must be completed before the carcass leaves the slaughter floor, ancillary facility, or other specified area covered by a registered RMP.

2.2.4 Ovine Heads and Tongues – Salvage for Petfood

Un-examined heads are designated condemned and treated accordingly unless salvaged for petfood.

If neither the head nor the tongue is required for human consumption, any parts of the head may be salvaged for petfood without PM examination, provided they are not defective in any way and not derived from carcasses condemned for disease conditions. Salvage may occur before PM examination using batch collection procedures.

2.2.5 Bobby calf Head and Tongues – Salvage for Petfood

When the tongue is not saved for human consumption, no PM examination of the head is required. This is valid even if the brain is saved for human consumption.

If neither the head nor the tongue is required for human consumption, any parts of the head may be salvaged for petfood without PM examination, provided they are not defective in any way and not derived from carcasses condemned for disease conditions. Salvage may occur before PM examination using batch collection procedures.

2.2.6 Livers

A liver presented with less than one whole node must be designated petfood if not otherwise condemned.

Also see chapter 6, Presentation.

2.3 Condemned Material

2.3.1 General

Pigs or goats scalded before sticking must be condemned.

Condemned carcasses or parts must be secured during work breaks unless an official assessor or PM examiner is physically present.

2.3.2 Carcasses

Carcasses falling into drains must be condemned without trimming.

Carcasses falling on the floor may be either discarded by the company [without the issue of a condemned ticket] or identified and either condemned or trimmed to the satisfaction of the PM examiner.

2.3.3 Viscera

All condemned material must go over the end of the viscera table, or be tipped from a gut buggy directly into a condemned material chute.

Slinks can be transported in secure facilities to the foetal blood room.

Condemned heads may be removed by a non-food worker or a food worker using a hook or similar device.

2.3.4 Foetal Blood

Foetal blood can only be collected from animals where the dam has passed AM and PM examination.

2.3.5 Denaturing of Raw Materials

Denaturing may take place on the slaughterfloor or any other place where animal product has been condemned. This needs to be done while the animal product is still under control of the examiner unless an approved system is in place.

Unless otherwise exempt any carcass or offal derived from farmed deer, game or stock that has been condemned according to any criteria relating to the examination, handling processing or packaging of products must be denatured using one of the following methods;

Hashing/hogging: when condemned material is transported off site the material is to have the character and appearance of inedible material otherwise one of the agents described below must be added;

- A green ink as in Approved Maintenance Compounds (Non-Dairy) Manual, Part A, 4.10.;
- Crude carbolic acid;
- Cresylic acid.

2.3.6 Exemptions for denaturing of raw material

Medium risk raw material that conforms to the following criteria does not need to be denatured:

a) they are derived from slaughtered or killed animals intended for food and the material is physically confined to, and secured on the same premises at all times from the point of collection to the thermal process; or
b) they are derived from field sources, ie, other than slaughtered or killed animals, and is transported directly to the thermal processing premises. During transport the material shall be physically confined so that it does not contaminate the environment and is inaccessible by vermin; or
c) they are derived from animals slaughtered at a premises which has been approved for the slaughtering of animals and rendering of medium risk raw material.

2.3.7 Pharmaceutical Material

Any material derived from animals that have passed ante- and post-mortem examination can be used for pharmaceutical purposes.

Foetuses and foetal blood derived from slaughtered stock or farmed deer may be saved as raw materials provided the conditions herein are fulfilled. The foetuses or foetal blood may only be used for pharmaceutical or biological purposes.

2.3.8 Alternative treatment

Condemned tissues from animals that have been slaughtered or killed, or recovered from the field may be treated by approved processes to recover extracts substances intended for pharmaceutical or biological purposes.

2.3.9 Thyroid gland

Neither the thyroid gland nor the muscular tissues surrounding the larynx can be salvaged for human consumption.

Thyroid glands may be saved for pharmaceutical or technical use.

3 Definitions

PCR: Polymerase Chain Reaction which is a technique to amplify a single or few copies of a piece of DNA across several orders of magnitude, generating thousands to millions of copies of a particular DNA sequence.

Tb: Bovine tuberculosis (Mycobacterium bovis).

Tb reactor: an animal judged to be a Tb reactor by an accredited or authorised person under the pest management strategy of the animal health board.

Line: A group of animals coming from the same vendor and slaughtered during the same day at one slaughterhouse. This is regardless of whether or not the animals are reactors, coming from an infected herd or coming from a vector risk area.

Tuberculous animal: Tb reactors and those animals with lesions suspicious of Tb.

Tuberculous product: Product derived from tuberculous animals which may or may not be passed for human consumption depending on location and removal of affected parts.

Tb suspect: Animals that have lesions suspicious of Tb identified at ante or post-mortem examination.

4 Dispositions

4.1 Background

Disposition of animal products following post-mortem examination must ensure that product is fit for intended purpose. The Disposition Table (Appendix 2) contains the dispositions that must be used.

In formulating the dispositions, MPI has considered that risks to public health (food safety) and animal health must be minimised. Wholesomeness was also a consideration.

The extent to which the disposition applies to the product must be made clear by the post-mortem examiner. Sometimes one disposition may apply to all tissues of an animal while at other times different dispositions may apply to different tissues of one animal.

Where only parts of an animal, carcass, head or viscera are affected by a disease, due consideration must be given to the possibility of the tissue being an indicator tissue for disease in other parts of the carcass.

4.2 Dispositions of product and by-product

See the Disposition Table (Appendix 2) for the dispositions to be used.

Subsequent to a disposition, adequate procedures must be in place to control animal material to ensure the material will not be disposed of in a manner which results in contamination of animal product.

The post-mortem examination service must have a programme in place to monitor the performance of the post-mortem examiners and MPI VS must verify this programme.

4.3 Control of product

Control of animal material occurs in various ways before being released.

Animal material that needs trimming and re-examination is handled on the main chain or diverted to the retain rail and remains under the control of the post-mortem examiner until the defects have been removed. This process usually takes only a short period of time. A documented system must be in place at each premises describing how such product is identified and controlled and who has the authority to remove what marks. Historically, standardised tickets, paper squares and discs have been used but alternative systems of control may be developed. Any system must be approved by the Technical Supervisor of MPI VS.

Lines of animals with CLA, Sarcocysts, minor pleurisy or grass seeds or which have been vaccinated with Johne's Disease vaccine may be transferred to MPI-approved ancillary areas for trimming and re-examination. Details of MPI-approved ancillary facilities are detailed in Chapter 5. Any system for dealing with product in ancillary areas must be approved by the Technical Supervisor of MPI VS.

Animal material or product may be retained for extended periods of time, for example, when laboratory results are required to make a judgement (eg in the case of Tb). This animal material or product must be retained in a secure manner by the post-mortem examination service (eg in a lockable cage or rail) in a different part of the premises. Inventory records of such product must be maintained by the post-mortem examination service.

Where animal material needs to be re-examined, the operator must ensure that the conditions under which this occurs are adequate for the purpose (chapter 9). Documentation must be available describing how the operator and the post-mortem examination service exercise control over such product.

4.4 Missing Tissues

Standards for Missing Tissues at Post-Mortem Examination

<table>
<tr><th>Missing Tissue</th><th>Tissue Found</th><th>Tissue Not Found</th><th>Export</th></tr>
<tr><td>1 kidney</td><td rowspan="2">Normal post-mortem examination judgement and disposition but condemn found tissues</td><td rowspan="2">Re-inspect carcass and offal using normal post-mortem examination judgement and disposition.
If no evidence of systemic food safety or wholesomeness issues pass carcass and viscera for human consumption</td><td>Can be passed for export if remaining kidney has no evidence of systemic Condemnable lesion</td></tr>
<tr><td>Other tissues requiring post-mortem examination</td><td>Not to be passed for export if tissue not found</td></tr>
<tr><td>Any missing tissue
If there is other evidence of a systemic condemnable condition</td><td>Condemn all</td><td>Condemn all</td><td></td></tr>
</table>

5 Samples

5.1 General

Samples may be collected for public health protection and animal health surveillance.

This section excludes requirements for Trichinosis, Injection Site Lesion (ISLs), species verification and chemical residues, which are discussed in other publications, and for Tb, which is addressed in the next chapter.

If samples are to be collected they must be collected, dispatched and acted upon in accordance with MPI procedures.

5.2 Suspect notifiable diseases (including Echinococcus granulosus and Taenia solium)

In the case of a suspect notifiable disease, follow instructions in accordance with the provisions of the Biosecurity Act 1993. Report suspected exotic diseases in animals (e.g. Foot-and-Mouth disease, Echinococcus granulosus, Taenia solium) via MPI's toll free hotline, all hours on 0800 80 99 66. Sample collection, further testing and any containment requirements will be directed by an MPI Incursion Investigator.

The list of notifiable diseases is in the Biosecurity (Notifiable Organisms) Order 2010 located at:

http://www.legislation.govt.nz/regulation/public/2010/0265/latest/whole.html?search=ts_regulation_biosecurity_resel&p=1

If the post-mortem examiner or the post-mortem examination service identifies what is suspected to be a new, unusual or emerging syndrome please notify via the MPI toll free hotline on 0800 80 99 66. An MPI Incursion Investigator will assess the findings and may be able to assist with an investigation to determine the cause of the presentation.

5.3 Taenia saginata

Every suspect *T. saginata* lesion must be submitted for laboratory diagnosis in accordance with:

- TD 03/165 Inspection procedures for the head and head meats of cattle (including calves) – for animals from suppliers **not** on the MPI surveillance list for *T saginata*
- TD 09/28: Bovine Taenia saginata examination procedures: specified countries – for animals from suppliers **on** the MPI surveillance list for *T saginata*.

The surveillance list is provided to official assessors by MPI VS.

If there are more than two suspect lesions in a line of animals, retain the lesions and email MPI Standards (Specialist Adviser (Residues) – residues@mpi.govt.nz).

Every suspect *T. saginata* lesion must be sent chilled and must not be incised deliberately. Do not send in formalin as this interferes with testing. Lesions must only be dispatched if they get to the laboratory still chilled; i.e. they are to be held in a fridge at the premises during weekends or holidays.

Record the sites (eg heart, masseter, liver) on the submission form where all suspect lesions have been found and the number of lesions at each site on the laboratory submission form. This applies to detection on post-mortem examination as well as in the boning room.

Lesions must be sent to Gribbles Veterinary Hamilton Laboratory. The laboratory submission form must be filled in completely and a copy kept at the sampling site.

The laboratory will provide copies of the results directly to MPI (Specialist Adviser (Residues)) as well as back to the sampling site submitter. Decisions on further investigations will be made by MPI Standards.

Laboratory costs for this testing will be paid by MPI and will be sent directly from the laboratory to MPI.

5.4 Fitness for Human Consumption

At times a laboratory diagnosis is required to decide on fitness for human consumption.

Laboratory: as appropriate.

The operator pays laboratory and courier costs. However, the operator has the option to decide that no laboratory test(s) will be performed, in which case a conservative approach must be taken; i.e. a disposition is made as if the laboratory had diagnosed the worst possible option (from a public health perspective).

5.5 Educational

Procedures are to be in accordance with MPI VS or the post-mortem examination service's specifications.

Laboratory: as appropriate.

MPI VS or the post-mortem examination service pay the laboratory and courier cost.

6 Tuberculosis

6.1 Introduction

Tuberculosis (Tb) plays a prominent role in the New Zealand meat post-mortem examination system. Compared with other conditions, many specific procedures apply to Tb.

A national bovine tuberculosis pest management strategy for both cattle and deer operates under the Biosecurity Act and is administered by TB Free NZ. The slaughter of reactor animals and the use of post-mortem examination slaughterhouse results for epidemiological purposes are important aspects of this strategy.

In the case of all species, lesion samples must be divided so that half is forwarded freshly chilled and half is forwarded as fixed tissue.

6.2 Cattle

The slaughter procedures for Tb reactors and the branding of Tb carcasses must be in accordance with Chapter 5.

The procedures for retained Tb meat must be documented in accordance with the section on Documentation and approval of post-mortem examination procedures.

6.2.1 Submission of samples and interpretation of results

If **one, two or three animals** in a line have suspect Tb lesions then:

All suspect lesions up to and including a maximum of three suspect lesions from each animal must be submitted. This is regardless of reactor status, infected herd status or vector risk area.

If **four or more animals** in a line have suspect Tb lesions then:

For three of these animals, see the paragraph above. The submission of lesions of the remaining animals is optional. Animals with suspect Tb lesions will be considered positive unless the individual animals are deemed negative based on laboratory post-mortem examination (eg histopathology).

If **seven or more animals** in a line have suspect Tb lesions then: See the paragraph above. However, if lesions of six animals of the line have been tested in an approved laboratory and they have all been negative and the cause is known, then the remaining animals will also be considered negative.

<table>
<tr><td>Animal ID</td><td colspan="4">Lesion</td></tr>
<tr><td></td><td>1</td><td>2</td><td>3</td><td>4 or more</td></tr>
<tr><td>1</td><td colspan="3" rowspan="3">Submission compulsory: TB Free NZ/AsureQuality will pay the costs of the histology.</td><td rowspan="3">Submission optional: operator, MPI or Post-mortem examination Service required to pay the cost of additional histology.</td></tr>
<tr><td>2</td></tr>
<tr><td>3</td></tr>
<tr><td>4</td><td colspan="4">Submission optional
Operator, MPI or Post-mortem examination Service pay
Animal is considered to have Tb unless cleared by a laboratory test.</td></tr>
<tr><td>5</td><td colspan="4" rowspan="3">Submission optional
Operator, MPI or Post-mortem examination Service pay
Animal is considered to have Tb unless cleared by a laboratory test.
Exception: if lesions of six animals of the line have been tested in a laboratory and they are all negative and the cause of the problem is known, then the remaining animals can also be considered negative.</td></tr>
<tr><td>6</td></tr>
<tr><td>>6</td></tr>
</table>

If there are 4 or more suspect lesions in an animal, then the most typical lesions for Tb on gross examination must be submitted.

Samples should be couriered to the laboratory on the same day of collection provided these will arrive at the receiving laboratory on the same working day or overnight (provided this is a working day for the laboratory).

If samples need to be held prior to dispatch:

- For fixed samples, these must be refrigerated but must not be frozen.
- For fresh samples, special care must be taken to ensure that samples for culture are not kept at room temperature for excessive periods. Samples must be stored at 5ºC or colder prior to forwarding them to the laboratory using couriers. If there are delays greater than three days in forwarding fresh samples to the laboratory, they must be frozen at a temperature of -12ºC or colder.

The disposition of each carcass will be based on the laboratory results as per the table below, (but see exceptions above).

H&E	ZN	Disposition
Negative	Negative	Human Consumption
Suspicious	Negative	Human Consumption /Condemn*
Typical	Negative	Human Consumption /Condemn*
Typical	Positive	Human Consumption /Condemn*

*Depending on the site(s) of the lesions.

At times, the person who makes the judgement may request culturing or PCR testing. Where the histopathology report states that the lesion(s) are consistent with cervine paratuberculosis, culturing or PCR testing may be required.

When culture information is available to the person making the final judgement, the decision on the disposition of the carcass may be at variance to that detailed in the above table. Any decisions which are at variance with the above table or where a disposition is based on a limited number of suspect animals as described above must be fully documented. If a situation arises where the above Tb procedures and dispositions are inappropriate for a certain farm or group of farms on an ongoing basis, an application for amended practices can be made to MPI.

There is no requirement for MPI VS or the post-mortem examination service to postpone making a judgement if AsureQuality requests culturing, but MPI VS or the post-mortem examination service may decide to postpone until all information is available to them.

The Disposition Tables (Appendix 2) contains details of disposition of Tb meat

6.3 Deer

6.3.1 Slaughter and processing procedures

The slaughter and processing procedures for Tb reactors and Tb carcasses must be in accordance with Chapter 5 and other relevant requirements.

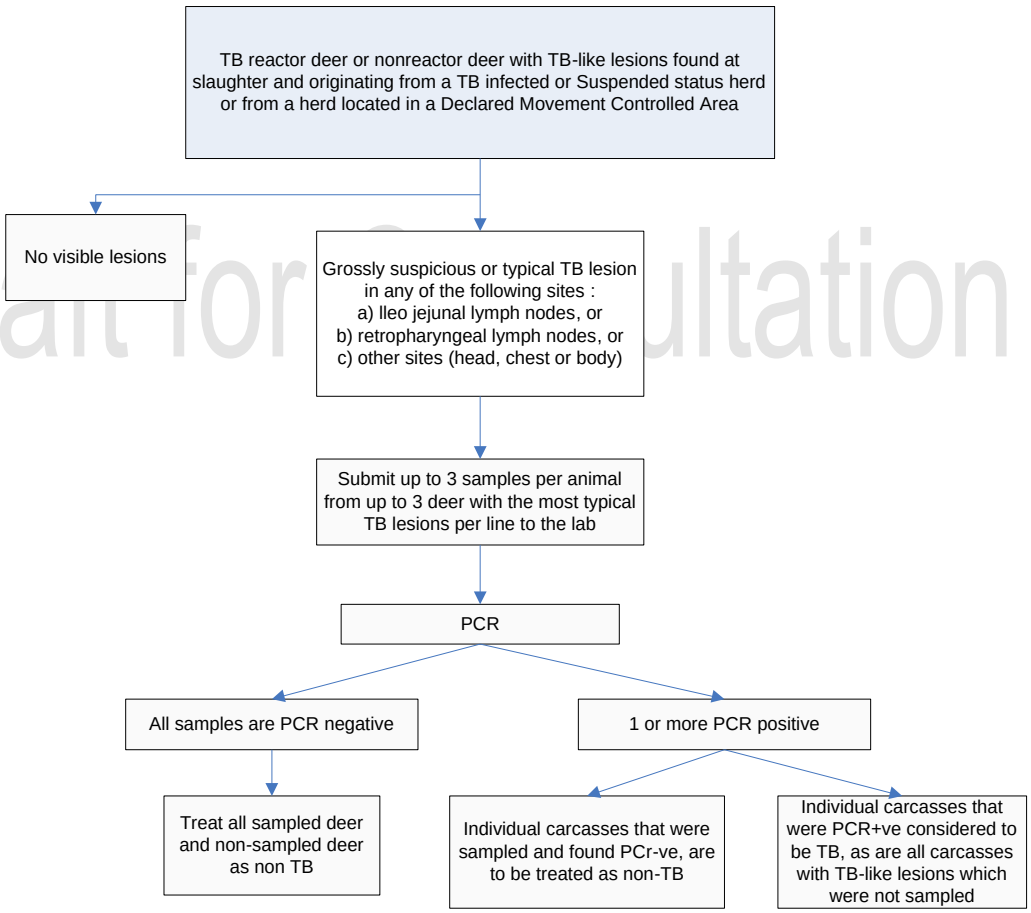
6.3.2 Submission of samples and interpretation of results

The submission of samples and interpretation of results will predominantly be based on the Tb herd status, i.e. either high risk or low risk category.

NB: Refer also to country OMAR to confirm market eligibility. For example, countries such as Russia are currently known to have prohibitions or restrictions on products derived from Tb reactors regardless of whether any Tb-like lesions are found at slaughter.

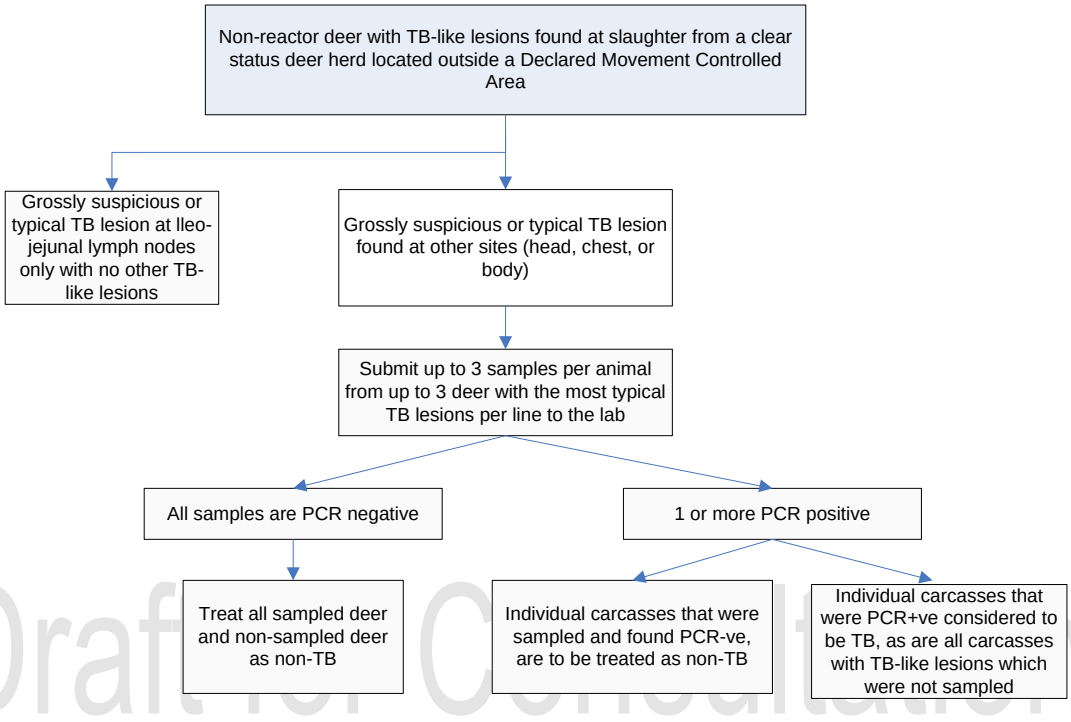
a) High risk category

- Tuberculous Reactor deer, or
- Non-reactor deer with tuberculous-like lesions found at slaughter and originating from a tuberculous-infected or suspected status herd, or
- Deer from a herd located in a Declared Movement Controlled Area.



b) Low risk category

Non reactor deer with tuberculous-like lesions found at slaughter from a Clear Status deer herd located outside a Declared Movement Controlled Area



Animal ID	Lesion			
	1	**2**	**3**	**4 or more**
1 **2** **3**	Submission compulsory: TB Free NZ/DINZ will pay the costs of the PCR			Submission optional
4 **5** **6**	Submission optional RMP operator pays the costs Refer to the relevant diagram above for product disposition			

If there are 4 or more suspect lesions in an animal, then the most typical lesions for Tb on gross examination must be submitted.

Fresh and fixed Tb samples from suspect Tb deer should be collected and placed in a pottle. Samples details must be entered in DMIS (Disease Management Information System) and couriered to the laboratory on the same day of collection provided these will arrive at the receiving laboratory on the same working day or overnight (provided this is a working day for the laboratory).

A copy of the completed DMIS report must accompany the sample to the laboratory.

If it is unlikely that the sample will reach laboratory on a working day, the sample should be kept at 4 ˚C until such time that the sample will get to the laboratory on a working day. If there is a long public holiday (>5 days), then samples should be frozen.

The physical address of Animal Diagnostics Laboratory is:

Animal Diagnostics Ltd
FAR Laboratory Complex
Cnr Gerald Street and Marion Place
Lincoln 7608
Canterbury
Ph: 03 325 3278
Fax: 03 325 6038
Email: 22egg7@gmail.com

6.4 Pigs

Samples of carcasses / viscera that are the subject of pending condemnation judgements must be submitted for laboratory confirmation in all cases.

Samples of a representative range of lesions from all carcasses/viscera that are condemned or are held pending possible condemnation must be submitted for laboratory confirmation by histopathological examination and culture.

The submitter may recover the costs of sampling and couriering from the operator. The name of the client for the laboratory to bill must be clearly indicated on the submission form. If the operator does not wish to have the test performed, the lesion(s) will be considered tuberculous and the product will be disposed of accordingly.

6.5 Wild Animals

Wild pigs, deer, chamois, thar, goats, hares and rabbits are at times submitted for processing. Any suspect Tb lesions must be submitted in accordance with section 5.2.

Costs: see section 5.2, Cattle.

6.6 Other Species

Any suspect Tb lesions must be submitted to a laboratory in accordance with section 5.2.

Costs: see section 5.2, Cattle.

Where Tb lesions are detected in other species, the submitter must notify MPI.

6.7 Communication

Reactors on arrival at a slaughterhouse are identified by:

- reactor ear tags
- a Tb declaration card submitted by or on behalf of the owner to the slaughter company or a vendor declaration form with details regarding Tb and reactor status.

The following procedures apply if:

- a reactor is submitted for slaughter, or
- an animal with suspect lesion(s) is detected on post-mortem examination.

The Tb Surveillance and Submission Form must be filled out. A copy of this form must be mailed, faxed or emailed to the AsureQuality veterinarian in the district relating to the owner. In those circumstances when MPI VS or the post-mortem examination services are uncertain to which AsureQuality office the information relates, the form may be mailed, faxed or emailed to:

North Island: Tb Bureau, AsureQuality NZ, Private Bag 3080, Hamilton.

Fax: 07 838 5895

South Island: Tb Bureau, AsureQuality NZ, Private Bag 4718, Christchurch

Fax: 03 358 6222.

The identity (as detailed under the Biosecurity (Animal Identification System) Regulations) of any cattle, or deer with suspect Tb lesion(s) detected during post-mortem examination must be recorded on the submission form which must be sent to AsureQuality.

The laboratory will send the results to the submitter (i.e. the post-mortem examination service). The submitter will pass this information on to the processor. It is not the responsibility of the submitter to contact the farmer, but the submitter should be available to provide the farmer with information if requested. Lines of communication between farmers, TB Free NZ, laboratories and field staff of AsureQuality, and veterinary clinical practitioners are outside the scope of this standard.

7 Disease and defect recording requirements

7.1 General

The collection of disease and defect information by the post-mortem examination service is required to monitor and improve post-mortem examination systems. This applies both to the adequacy of the system to detect abnormal tissues and to be able to compare findings at different premises. It may also assist in continued access to overseas markets and monitoring of animal diseases. A number of sheets attached to the Post-mortem examination Table (Appendix 3) contain the categories of diseases and defects that are to be collected and made available to MPI. The sections below contain descriptions of the diseases and defects for farmed deer and bobby calves that are to be collected. Some comments are made regarding wild deer and ovines. Other species and more details regarding wild deer and ovines will follow in due course.

7.2 Farmed Deer

With the exception of tuberculosis, neoplasms and E. granulosus, only affected carcasses are to be recorded. As an example facial eczema is to be recorded as Other Causes when the carcass is affected but not if the liver only is affected.

Arthritis infectious

Any swelling, deformation or inflammation of a joint which is considered at post-mortem examination as being caused by an infectious agent. Please note the diagnosis will be based on gross pathology and it is not the intention that joints are opened for confirmation.

Arthritis non-infectious

Any deformation or swelling of a joint which is considered to be non-infectious. This includes joints deformed by trauma or a degenerative process.

Bruises Forequarter

All lesions resulting from trauma to the forequarter (forelegs, neck, shoulders. The caudal part of the shoulder is defined by a line which runs horizontally and touches the most caudal part of the shoulder blade when the carcass and the forelegs are hanging freely). Ribs in the forequarter are included with the exception of healed broken ribs. All lesions are to be more than 10 cm in their greatest dimension and a minimum depth of 0.5 cm.

Lesions identified as Wounds take precedence over associated bruises and should only be recorded as "Wounds".

Bruises Middle

All lesions resulting from trauma to the "middle" of the carcass (thoracic and lumbar vertebrae, ribs, brisket and flaps). Ribs are included with the exception of healed broken ribs. Removal of healed broken ribs is a commercial matter. The lesions are to be more than 10 cm in their greatest dimension and a minimum depth of 0.5 cm.

Lesions identified as Wounds take precedence over associated bruises and should only be recorded as "Wounds".

Bruises Hindquarter

All lesions resulting from trauma to the hindquarter (hocks, knuckles, topsides, silversides, rumps, tissues covering ischium and ilium). The lesions are to be more than 10 cm in their greatest dimension and a minimum depth of 0.5 cm.

Lesions identified as Wounds take precedence over associated bruises and should only be recorded as "Wounds".

Therefore more than one ticket for Bruises can be attached to a carcass. In practical terms the definition of minor bruises has been changed but the way to deal with minor bruising is unchanged.

Carcasses will be passed if they are:

- free from diseases and defects, apart from minor bruising (10 cm in its greatest dimension and < 5 cm deep), and ..

Company responsibilities with regard to bruising are detailed in Chapter 5. This continues to apply but note the altered definition of bruising in farmed deer above.

If a carcass is condemned for bruises it is sufficient to enter this data in the box of Bruises Forequarter only.

Wounds

All lesions resulting from trauma which are associated with a penetrated hide. Wounds are recorded regardless of their size and if accompanied by bruises or pleurisy broken rib or pleurisy other they will take precedence for recording purposes.

E. granulosus

Any lesions from an animal which are confirmed by a laboratory as caused by *E. granulosus* are to be recorded. Current hydatids requirements remain unchanged. Recording occurs in the month of confirmation.

Injection Site Lesions

Lesions which are likely to have been caused by injections regardless of size, substance injected, and age of the lesion.

Neoplasms

All animals which are considered at post-mortem examination as having one or more neoplasms in the carcass, head or offal.

Peritonitis

Carcasses for which peritonitis is identified and which require trimming or further input prior to disposition. Minor resolved lesions (<5 cm in largest diameter) which are remnants of earlier peritonitis should not be recorded.

Pleurisy Broken rib

Any abnormality of the pleura (inflammation, thickening and/or adhesion), which is associated with broken ribs and requires trimming or further input prior to disposition. Lesions which are classified as Tuberculosis, Wounds, Bruises and Neoplasms are not included in this category.

Please note that there is no requirement to remove broken healed ribs which do not have pleurisy. This is a commercial matter.

Pleurisy Other

Any abnormality of the pleura (inflammation, thickening and/or adhesion), which is not associated with broken ribs and requires trimming or further input prior to disposition. Lesions which are classified as Tuberculosis, Wounds, Bruises and Neoplasms are not included in this category.

Pyogenic Lesions

One or more pyogenic lesions in the carcass. Specific conditions in the list which are accompanied by pyogenic lesions will take precedence for recording purposes.

Septicaemia

All carcasses which are judged as septicaemic unless already judged to be septicaemic and condemned as part of a specific condition on the list. Note that if an initial diagnosis of septicaemia is not confirmed on re-examination, the septicaemia ticket should be cancelled.

Tuberculosis

Any animal with lesion(s) found in a carcass, head and/or offal which is (are) diagnosed as tuberculosis for the purpose of carcass disposition. This may not always include laboratory diagnosis.

Other Causes

All causes which are not mentioned in this list and which require a carcass to be diverted to the retain rail and/or condemned. It includes diseases and defects which previously were recorded separately such as actinoform lesions, facial eczema, post capture myopathy, *Elaphostrongylus cervi*, emaciation.

7.3 Farmed and Wild Deer

Orchitis/epididymitis

Any animal with lesions suspected to be orchitis or epididymitis.

In the case of *Brucella ovis* the following details are to be recorded for epidemiological purposes.

Farmed and wild:

- Date of post-mortem examination.
- Number of affected male deer in this line.
- Number of male deer in this line.
- Farmed or wild deer.
- If farmed deer:
- Name of the owner.
- Address.
- Further clarification of address if required.
- Town.

If wild deer:

- Area where the animal(s) were derived from.
- Total number of wild male deer inspected this month (top of page).

Contamination will not be recorded. However the carcasses are to continue to be ticketed and trimmed as per Chapter 5. This standard remains unchanged.

7.4 Bobby Calves

Emaciation

Emaciation and Immaturity, signs include:

- minimal wearing of the plantar surfaces of the hooves, the umbilical remnant is fresh rather than dry, and coupled with these findings there may be evidence of muscular weakness (ante mortem)
- musculature which is loose and flabby and appears “water soaked”
- generalised underdevelopment of the musculature
- minimal fat deposits, which appear brownish-red, gelatinous and oedematous.

Wounds and bruises

- Wounds.
- Bruises.

Arthritis

Acute inflammation and infection affecting the joints, including localised infectious arthritis and infectious polyarthritis, but excluding uncomplicated traumatic lesions.

Septicaemia

- Septicaemia and pyaemia.
- Conditions which have spread systemically from the initial focus of infection (eg hepatic abscesses with further abscessation in other organs).
- Salmonellosis.
- Haemorrhagic, gangrenous and other acute inflammations of the GI tract
- Acute pericarditis.
- Acute nephritis (includes those conditions where there are hyperaemic haloes around white spots on the cortex).
- Other acute inflammatory conditions (eg fibrinous peritonitis and acute hepatitis)

Pleurisy

- Pleurisy
- Use Pneumonia (not pleurisy) if in conjunction with acute pneumonia.
- Use Septicaemia (not pleurisy) if in conjunction with acute pericarditis.

Other Causes

- Superficial haematomas in the pelvic area resulting from ineffective closure of the umbilical arteries.
- Non-infectious, rare conditions affecting part of the carcass, such as melanosis, umbilical hernias, and localised white muscle.
- Generalised, non-infectious conditions, which occur rarely and require carcass condemnation (jaundice, malignant neoplasms, generalised melanosis).
- Any condition (excluding contamination) which is not recorded by any of the other categories and which results in the carcass being sent to the retain rail.

Contamination

- Contamination

Navel Ill

- Navell ill.
- Omphalophlebitis.
- Omphaloarteritis.
- Urachitis.

Pneumonia

- Pneumonia.

7.5 Sheep and Lambs

Where T. ovis (C. ovis) cysts or Caseous lymphadenitis (CLA) lesions are detected anywhere in the viscera of the sheep (other than lambs), the carcass is to be diverted to the detain rail and the appropriate disease is to be recorded.

Lambs

To ensure consistency of data to enable the control and management of Taenia ovis (sheep measles) at farm level, Ovis Management Ltd requests that for lambs, findings of T. ovis lesions in the diaphragm and heart be recorded against the carcass of lambs. This is likely to involve notification from viscera examiners to carcass examiners who will ticket the carcass but not send the carcass to the detain rail. The company grader will then enter the data against the carcass and the farm. It will be up to the operator, AsureQuality and MPI staff at each premises to agree on the ticketing process.

8 Appendix 1: Disease and Defect Forms

Disease and Defect Form Ovine and Caprine

Premises No.:

Month Ending:

Eg enter February as 2/12

		SHEEP		LAMBS		GOATS	
		Prevalence	Condemned	Prevalence	Condemned	Prevalence	Condemned
PLU	1						
WB	2						
C-OVIS	3						
SAR	4						
ART	5						
CLA	6						
EMA	7						
NP	8						
PYO	9						
EG	10						
CONTAM	11						
FEX	12						
OCS	13						
SAL	14						
	15						
	16						
	17						
	18						
	19						
TOTAL							

Disease and Defect Form Bovine and Caprine

Premises No.:

Month Ending:

Eg enter February as 2/12

		CATTLE		CALVES		PIGS	
		Prevalence	Condemned	Prevalence	Condemned	Prevalence	Condemned
EMA	51						
WB	52						
TB	53						
PYO	54						
ART	55						
SAL	56						
NP	57						
PLU	58						
ACT	59						
XAN	60						
FC	61						
SL	62						
C-BOVIS	63						
OCS	64						
CONTAM	65						
FEX	66						
EG	67						
NI	68						
PNU	69						
TOTAL	99	0	0	0	0	0	0

Disease and Defect Form Farmed Deer

Premises RMP Identifier

Month – Year
Eg enter February 2012 as 2/12

Total number of carcasses examined
Total number of male deer examined
* Total number of male deer of which testicles have been examined
Including condemned carcasses

	Number of Affected Deer	Number of Condemned Deer	Percentage Prevalence
Arthritis_Infectious			
Arthritis_Non-infectious			
Bruises_Forequarter			
Bruises_Middle			
Bruises_Hindquarter			
Bruises			
Wounds			
E. granulosus			
ISL			
Neoplasms			
Peritonitis			
Pleaurisy_Broken rib			
Pleurisy_Other			
Pyogenic Lesions			
Septicaemia			
Tuberculosis			
Other Causes			
Orchitis/epididymitis			

Note that the column with affected deer included condemned animals

Disease and Defect Form Feral Animals

Premises No.:

Month Ending: **or Email:**

	WILD DEER		WILD PIGS		WILD GOATS		CHAMOIS		THAR		HARES		RABBITS	
	Prev	Cond	Prev	Cond	Prev	Cond	Prev	Cond	Prev	Cond	Prev	Cond	Prev	Cond
Exceeds Time Limit														
No Viscera														
Frozen														
Farmed														
Imperfect Bleeding														
Decomposition														
Emaciation														
Contamination														
Arthritis														
Wounds and Bruises														
Pyogenic Lesions														
Neoplasm														
Pleurisy														
Tuberculosis														
Septicaemic-Like lesions														
Other Causes														
Actino														
Facial Eczema														
Post Capture Myopathy														
Elaphostrongylus Cervi														
B. Ovis														
Note: prevalence column includes condemned														
Total Carcasses Examined														

Disease and Defect Form Game Estate Animals

Premises No.
Month Ending : **or Email:**

	GAME ESTATE DEER		GAME ESTATE PIGS		GAME ESTATE GOATS		GAME ESTATE CHAMOIS		GAME ESTATE THAR	
	Prev	Cond	Prev	Cond	Prev	Cond	Prev	Cond	Prev	Cond
Exceeds Time Limit										
No Viscera										
Frozen										
Farmed										
Imperfect Bleeding										
Decomposition										
Emaciation										
Contamination										
Arthritis										
Wounds and Bruises										
Pyogenic Lesions										
Neoplasm										
Pleurisy										
Tuberculosis										
Septicaemic-Like lesions										
Other Causes										
Actino										
Facial Eczema										
Post Capture Myopathy										
Elaphostrongylus Cervi										
B. Ovis										

Note: prevalence column includes condemned

Total Carcasses Examined

Cervine orchitis/epididymitis form

Number of examined wild male deer this month:

				If farmed				If wild	
Date	Number of affected male deer	Number of male deer in this line	Farmed /wild	Owner	Address_1	Address_2	Town	Area where animals were derived from	Comments

9 Appendix 2: Dispositions

Disease or Defect	Details	Livestock class	Disposition	Parts of slaughtered animal	Comments
Abrasions	Small to head.	C	Condemn	Affected parts	Post-mortem examiner to pass, company to remove
Abscess	Multiple abscesses which could have resulted from a pyaemia are found.	P	Condemn	All	See specific procedures
Abscess	Multiple bite abscesses without systemic involvement.	P	Condemn	Affected parts	
Abscess	Local spread only (e.g. from a tail bite to the sacrum, or from a castration wound to the superficial inguinal lymph node).	P	Condemn	Affected parts	
Abscess	Single abscess.	P	Condemn	Affected tissues	
Abscess	Systemic spread.	CS	Condemn	All	
Abscess	Parts of the carcass only.	CS	Condemn	Affected parts	
Actinomycosis, Actinobacillosis	Localised.	C	Condemn	Affected organs and parts and corresponding nodes.	
Actinomycosis, Actinobacillosis	Numerous and widespread lesions with emaciation or oedema.	C	Condemn	All	
Actinomycosis, Actinobacillosis	Any lymph node involvement in the head.	C	Condemn	Head and tongue	
Actinomycosis, Actinobacillosis	Lesion is in the jawbone only.	C	Condemn	Head	Tongue is fit for human consumption
Adenocarcinoma	Of the small intestine.	S	Condemn	All	See malignant neoplasms
Arthritis	Acute, with evidence of systemic involvement.	CPS	Condemn	All	
Arthritis	Acute with emaciation.	CPS	Condemn	All	

Disease or Defect	Details	Livestock class	Disposition	Parts of slaughtered animal	Comments
Arthritis	Acute polyarthritis. Number of affected joints in more than one limb or region.	CPS	Condemn	All	
Arthritis	Acute, localised and no systemic involvement.	CPS	Condemn	Affected joints or parts, and surrounding tissue together with associated lymph nodes if affected.	
Arthritis	Chronic localised or chronic polyarthritis.	CPS	Condemn	Affected joints or parts, and surrounding tissue together with associated lymph nodes if affected.	
Arthritis	Chronic localised or chronic polyarthritis and very poor carcass.	CPS	Pet food	All	Option to designate pet food instead of Render in toto
Ascaris lumbricoides	Minor blemishes (milk spots).	P	Condemn	Affected parts	
Ascaris lumbricoides	More extensive blemishes.	P	Condemn	Liver	
BOSCC	Involvement of the osseous structure of the head with extensive infection, suppuration and necrosis.	C	Condemn/ Pet Food	Affected parts / Rest	
BOSCC	Metastasis from the eye or orbital region to any of the lymph nodes, internal organs, muscles, skeleton or other structures, regardless of the extent of the primary tumour.	C	Condemn/ Pet Food	Affected parts / Rest	
BOSCC	Is, regardless of extent, associated with cachexia or evidence of absorption or secondary changes.	C	Condemn	All	

Disease or Defect	Details	Livestock class	Disposition	Parts of slaughtered animal	Comments
BOSCC	Less severe than other described cases (see osseous structure and metastasis).	C	Render/ Human consumption	Affected parts / Rest	
Bruises	Extensive or gangrenous.	C	Condemn	Carcass	
Bruises	Extensive with systemic involvement, or gangrenous.	CPS	Condemn	All	
Bruises	Major bruises	CPS	Condemn	Affected parts	
Bruises	Minor bruises	CPS	Condemn	Affected parts	Company responsibility, to be removed before entering chiller
CLA	Systemic involvement (i.e. fevered or showing evidence of haematogenous spread) on carcass and or viscera examination.	S	Condemn	All	
CLA	Poor carcass, soft wet lesions.	S	Condemn	All	
CLA	Poor carcass, chronic lesions.	S	Pet Food	All	Also :Excise all lesions and immediate surrounding tissue and condemn
CLA	Four or more extensive lesions, affecting most of a lymph node on carcass and viscera examination, soft wet lesions.	S	Condemn	All	
CLA	Four or more extensive lesions, affecting most of a lymph node on carcass and viscera examination, chronic lesions.	S	Pet Food	All	Also excise all lesions and immediate surrounding tissue and condemn
CLA	Carcass/organ/viscera not covered by other CLA criteria.	S	Condemn	Affected parts	

Disease or Defect	Details	Livestock class	Disposition	Parts of slaughtered animal	Comments
Contagious ophthalmia		S	Condemn	Heads excluding tongue and brains	
Enteritis	Haemorrhagic or gangrenous.	CPS	Condemn	All	
Erysipelas	If signs of septicaemia.	P	Condemn	All	
Erysipelas	If lesions are chronic without signs of septicaemia, e.g. vegetative endocarditis, chronic "diamond" skin lesions, arthritis.	P	Condemn	Affected tissue	
Facial eczema	Heads with photosensitivity lesions.	CS	Condemn	Affected organ	See Icterus
Facial eczema	Udders with photosensitivity lesions.	C	Condemn	Affected organ	See Icterus
Facial eczema	Carcass and viscera showing marked icterus.	CS	Condemn	Carcass and viscera	See Icterus
Facial eczema	Liver with extensive cirrhosis.	CS	Condemn	Liver	See Icterus
Facial eczema	Slightly affected liver.	S	Pet Food	Liver	See Icterus
Gangrene	Wet gangrene with systemic involvement.	CS	Condemn	All	
Grass seeds	A few isolated surface seeds.	S	Company responsibility		
Grass seeds	Lesions containing pus.	S	Condemn	Affected tissue	
Grass seeds	Numerous grass seeds and penetrating seeds.	S	Condemn	Affected tissue	
Hydatids		All	Condemn	Affected organs	Lab submission procedures apply
Hydronephrosis	Chronic, no systemic involvement.	S	Condemn	Kidney	

Disease or Defect	Details	Livestock class	Disposition	Parts of slaughtered animal	Comments
Icterus	When liver degeneration and a pronounced yellow or yellow/green discolouration not only of the fat but also of the cartilages, tendon sheaths, serous membranes and connective tissue generally.	CPS	Condemn	All	Retaining of carcass and additional tests may be required
Kidneys	Ruminants, excluding deer, with six or more permanent incisiors.	CS	Pet food	Kidneys	
Kidneys	Cull velveting stags, fire stags, cast for age hinds.	D	Pet Food	Kidneys	
Kidneys	Pigs weighing over 80 kg with the head on.	P	Pet Food	Kidneys	
Kidneys	Horses, all ages.	H	Pet Food	Kidneys	
Leptospirosis	If there are signs of septicaemia.	P	Condemn	All	
Leptospirosis	If no signs of systemic involvement.	P	Condemn	Kidneys	
Liver	Small amount of scar tissue, or localised cirrhosis, or telangiectasis or encapsulated areas of necrotic tissue.	C	Condemn	Affected areas	Post-mortem examiner to check periodically
Liver	Condition is more extensive than a small amount of scar tissue, or localised cirrhosis, or telangiectasis.	C	Pet Food	Liver	
Liver	Less than one lymph node.	C	Pet Food	Liver	
Liver fluke	Severely affected.	CS	Condemn	Liver	

Disease or Defect	Details	Livestock class	Disposition	Parts of slaughtered animal	Comments
Liver fluke	Not severely affected.	CS	Pet food	Liver	
Lungworm	There is a severe associated pneumonia.	S	Condemn	Lungs	
Lungworm	There are numerous shot-like, pyogenic lesions.	S	Condemn	Lungs	
Mastitis	Acute and with systemic involvement.	CPS	Condemn	All	
Mastitis	Gangrenous with systemic involvement.	C	Condemn	All	
Mastitis	Chronic with no systemic involvement.	C	Condemn	Udder and supramammary	
Metritis	Acute and with systemic involvement.	CPS	Condemn	All	
Metritis	Acute or purulent with systemic involvement.	C	Condemn	All	
Metritis	Not acute and no systemic involvement.	C	Condemn	Reproductive system	
Muscle degeneration	Not general systemic disease.	S	Condemn	Affected muscles	
Muscle disease	Not systemic disease.	C	Condemn	Affected parts	
Neoplasm	Carcass with metastasis in carcass or viscera.	CPSB	Condemn	All	
Neoplasm	Organ or viscera, with metastasis in carcass.	CSB	Condemn	All	
Neoplasm	Organ, with metastasis to the carcass.	P	Condemn	All	
Neoplasm	Benign.	CPSB	Condemn	Neoplasm and affected surrounding tissue.	
Nephritis	Chronic, no systemic involvement.	CS	Condemn	Kidney	
Odour	Abnormal.	CPS	Condemn	Carcass	Additional testing may be required (in detain cage)

Disease or Defect	Details	Livestock class	Disposition	Parts of slaughtered animal	Comments
Odour	Boars with very pronounced male odour.	P	Condemn	All	
Oedema	Generalised.	CS	Condemn	All	
Oedema	Localised but accompanied by emaciation.	C	Condemn	All	
Oedema	Localised and rest the carcass is normal.	CS	Condemn	Affected tissue	
Oedema	If in doubt.	S	Pet Food	Offal	Carcass can be detained, carcass disposition elsewhere
Parasites	Not harmful to humans, Can be completely removed, Not numerous, localised.	All	Pet Food	Affected parts	
Parasites	Not harmful to humans, numerous parasitic lesions, removal renders carcass unsightly.	All	Pet Food	Carcass	
Pentastomes	Mesenteric lymph nodes.	C	Condemn	Affected lymph nodes	No specific action required if removal occurs by normal stripping procedures
Pericarditis	Acute, with fever or septicaemia,	C	Condemn	All	
Pericarditis	Purulent, with evidence of systemic infection.	C	Condemn	All	
Pericarditis	Chronic.	CB	Condemn	Heart and surrounding tissue	
Peritonitis	Acute or diffuse with septicaemic-like lesions	CPS	Condemn	All	
Peritonitis	Chronic affecting organs or viscera	C	Condemn	Affected parts	Strip chronic peritonitis under MPI or AsureQuality supervision
Pigmentation	Xanthosis and melanosis affecting bones, muscles and fat tissue generally.	CPS	Pet Food	Carcass	

Disease or Defect	Details	Livestock class	Disposition	Parts of slaughtered animal	Comments
Pigmentation	Xanthosis and melanosis, localised.	C	Condemn	Affected parts	
Pigmentation	Localised melanosis or seedy cut.	SP	Condemn	Affected parts	
Pimply gut	Oesophagostome larvae in small intestine, caecum and colon. Numerous lesions.	C	Condemn	Runners	Paunch may be saved for human consumption
Pimply gut	Oesophagostomum venulosum, Oesophagostomum columbianum.	S	Condemn	Intestines	
Pleurisy	Acute or diffuse with evidence of systemic involvement.	CPB	Condemn	All	Veterinary disposition
Pleurisy	Acute, no signs of systemic involvement.	CP	Condemn	Affected parts	To be performed by stripping
Pleurisy	Chronic, no signs of systemic involvement	CP	Condemn	Affected parts	Stripping
Pleurisy	Pleura are hyperaemic and there are obvious signs of systemic involvement.	S	Condemn	All	
Pleurisy	Pleura are hyperaemic and there are NO obvious signs of systemic involvement.	S	Retain		Retain for veterinary disposition
Pleurisy	Fibrous adhesions to the pleura, thickened involvement and/or purulent pleura and other pleural lesions including 'wipeouts', no systemic involvement.	S	Condemn	Affected parts	

Disease or Defect	Details	Livestock class	Disposition	Parts of slaughtered animal	Comments
Pneumonia	Acute pneumonia with evidence of systemic involvement.	CPSB	Condemn	All	
Pneumonia	Gangrenous.	CPS	Condemn	All	
Pyaemia		CPSB	Condemn	All	
Pyelonephritis	Chronic, no systemic involvement.	C	Condemn	Kidney	
Retention cysts	Congenital.	C	Condemn	Cysts	Kidney for local market
Rumino-reticular junction	Lesions such as abscesses, actinobacillosis and traumatic reticulitis.	C	Condemn	Paunch and intestines	
Salmonellosis		CPSB	Condemn	All	See manual 11
Sarcocysts	Obviously visible and generalised.	C	Pet Food	All	
Sarcocysts	Obviously visible but light and/or localised.	C	Pet Food	Affected tissue	
Septicaemia		CPSB	Condemn	All	
Stephanurus dentatus	Kidney worm minor blemishes (milk spots).	P	Condemn	Affected parts	
Stephanurus dentatus	More extensive lesions.	P	Condemn	Liver	
Stephanurus dentatus	Perirenal fat, Sublumbar muscles.	P	Condemn	Affected tissue	
Suppurating lesions		C	Condemn	Affected parts	
T. hydatigena	Grossly affected livers.	S	Condemn	Liver	
T. hydatigena	More than six minor lesions.	S	Pet food	Liver	

Disease or Defect	Details	Livestock class	Disposition	Parts of slaughtered animal	Comments
T. hydatigena	Requiring up to six minor trims. Trims should be shallow and not larger in diameter than a 50 cent piece.	S	Condemn	Affected tissue	
T. ovis	Carcass judgement. More than 5 cysts in skeletal muscles excluding the diaphragm.	S	Pet food	Carcass	
T. ovis	In the heart, tongue or diaphragm.	S	Pet food	Affected organ	
T. ovis	Head and tongue.	S			See head and tongue judgements
T. saginata	< 3 cysts in the musculature of the carcass, head and tongue but excluding the heart.	C	Freeze	Meat	Based on laboratory results
T. saginata	> 2 cysts in the musculature of the carcass, head and tongue but excluding the heart.	C	Condemn	All	Based on laboratory results
T. solium		P	Condemn	All	Based on laboratory results
Trichinosis		P			See system
Udder	When exhibiting signs of chronic mastitis, botriomycosis, actinomycosis or seedy cut or milk.	P	Condemn	Udder	
Uraemia		CPS	Condemn	All	
Wool pull defects	See bruises major or minor.	S			
Wounds		P	Condemn	Affected parts	
Bites	Small to head.	C	Condemn	Affected parts	Post-mortem examiner pass, company to remove
Abrasions	Part of the carcass only.	CP	Condemn	Affected parts	

Disease or Defect	Details	Livestock class	Disposition	Parts of slaughtered animal	Comments
Emaciation		CSB	Condemn	All	
Pizzle	Active inflammatory condition, neoplasms, trauma, erosions scars, haematoma.	CS	Condemn	Pizzle	
Lungs	Inflammation, tumours, abscesses or lymph node pathology, or purulent discharge in the trachea or bronchi.	C	Condemn	Lungs	
Lungs	Adhesions indicative or resolved minor pleurisy.	C	Condemn	Affected parts	
Trachea	See disposition of lungs, save trachea for edible purposes where the lung set meets edible criteria.	CS			
Bruises	Extensive.	C	Condemn	Carcass	
Lungs	Edible from skin-on animals, scar tissue without active inflammation and no evidence of thoracic exudate.	PG	Pet Food	Lungs	
Sarcocysts	Generalised.	S	Pet Food	All	
Sarcocysts	Less severe or localised.	S	Pet Food	Affected tissue	
Peritonitis	Chronic.	S	Condemn	Peritoneum	Company to strip
Lungs	Severe pneumonia or large and/or multiple abscesses.	S	Condemn	Lungs	
Tuberculosis	Any tuberculous lesion which is acute and actively progressive.	CD	Condemn	All	

Disease or Defect	Details	Livestock class	Disposition	Parts of slaughtered animal	Comments
Tuberculosis	The lesions are generalised, ie when they are distributed in a manner made possible by haematogenous spread.	CD	Condemn	All	
Tuberculosis	There is associated cachexia.	CD	Condemn	All	
Tuberculosis	A lesion is found in any part of the carcass, liver or spleen but not including the head.	CD	Condemn	All	
Tuberculosis	The lesions are extensive in the tissue of either the thoracic or abdominal cavities, including "grapes".	CD	Condemn	All	
Tuberculosis	Head lnn.	CD	Condemn	Head, tongue	
Tuberculosis	Mesenteric lnn.	CD	Condemn	Abdominal viscera	
Tuberculosis	Hepatic lnn.	CD	Condemn	Carcass, head, tongue, viscera	
Tuberculosis	Bronchial lnn.	CD	Condemn	Pluck	
Tuberculosis	Mediastinal lnn.	CD	Condemn	Pluck	
Tuberculosis	Head lnn Mesenteric lnn.	CD	Condemn	Head, tongue, abdominal viscera	
Tuberculosis	Head lnn, Bronchial lnn.	CD	Condemn	Head, tongue, pluck	
Tuberculosis	Head lnn, Mesenteric lnn, Bronchial lnn.	CD	Condemn	Head, tongue, abdominal viscera, pluck.	
Tuberculosis	Head lnn, Mesenteric lnn, Mediastinal lnn.	CD	Condemn	Head, tongue, abdominal viscera, pluck.	
Tuberculosis	Head lnn, Mesenteric lnn, Bronchial lnn, Mediastinal lnn.	CD	Condemn	Head, tongue, abdominal viscera, pluck	
Tuberculosis	Mesenteric lnn, Bronchial lnn.	CD	Condemn	Abdominal viscera, thoracic viscera	

Disease or Defect	Details	Livestock class	Disposition	Parts of slaughtered animal	Comments
Tuberculosis	Mesenteric lnn, Mediastinal lnn.	CD	Condemn	Abdominal viscera, thoracic viscera	
Tuberculosis	Mesenteric lnn, Bronchial lnn, Mediastinal lnn.	CD	Condemn	Abdominal viscera, thoracic viscera	
Tuberculosis	Bronchial lnn, Mediastinal lnn.	CD	Condemn	Thoracic viscera	
Tuberculosis	Precrural lnn.	CD	Condemn	All	
Tuberculosis	Popliteal lnn.	CD	Condemn	All	
Tuberculosis	Anal lnn.	CD	Condemn	All	
Tuberculosis	Inguinal or Supramammary lnn.	CD	Condemn	All	
Tuberculosis	Ischiatic lnn.	CD	Condemn	All	
Tuberculosis	Iliac lnn.	CD	Condemn	All	
Tuberculosis	Lumbar lnn.	CD	Condemn	All	
Tuberculosis	Renal lnn.	CD	Condemn	All	
Tuberculosis	Sternal lnn.	CD	Condemn	All	
Tuberculosis	Prepectoral lnn.	CD	Condemn	All	
Tuberculosis	Prescapular lnn.	CD	Condemn	All	
Tuberculosis	Atlantal lnn.	CD	Condemn	Head, tongue	
Tuberculosis	Any lesion.	SD	Condemn	All	
Tuberculosis	Liver, spleen, kidneys and/or associated lnn, which is acute/invasive and the source of septicaemia/bacteriaemia.	P	Condemn	All	Lesions in the peripheral lymph nodes eg prescapular, precrural, superficial inguinal/ supramammary and popliteal lymph nodes are not necessarily of haematogenous spread.
Tuberculosis	Lesions at multiple tissue sites, and one (or more) occur in the liver, spleen, kidneys and/or associated lymph nodes.	P	Condemn	All	

Disease or Defect	Details	Livestock class	Disposition	Parts of slaughtered animal	Comments
Tuberculosis	Lesions are extensive in either the thoracic and/or the abdominal cavities.	P	Condemn	All	
Tuberculosis	Concurrent presence of cachexia.	P	Condemn	All	
Tuberculosis	Organ or part or corresponding lymph nodes.	P	Condemn	Affected organs or parts	
Tuberculosis	Head lnn.	P	Condemn	Lesion and adjacent lnn	If cannot be removed without contamination of surrounding tissue condemn head.
Tuberculosis	Lung lnn	P	Condemn	Lungs	Heart and liver also condemn if not separated from pluck prior to examination and cross-contamination has occurred subsequent to evisceration.
Tuberculosis	Mesenteric lnn	P	Condemn	Intestines and mesentery	Other GI tissues condemned if contamination has occurred subsequent to evisceration.
Tuberculosis	Carcass lnn, not involving surrounding tissue.	P	Condemn	Affected lnn	
Tuberculosis	Carcass lnn and extension involving surrounding tissue.	P	Condemn	Affected part of the carcass	
Tuberculosis reactor	No lesions.	CD	As tuberculous meat		
Suppurating lesions	Lesions with systemic involvement.	C	Condemn	Carcass	
Mastitis	Chronic mastitis.	P	Condemn	Udder	
Testicle	Active inflammatory condition, including inflammation of the epididymus, chronic inflammatory condition of the epididymus, neoplasms, haematoma.	All	Condemn	Affected organ	

Disease or Defect	Details	Livestock class	Disposition	Parts of slaughtered animal	Comments
Neoparasec lesion		CSG	Condemn	Affected parts	
Inflammation	Haemorrhagic, gangrenous and other acute inflammations of the GI tract.	B	Condemn	All	
Pneumonia	Subacute, localised.	B	Condemn	Lungs	
Pleural lesions	Non-infected due to trauma.	B	Condemn	Affected parts	
Arthritis	Acute inflammation and infection, including localised infectious arthritis and infectious polyarthritis. Excludes traumatic lesions.	B	Condemn	All	Excludes uncomplicated lesions
Nephritis	Acute, includes conditions with hyperaemic haloes around white spots on cortex.	B	Condemn	All	
Inflammation	Acute, eg fibrinous peritonitis and acute hepatitis.	B	Condemn	All	
Generalised conditions	Non-infectious such as jaundice, malignant neoplasms, generalised melanosis.	B	Condemn	All	
Bruises	When lesions affect the majority of the muscle masses in the hind and forequarters to a depth exceeding0.5 cm into musculature.	B	Condemn	All	
Bruises	With secondary carcass changes (eg oedema or generalised hyperaemia).	B	Condemn	All	

Disease or Defect	Details	Livestock class	Disposition	Parts of slaughtered animal	Comments
Immaturity	Includes musculature which is loose and flabby, generalised underdevelopment of the musculature, minimal fat deposits which appear brownish-red, gelatinous and oedematous.	B	Condemn	All	Vells may be saved under conditions specified in IS6
Navel Ill	Enlargement of the navel with no infection of the umbilical vessels or associated peritonitis. With or without a small amount of inflammation in the immediate area of the navel.	B	Condemn	Affected parts	
Omphalophlebitis	Infection of one or more of the umbilical vessels. Acute inflammation and/or active infection extending the total length of any vessel remnant	B	Condemn	All	
Omphalophlebitis	Infection of one or more of the umbilical vessels. Peritonitis associated with infection of an umbilical vessel.	B	Condemn	All	
Omphalophlebitis	Infection of one or more of the umbilical vessels. Resolved fibrous enlargement extending the total length of any vessel remnant.	B	Condemn/Pet food	Affected parts / Liver	

Disease or Defect	Details	Livestock class	Disposition	Parts of slaughtered animal	Comments
Omphalophlebitis	Infection of one or more of the umbilical vessels. Acute inflammation and/or active infection not extending the total length of any vessel remnant.	B	Condemn/Pet food	Affected parts / Liver	
Vell	Diseased.	B	Condemn	Vell	
Kidneys	White Spotted.	B	Condemn	Affected kidneys	
Abscess	Hepatic, which are not surrounded by hyperaemic halos, where there is no swelling of the liver or associated lymph nodes, and no involvement of other organs.	B	Condemn	Affected parts	
Bruises	If not warranting total condemnation.	B	Condemn	Affected parts	
Haematomas	Superficial haematomas in the pelvic area, resulting from ineffective closure of the umbilical arteries.	B	Condemn	Affected parts	
Miscellaneous	Non-infectious rare conditions affecting part of the carcass, such as melanosis, umbilical hernias, and localised white muscle disease.	B	Condemn	Affected parts	
Lungs	Inflammation, tumours or abscesses or any other diseases and defects that make it unsuitable for human consumption.	L	Condemn	Lungs	Notwithstanding the condemnation requirement, may be saved for human consumption after trimming adhesions indicative of resolved minor pleurisy.

Disease or Defect	Details	Livestock class	Disposition	Parts of slaughtered animal	Comments
Lungs	Pleural scar tissue if no active inflammation or thoracic exudate.	L	Pet Food	Lungs	
T. saginata	After removal of any suspected cyst.	C	Condemn	Head, tongue, heart, all other offal and viscera.	Special lab submission and other procedures apply (see Section 4.2).
Fat necrosis		All	Condemn	Affected parts	

In a few cases the organs affected are described in this column as well as diseases and defects. For example lungs, trachea, pizzle,

Codes:
All- All livestock classes
B- Bobby calves
C- Cattle
H- Horses
P- Pigs
L- Lambs
S- Sheep (lambs, adult sheep & goats)
G- Goats
D- Deer

Sometimes "/" has been used in both "Disposition" and "Parts of slaughtered animal". The text before (after) "/" in "Disposition" corresponds with the text before (after) "/" in "Parts of slaughtered animal".

Additional dispositions for Sheep/Goats and Lambs:

Carcasses with:

- broken, but healed ribs,
- non-active pleural adhesions and/or scar tissue,
- incidental missing superficial lymph nodes under options 2 and 3,

are passed for human consumption

Tb Surveillance & Submission Report

TB SURVEILLANCE & SUBMISSION FORM

Charge:	
AgriQuality	
MAF-VA	
Asure NZ	

P O Box 3412, Agriculture House, Johnston Street, Wellington
Phone (04)472-2858 Fax (04)473-8786

Bovine/Cervine Tuberculosis

Use for cattle or deer with suspect Tb lesions and for all Tb Reactors.

Submitter	Owner
Address	Address
Phone [Office] [Fax]	AHB Herd No. / MINDA No.

Surveillance Data

Premises Licence No.	Slaughter Date	No. in Line	No. with Lesions	Species		Slaughter Class		Date Sample Sent
				Dairy		Reactor		
				Beef		Non-Reactor		
				Deer				
				Other		Wild/Feral		

Kill No.	1	2	3	4	5
Official Reactor Id					
Animal Id					
Sex / Age					
Gross Diagnosis (Typical Tb T, Equivocal Tb E, NVL N)					

		Lesion	Sample	Culture	Lesion	Sample	Culture	Lesion	Sample	Culture	Lesion	Sample	Culture	Lesion	Sample	Culture
Lymph Nodes	Retropharyngeal A															
	Submaxillary B															
	Parotid C															
	Atlantal D															
	Mediastinal E															
	Tracheo bronchial F															
	Apical G															
	Ileo caecal H															
	Ileo jejunal I															
	Prescapular J															
Other	Liver K															
	Lung L															
	Skin M															
	Other															

Other lesions					

Technical Supervisor/Off-Chain Supervisor: stamp/signature/date

Pathologist	Date/Time Sample Received			

White: Copy to accompany samples **Yellow:** Copy to mail/fax to AgriQuality NZ **Green:** Submitter's copy

Issued: June 2002