

# **Manual 16**

## **Post-Mortem Inspection Procedures**

## **Notice of Copyright**

---

© Crown Copyright – Ministry of Agriculture and Forestry 2000

All rights reserved. No part of this publication may be reproduced or transmitted in any form or by any means, electronic, mechanical, photocopying, recording, or otherwise stored in any retrieval system of any nature, without the written permission of the copyright holders.

## **Review of Manual 16**

---

This standard shall be regularly reviewed according to a schedule held by New Zealand Food Safety Authority (Animal Products Group).

The co-ordinator welcomes suggestions for alterations, deletions or additions to this standard, to improve it or make it more suited to Industry needs. Suggestions should be sent to the co-ordinator on the form on Page P.3, together with reasons for the change and any relevant data.

The co-ordinator of this standard is:

Judy Barker  
Assistant Director (Animal Product Standards)  
New Zealand Food Safety Authority (Animal Products Group)  
PO Box 2835  
Wellington

Telephone: (04) 463 2606

Facsimile: (04) 463 2643

## Suggestions for Change

Name: \_\_\_\_\_  
Organisation: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
Email: \_\_\_\_\_  
Phone: \_\_\_\_\_ Facsimile \_\_\_\_\_  
*Manual 16: Post-mortem Inspection Procedures*

Section	Suggested Improvements

Signature:	Date:
Please post to: Assistant Director (Animal Products Standards) NZFSA (Animal Products Group) PO Box 2835 WELLINGTON	<b>Acknowledgement of receipt:</b>  Signature:  Date:

## Amendment Record

Amendments to this manual will be given a consecutive number and will be dated. Please ensure that all amendments are inserted, obsolete pages are removed, and the record below is completed.

Amendment No.	Date	Entered by	Amendment No.	Date	Entered by
1 Admt 1	19/12/00	MAF Food	26		
2 Admt 2	9/2/01	MAF Food	27		
3 Admt 3	24/7/01	MAF Food	28		
4 Admt 4	8/4/02	MAF Food	29		
5 Admt 5	10/6/02	MAF Food	30		
6			31		
7			32		
8			33		
9			34		
10			35		
11			36		
12			37		
13			38		
14			39		
15			40		
16			41		
17			42		
18			43		
19			44		
20			45		
21			46		
22			47		
23			48		
24			49		
25			50		

## Contents

<b>Notice of Copyright</b>	<b>1</b>
Review of Manual 16	2
Suggestions for Change	3
Amendment Record	4
Contents	5
<b>1. Introduction</b>	<b>1</b>
1.1 Legal basis	1
1.2 Definitions	2
<b>2. Post-mortem Meat Inspection Procedures</b>	<b>1</b>
Background	1
2.1 Ante-mortem inspection	1
2.2 Post-mortem inspection requirements	2
2.3 Inspection procedures	3
2.4 Documentation and approval of inspection procedures	4
<b>3. Dispositions</b>	<b>1</b>
Background	1
3.1 Dispositions of product and byproduct	1
3.2 Control of product	1
<b>4. Samples and Specifications</b>	<b>1</b>
General	1
4.1 <i>Echinococcus granulosus</i>	1
4.2 <i>Taenia saginata</i> and <i>Taenia solium</i>	2
4.3 <i>Brucella ovis</i> in deer	2
# 4.4 Deleted	3
4.5 New, emerging and suspect notifiable diseases	3
4.6 Suitability for human consumption	3
4.7 Educational	4
<b>5 Tuberculosis</b>	<b>1</b>
5.1 Introduction	1
5.2 Cattle and deer	1
Definitions and slaughter procedures	1
Approved Laboratories and costs of sampling	3
5.3 Pigs	4
5.4 Feral animals	5
5.5 Other species	5
5.6 Communication	5

<b>6</b>	<b>Disease and defect recording requirements</b>	<b>1</b>
	General	1
6.1	Farmed deer	1
6.2	Farmed and feral deer	4
6.3	Bobby calves	4
6.4	Sheep and lambs	6
Appendix 1: MAF Biosecurity Approved Laboratories		1
Appendix 2: Standards for Missing Tissues at Post-Mortem Meat Inspection and Presentation to Inspector		2
Appendix 3: Inspection Table		3
Appendix 4: Disposition Table		4
Appendix 5: Tb Surveillance & Submission Report		5

## 1. Introduction

The purpose of an inspection system is to minimise the number of people suffering from food-borne illnesses as a result of eating animal product. Ideally, the inspection system should be focused on the food-borne disease surveillance in humans and act in unison with other preventative measures. There is still considerable progress to be made in these areas. Wholesomeness is also a matter of consideration for post-mortem inspection.

This manual contains the New Zealand standards for post-mortem inspection of animal products. Due care should be taken to consult all relevant parts of this manual, other manuals, technical directives and the Meat Act and Regulations. This applies in particular to additional inspection and disposition requirements that are listed in the documentation of overseas market access requirements (Manual 12) and issues related to contamination (IS/IAS 5).

The previous manual for post-mortem inspection, the circulars and technical directives contained a lot of detail on procedures. This related to such activities as ticketing defective carcasses. To some degree this detail has been deleted to allow licensees, the inspection service and the MAF Verification Agency (MAF VA) to develop procedures appropriate for the premises where they work. Consequently, there will be a greater need for these parties to document the procedures that are specific to their premises. Not only will this be of assistance in identifying omissions in procedures but it is also necessary in order to establish compliance with requirements.

Please note the flexibility does not apply to the actual inspection procedures (view, palpate, incise etc.) and the dispositions which are listed in the Tables. Details of the relationship between the inspection service and MAF VA are in TD 99/165. Authorities and qualifications required for performing duties related to post-mortem inspection are described in other specifications (eg TD 98/133).

### 1.1 Legal basis

This manual specifies the criteria for post-mortem inspection as required by Regulation 123 of the Meat Regulations 1969 and Regulation 112 of the Game Regulations 1975.

## 1.2 Definitions

**Approved Laboratory** is a MILAB laboratories (see the MAF website, [www.maf.govt.nz](http://www.maf.govt.nz)); laboratories approved by MAF Biosecurity Authority (MAF BA) (see Appendix 1); and laboratories approved by the Director General (eg AgriQuality National Chemical Residue Laboratory, Wallaceville)

**Batch inspection** is the inspection of tissues that have been placed in a lot before inspection and where the identity of the individual animal from which the tissue was obtained can no longer be established.

**Inspection** is a set of procedures to determine whether product or byproduct is fit for intended purpose

**Inspection Service** is the organisation that provides the mandatory ante and post-mortem inspection service to the New Zealand meat industry as provided for in the Meat Act 1981. The delivery of this service is in accordance with MAF Food Assurance Authority (MAF Food) (Animal Products) standards and procedures.

**Suspect** is an animal or line of animals that displays symptoms or is suspected of having diseases or defects that require the awareness of the post-mortem inspector or the company. This may be because the suspected diseases or defects may affect disposition or because of the risk of contamination. Included are

- animals with clinical disease
- Tb reactors
- animals with declarations of disease by veterinary clinicians or farmers
- animals from chemical residue or disease surveillance lists.

**Wholesomeness** in relation to any regulated product, means that the product does not contain or have attached to it, enclosed with it, or in contact with it anything that is offensive, or whose presence would be unexpected or unusual in product of that description.

## 2. Post-mortem Meat Inspection Procedures

### Background

Post-mortem inspection procedures are to be applied in such a manner to carcasses, heads and viscera that a judgement can be made as to their fitness for intended purpose.

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

Some inspection procedures lead to handling of product. This results in potential cross-contamination of the product, which should be minimised.

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

### 2.1 Ante-Mortem Inspection

Animals shall have been subjected to ante-mortem inspection before receiving post-mortem inspection and evidence of this shall be available. Before performing post-mortem inspection, the meat inspector shall be provided with information regarding the status of animals, including

- suspect animal and reasons for being suspect
- Tb reactor
- chemical residue list
- Neoparasec vaccinated
- disease surveillance suspect list
- any relevant issues described in the vendor declaration form.

There are some exclusions from the requirements for ante-mortem inspection. One example is game.

Where farmed animals are presented as feral animals they are to be condemned. Inspectors are to record clearly and comprehensively on what they based their opinion that the condemned animal had been a farmed animal rather than game.

## 2.2 Post-Mortem Inspection Requirements

Animal products shall be inspected in accordance with this post-mortem inspection specification before they are considered fit for intended purpose. The inspection requirements described in the Inspection Table (Appendix 3) are based on current practice and scientific knowledge; any amendment to these standard inspection requirements will be based on risk analysis and advances in the science of meat hygiene.

Inspectors are authorised to make such incisions and inspections as are essential to determine the presence, character and extent of any condition that may have a bearing on the disposition of a carcass or any of its parts. This includes such issues as requesting that a company splits the spinal column of a pig if spinal abscesses are suspected.

Animals shall be slaughtered and dressed so that all prescribed parts of the animal required for inspection are positively identified with the carcass from which they were removed. This identification shall be maintained at least until routine main chain inspection has been completed and the decision on disposition or further inspection has been made.

Batch system inspection is inspection of tissues where the identity of the animal from which the tissues have been derived can no longer be unequivocally established. Batch inspection has been used for such tissues as blood. This system of inspection may be used where physically keeping the tissue with the originating carcass and viscera is impractical or expensive. It must remain possible to identify the group of animals from which the tissues were derived.

A critical issue of batch inspection is batch disposition. If a carcass from such a group is condemned *in toto* (excluding for contamination), all tissues in the batch must be condemned. If a defect in a batch is such that it would result in the condemnation of a carcass or viscera (indicator function), all carcasses or viscera shall be condemned.

The Technical Supervisor of MAF VA shall approve batch system inspections before implementation. Other factors such as the time within which these products are to be placed under refrigeration should be considered when approving this system (see IS 6/IAS 6).

Procedures for delayed inspection will follow.

## 2.3 Inspection Procedures

A table with requirements for the presentation of tissues to the inspector is displayed in Appendix 2, as is a table with the standard regarding missing tissues.

Inspection is performed in accordance with several procedures. There are procedures designed to detect product that does not meet a standard at the initial stage on the main chain. These procedures also include random sampling of product for disease or chemical residue surveillance purposes. The result of this initial routine inspection or sorting process is to identify product that is judged fit for intended purpose and can be disposed of accordingly.

Diseases or defects detected by the inspector need to be addressed in accordance with the Disposition Table (Appendix 4). It is the responsibility of the company and the inspection service to have a system in place that ensures that these diseases and defects are trimmed either on the main chain or on the retain rail.

Once the disease or defect has been remedied, re-inspection by the inspection service shall take place. The re-inspection only needs to apply to the defect that had been identified. The inspector is to indicate all defects that need to be addressed. If this is not practical, a system is to be in place indicating what (re-) inspection procedures are required, for example, re-inspection of the whole carcass.

In some cases, MAF approved ancillary areas may be used instead of addressing the defects on the main chain or the retain rail.

At times the product needs to be retained for an extended period of time before the disposition following specific tests can occur. An example of such a situation is retaining product for laboratory testing for Tb, or cestodes. The "Disease Surveillance Suspect List" can be found at <http://www.maf.govt.nz/meatdoc/meatman/man16/dis-suspectlist.htm> where properties or geographic areas which are suspect of harbouring certain diseases (eg *T. saginata*, hydatids) are listed.

In case of the receipt of a suspect line, telephone Peter van der Logt, MAF Food, (04) 474 4100 for details of the required inspection procedures. The sorting of these animals usually takes place in the lairage. There shall be procedures to ensure the relevant data is made available to the post-mortem meat inspectors. Retained product shall follow the requirements of IS/IAS 6.

## 2.4 Documentation And Approval Of Inspection Procedures

There is no prescribed sequence of procedures for inspecting product. It is permitted to describe various ways of performing inspection at a premises (eg inspection for left-handed or right-handed inspectors). An acceptable way of describing the sequence of inspection procedures is to group the various procedures in a number of categories. The procedures within each category can be performed in random order but they must be performed before or after procedures in other categories. For instance three categories A, B and C might be created. Categories B must always be performed after Category A but before Category C. The sequence of inspection within Category B need not be defined. The inspection for each animal must be concluded before any parts are removed from the slaughterboard, except where this manual or other specifications detail otherwise. The methods of inspection shall minimise redistribution of contamination and cross-contamination.

There must be effective communication between inspectors so that all relevant information is available to inspectors to make a final post-mortem judgement. For example, if a meat inspector condemns an animal in its entirety, no parts of this carcass will inadvertently have been mixed with passed product. (However, see the note on batch systems under Post-mortem inspection requirements, 2.2).

The inspection service shall document the details of inspection as relevant to the premises. These details will include

- notification of suspect animals;
- the sequence(s) of inspection procedures;
- any specific inspection procedures relating to overseas market access requirements;
- ways of communication between post-mortem inspectors;
- ways of communication between ante and post-mortem inspectors;
- confirmation of the ante-mortem status of animals to the post-mortem inspectors;
- handling of increased workload due to a high prevalence of diseases or defects;
- the frequency of hand-washing, knife-sterilising and other hygiene measures of meat inspectors;
- identification of diseases and defects for trimming, retain and re-inspection purposes;
- the collection and dispatch of diseases and defects information;
- the use of MAF-approved ancillary areas;
- procedures for product that is retained for extended periods (i.e. retained product not covered by main chain, retain rail and ancillary areas procedures);

- batch inspection systems;
- a monitoring system of meat inspector performance;
- a system that ensures all relieving meat inspectors are familiar with and competent in all local procedures (on and off chain) and has records to substantiate the process and
- any other standards required by TD 99/165 as appropriate to this documentation.

These procedures shall be subject to approval by the MAF VA Technical Supervisor. Where the inspection service has an agreed national system with MAF VA or MAF Food, there is no need for a premises-specific approval (i.e. the Technical Supervisor does not need to validate this procedure). However, the MAF VA Technical Supervisor must verify that the on-plant system is in concordance with the national system and sign off to this effect.

## **3. Dispositions**

### **Background**

Disposition of animal products following post-mortem inspection shall ensure that product is fit for intended purpose. The Disposition Table (Appendix 4) contains the dispositions that shall be used. In formulating the dispositions, MAF Food 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 shall be made clear by the meat inspector. 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 shall be given to the possibility of the tissue being an indicator tissue for disease in other parts of the carcass.

### **3.1 Dispositions of product and byproduct**

See the Disposition Table (Appendix 4) for the dispositions to be used.

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

The inspection services shall have a programme in place to monitor the performance of the meat inspectors and MAF VA shall verify this programme.

### **3.2 Control of product**

Control of product occurs in various ways before being released.

Product that needs trimming and re-inspection is handled on the main chain or diverted to the retain rail and remains under the control of the inspection service until the defects have been removed. This process usually takes only a short period of time. A documented system shall 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 is to be approved by the Technical Supervisor of MAF VA.

Lines of animals with CLA, Sarcocysts, minor pleurisy or grass seeds or which have been vaccinated with Neoparasec may be transferred to MAF-approved ancillary areas for trimming and re-inspection. Details of MAF-approved ancillary facilities are detailed in IS 5/IAS 5 sections 24.4 and 24.5. Any system for dealing

with product in ancillary areas is to be approved by the Technical Supervisor of MAF VA.

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 or *T. saginata*). This product is to be retained in a secure manner by the inspection service (eg in a lockable cage or rail) in a different part of the premises. Inventory records of such product shall be maintained by the inspection service.

Where product needs to be re-examined, the licensee shall ensure that the conditions under which occurs are adequate for the purpose (see IS 6/IAS 6). Documentation is to be available describing how the licensee and the inspection service exercise control over such product.

See IS 5/IAS 5 for details of dealing with condemned materials and pet food.

## 4 Samples

### General

Samples are to be collected for public health protection and animal health surveillance. This section excludes requirements for Trichinosis, ISLs, species verification and chemical residues, which are discussed in other publications, and for Tb, which is addressed in the next chapter.

Samples are to be collected, dispatched and acted upon in accordance with TD 99/165.

Lesions are only to be sent to laboratories that are approved for the relevant category of testing.

The Laboratory Submission Report is to be filled in completely. Accurate details of the owner and the age of the animal are of particular importance for trace-back purposes. Submission forms can be obtained from the appropriate laboratories.

Send copies of the submission forms and laboratory reports to the people as listed below. It is important that copies of these reports are sent, as they will trigger investigations of positive cases.

### 4.1 *Echinococcus granulosus*

Every suspect hydatid cyst is to be submitted for laboratory diagnosis. Lesions are not to be incised deliberately. Submit the lesion(s) in 10% formalin. If there are more than five suspect lesions in a line of animals, retain the lesions and telephone Assistant Director (Monitoring and Review) (04) 463 2610 for further instructions.

Copies of submission forms and laboratory reports of suspect *E. granulosus*, regardless of whether or not they have been confirmed, are to be sent by the submitter within one week of receiving the lab report to Assistant Director (Monitoring and Review), NZFSA, PO Box 2835, Wellington or fax (04) 463 2643.

Approved laboratory: Gribbles Veterinary Pathology Hamilton.

Courier costs are to be charged by the submitter to Roger Poland, Programme Coordinator, Surveillance, MAF BA, PO Box 2526, Wellington.

Laboratory costs are to be charged by the laboratory to Roger Poland, Programme Coordinator, Surveillance, MAF BA, PO Box 2526, Wellington.

## 4.2 *Taenia saginata* And *Taenia solium*

Every suspect *T. saginata* and *T. solium* is to be submitted for laboratory diagnosis. Lesions are not to be incised deliberately. If there are more than five suspect lesions in a line of animals, retain the lesions and telephone Assistant Director (Monitoring and Review) (04) 463 2610 for further instructions.

Lesions suspected of *T. solium* are a new addition to suspect lesions that are to be submitted.

The suspect lesions of *T. saginata* and *T. solium* must be sent **chilled** and should not be incised deliberately. Do **not** send suspect *T. saginata* or *T. solium* lesions in formalin as this interferes with DNA testing. Lesions shall 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 where suspect lesions have been found and the number of lesions. This applies to detection on post-mortem inspection as well as in the boning room.

Copies of submission forms and laboratory reports of suspect *T. saginata* or *T. solium*, regardless of whether or not they have been confirmed, are to be sent by the submitter within one week of receiving the lab report to Assistant Director (Monitoring and Review), NZFSA, PO Box 2835, Wellington or fax (04) 463 2643 within one week of receiving the lab report.

Approved laboratory: Gribbles Veterinary Pathology Hamilton.

Laboratory costs are to be charged by the laboratory to Assistant Director (Monitoring and Review), NZFSA, PO Box 2835, Wellington.

Courier costs are to be charged by the submitter to Assistant Director (Monitoring and Review), NZFSA, PO Box 2835, Wellington .

## 4.3 *Brucella ovis* In Deer

Deer testicles with evidence of epididymitis or orchitis are to be sent for laboratory confirmation of *B. ovis*. The whole fresh testicle(s) are to be chilled. When several animals in a line are affected, no more than three representative samples from the line are to be sent for culture.

Copies of submission forms and laboratory reports of suspect *B. ovis*, regardless of whether or not they have been confirmed, are to be sent by the submitter within one week of receiving the laboratory report to Roger Poland, Programme Coordinator, Surveillance, MAF BA, PO Box 2526, Wellington.

Approved laboratories: all MAF BA approved laboratories.

Laboratory costs are to be charged by the laboratory to Roger Poland, Programme Coordinator, Surveillance, MAF BA, PO Box 2526, Wellington.

Courier costs are to be charged by the submitter to Roger Poland, Programme Coordinator, Surveillance, MAF BA, PO Box 2526, Wellington.

#### #4.4 Deleted

#### 4.5 New, Emerging And Suspect Notifiable Diseases

A number of premises will participate in an ongoing survey of new and emerging diseases. The survey will consist of the submission of 50 unusual lesions per year from 10 premises (8 MEs, 2 DSPs, equal numbers from the North Island and South Island,) each submitting up to 5 lesions per year. The inspection service at the participating premises will be notified on an annual basis.

Retain the carcass and offal, contact the nearest MAF BA approved laboratory and ask which samples are to be collected, and the method of collection.

Premises not participating in this survey can contact Roger Poland, Programme Coordinator, Surveillance, (phone 04 4744100), to ask for advice unusual lesions are detected.

Regardless of participation in this survey:

At plants where a veterinarian is present, if an unusual lesion is detected on post-mortem inspection the inspection service must consult the veterinarian regarding the findings.

In the case of a suspect notifiable disease, follow instructions in accordance with the provisions of the Biosecurity Act (1993). **To report suspected exotic diseases in animals, please phone toll free, all hours 0800 809 966.**

Approved laboratory: participating premises will be notified of the approved laboratory.

Inspection service costs are to be charged by the inspection service to Roger Poland, Programme Co-ordinator, Surveillance, MAF BA, PO Box 2526, Wellington.

Courier costs are to be charged by the submitter to Roger Poland, Programme Co-ordinator, Surveillance, MAF BA, PO Box 2526, Wellington.

Laboratory costs are to be charged by the laboratory to Roger Poland, Programme Co-ordinator, Surveillance, MAF BA, PO Box 2526, Wellington.

#### 4.6 Suitability For Human Consumption

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

Approved laboratory: as appropriate.

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

---

## **4.7 Educational**

Procedures are to be in accordance with MAF VA or the inspection service's specifications.

Approved laboratory: as appropriate.

MAF VA or the inspection service pay the laboratory and courier cost.

## 5 Tuberculosis

### 5.1 Introduction

Tuberculosis plays a prominent role in the New Zealand meat inspection 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 the Animal Health Board. The slaughter of reactor animals and the use of post-mortem inspection slaughterhouse results for epidemiological purposes are important aspects of this strategy.

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

### 5.2 Cattle And Deer

#### Definitions and slaughter procedures

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.

The slaughter procedures for tb reactors and the branding of Tb carcasses are to be in accordance with IS 5/IAS 5.

The procedures for retained Tb meat are to be documented in accordance with the section on Documentation and approval of inspection procedures.

#### 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 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.

In the case of **deer**, if only the ileo caecal lymph nodes were affected and if the originating property had been confirmed in the last twelve months as being positive for Johne's disease, then these lesions need not be submitted to a laboratory and the lesions will be considered negative for Tb.

Animal ID	Lesion			
	1	2	3	4 or more
1	Submission compulsory: AHB/AgriQuality will pay the costs of the histology.			Submission optional: licensee, MAF or Inspection Service required to pay the cost of additional histology.
2				
3				
4	Submission optional Licensee, MAF or Inspection Service pay Animal is considered to have Tb unless cleared by a laboratory test.			
5				
6				
>6	Submission optional Licensee, MAF or Inspection 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.			

If there are 4 or more suspect lesions in an animal, then the most typical lesions for Tb on gross examination are to 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 should 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 should be stored at 5°C 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 should be frozen at a temperature of -12°C 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	Export (Not for Tb reactors)
Suspicious	Negative	Local / Condemn*

Typical	Negative	Local / Condemn*
Typical	Positive	Local / 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 should 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

# Assistant Director (Monitoring and Review) NZFSA, PO Box 2835, Wellington.

There is no requirement for MAF VA or the inspection service to postpone making a judgement if AgriQuality requests culturing, but MAF VA or the inspection service may decide to postpone until all information is available to them.

The Disposition Table (Appendix 4) contains details of disposition of Tb meat.

### Approved Laboratories and costs of sampling

# Approved laboratories: Gribbles Veterinary Pathology Laboratories Auckland, Hamilton and Palmerston North for North Island premises and LABNET Invermay for South Island premises.

Tb samples are sent to laboratories for various reasons, eg disease control/eradication, public health protection, and training.

The **Animal Health Board**, through its agent **AgriQuality**, will pay for the courier costs and the histopathology of a maximum of three animals per line and three samples from each of these three animals. AgriQuality may request Wallaceville to perform cultures or PCR testing of suspect lesions. AgriQuality does not pay for culturing or PCR testing requested by MAF VA or the Inspection Service.

Where the costs of samples are **not covered by the AHB / AgriQuality** the following shall apply.

In the case of public health protection and market access, samples are sent to enable a judgement on whether or not the product is tuberculous. The submitter may recover the costs of sampling and couriering from the **licensee**. The name of the client for the laboratory to bill must be clearly indicated on the submission form. If the licensee does not wish to pay for the performance of the test and no tests are performed, the lesion(s) will be considered tuberculous and the product will be disposed of accordingly.

A sample may be submitted for training purposes in which case the **inspection service** or **MAF VA** pay the costs. The name of the client for the laboratory to bill must be clearly indicated on the submission form.

The cost of keeping any suspect product in storage is a commercial matter to be resolved between the owner of the meat and the owner of the storage space.

### 5.3 Pigs

Samples of carcasses / viscera that are the subject of pending condemnation judgements shall 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 shall be submitted for laboratory confirmation by histopathological examination and culture.

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

## 5.4 Feral Animals

Feral pigs, deer, chamois, thar, goats, hares and rabbits are at times submitted for processing. Any suspect Tb lesions are to be submitted in accordance as per section 5.2.

Costs: see section 5.2, Cattle and deer.

## 5.5 Other Species

Any suspect Tb lesions are to be submitted to a laboratory as per section 5.2.

Costs: see section 5.2, Cattle and deer.

Where Tb lesions are detected in other species, the submitter is to notify Assistant

# Director (Monitoring and Review), telephone 04 463 2610.

## 5.6 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 inspection.

The Tb Surveillance and Submission Form (Appendix 5) will be filled out. A copy of this form is to be mailed or faxed to the AgriQuality veterinarian in the district relating to the owner. In those circumstances when MAF VA or the inspection service are uncertain to which AgriQuality office the information relates, the form may be mailed or faxed to:

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

Fax: 07 838 5895

South Island: Tb Bureau, AgriQuality 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 inspection is to be recorded on the submission form which is to be sent to AgriQuality.

The laboratory will send the results to the submitter (i.e. the inspection 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, AHB, laboratories and field staff of AgriQuality, and veterinary clinical practitioners are outside the scope of this standard.

## 6. Disease and defect recording requirements

### 6.1 General

The collection of disease and defect information by the inspection service is required to monitor and improve inspection 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 Inspection Table (Appendix 3) contain the categories of diseases and defects that are to be **collected and made available to NZFSA**. 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 feral deer and ovines. Other species and more details regarding feral deer and ovines will follow in due course.

### 6.2 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 meat inspection 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. The statement of VISC IAS 5, 12.2:

Carcasses will be passed if they are:

- free from diseases and defects, apart from minor bruising (<6 lesions of maximum 50 mm greatest dimension and 25 mm depth), and..

is replaced by:

Carcasses will be passed if they are:

- free from diseases and defects, apart from minor bruising (< 10 cm in its greatest dimension and < 0.5 cm deep), and ..

Company responsibilities with regard to bruising are detailed in VISC IAS 5. 15.1 "After carcass inspection company personnel shall attend to passed carcasses by removing: (b) minor bruising before the carcass leaves the slaughterfloor". 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 broken 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 meat inspection 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 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 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 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-inspection, 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.

## **6.3 Farmed and Feral 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 feral:

- Date of inspection.
- Number of affected male deer in this line.
- Number of male deer in this line. Farmed or feral deer

If farmed deer:

- Name of the owner.
- Address.
- Further clarification of address if required.
- Town.

If feral deer:

- Area where the animal(s) were derived from.
- Total number of feral 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 VISC IAS 5. This standard remains unchanged.

#### **6.4 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 III**

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

### **Pneumonia**

- Pneumonia.

## **6.5 Sheep And Lambs**

Differences in requirements for recording and detaining lamb and sheep carcasses.

Where *T. ovis* (*C. ovis*) cysts or Caseous lymphadenitis (CLA) lesions are detected anywhere in the viscera of sheep, the carcass is to be diverted to the detain rail and the appropriate disease is to be recorded. In the case of lambs, the carcass is not to be retained for these reasons and it is not to be recorded. *T. ovis* lesions in the diaphragm of lambs (regardless whether presented in the carcass or on the viscera table) are to be recorded and the carcass is to be retained for re-inspection.

## Appendix 1: MAF Biosecurity Approved Laboratories

- # Gribbles Veterinary Pathology Auckland  
35 O'Rorke Road  
Penrose  
PO Box 163-035  
Lynfield  
AUCKLAND  
Tel: 09 526 4560 Fax: 09 526 4569
- # Gribbles Veterinary Pathology Hamilton  
East Street  
PO Box 14 103  
HAMILTON  
Tel: 07 834 1799 Fax: 07 856 8797
- # Gribbles Veterinary Pathology Palmerston North  
142 Botanical Road  
PO Box 536  
PALMERSTON NORTH  
Tel: 06 356 7100 Fax: 06 357 1904  
  
Alpha Scientific Ltd  
141 Ellis Street  
HAMILTON  
Tel: 07 846 2266 Fax: 07 846 2346
- LABNET Invermay  
# Invermay Campus  
Puddle Alley  
PO Box 371  
MOSGIEL  
Tel: 03 489 4600 Fax: 03 489 8576
- LabWorks Animal Health  
# Ellesmere Junction  
Junction Road  
PO Box 113  
Lincoln University  
LINCOLN  
Tel: 03 325 3636 Fax: 03 325 3630

## Appendix 2: Standards for Missing Tissues at Post-Mortem Meat Inspection and Presentation to Inspector

### \* Standards for Missing Tissues at Post-Mortem Meat Inspection

Missing Tissue	Tissue Found	Tissue Not Found	Manual 12
1 kidney	Normal inspection judgement and disposition but condemn found tissues.	Re-inspect carcass and offal using normal inspection judgement and disposition.  If no evidence of systemic food safety or wholesomeness issues pass carcass and viscera for human consumption.	Can be passed for export if remaining kidney has no evidence of systemic condemnable lesion.
Other tissues requiring inspection			Not to be passed for export if tissue not found.
Any missing tissue If there is other evidence of a systemic condemnable condition.	Condemn all	Condemn all	

### \* Standards for Presentation to Inspector

	Shall	May	Must Not
<b>Kidney</b>	Enucleate	Separate from carcass	Remove or incise prior to inspection.  However, a superficial nick in the cortex of the kidneys is acceptable.
<b>Heart</b>		Separate from lungs	
<b>Liver</b>		Separate from viscera	
<b>Spleen</b>		Separate from viscera	
<b>Diaphragm</b>		Separate from carcass	
<b>Lymph nodes</b>			
<b>Carcass</b>		Trim contamination prior to inspection	Trim pathology prior to inspection
<b>Milky Udders</b>	Remove prior to inspection		
<b>Head</b>	Depends on species		
<b>Animal Tissues</b>	Ensure all relevant Animal Tissues are identified to one animal until final inspection unless there is an approved batch disposition programme for the unidentified tissues.		Remove edible parts prior to final inspection unless there is an approved batch disposition programme for those tissues.

\*

### **Appendix 3: Inspection Table**

It should be noted that when printing the .pdf files two documents are available. They are “Inspection Table” and “Inspection Table Notes”. The latter table contains details that relate to the first file. Both files should be considered concurrently when reading these files.

Appendix 3 - InspectionTable - Amendment 7 - October 2005

ID	Tissue	Cattle NZ	Cattle TB NZ see *1	Cattle T. saginata see *2	Farmed Deer NZ	Feral Deer NZ	Deer TB NZ see *3	Bobby NZ	Pigs NZ	Pigs TB NZ see *4	Lambs NZ	CLA see *5	Sheep NZ	Goats NZ	Game NZ	Vaccine for Johne's disease see *6	Ratites	Horses NZ
1	Abdominal cavity	V						VP			VP		VP	VP	VP			
2	Abomasum							V					V	V				
3	Anterior cervical Inn									I								
4	Anterior mediastinal In	I																
5	Atlantal Inn	I	I				I											
6	Axillae							V			V		V	V				
7	Back carcass							V			VP		VP	VP				
8	Bile duct (e)	VI 2									VP 1		VP	VP	PI			
9	Bile duct (i)	see edible									V 12		see edible	see edible	PI			
10	Brisket							V			V		V	V				
11	Bronchial Inn							VP	VPI 1	I	P 2		VP	VP	I			P
12	Buccal cavity							V										
13	Carcass Inn							VP 1							PI 2			
14	Caul Fat	V 1			V													
15	Diaphragm	VP 1		VP	V 2	V 2		VP	V		VP		VP	VP				V
16	Exposed lymph nodes cavities							VP 1										
17	Exposed lymph nodes heads							V										
18	External masseter	I 1																
19	External surfaces carcass	V			V	V 1			V						V			
20	External surfaces head							V										
21	Eyes	V			V	V							V	V				
22	Forelegs										V		V	V				
23	Forequarters							VP										
24	Front of hind legs										V		V	V				
25	Gall bladder	V						V										
26	Gastro-intestinal tract										V 1		V	V				V
27	Head (e)	V		VP	V	V			V 2		V 1		V 1	V 1			V	V
28	Head (i)	see edible		see edible	see edible	see edible			see edible		No 1		No 1	No 1			see edible	See edible
29	Head Inn							V 1	V									
30	Heart (e)	VPI 1		VP	VP 2	VP 23		VP	V		VP		VP	VP	VP 23		VP	VI 4

ID	Tissue	Cattle NZ	Cattle TB NZ see *1	Cattle T. saginata see *2	Farmed Deer NZ	Feral Deer NZ	Deer TB NZ see *3	Bobby NZ	Pigs NZ	Pigs TB NZ see *4	Lambs NZ	CLA see *5	Sheep NZ	Goats NZ	Game NZ	Vaccine for Johne's disease see *6	Ratites	Horses NZ
31	Heart (i)	see edible		see edible	see edible	see edible		see edible	see edible		V 1		see edible	see edible	VP 2		see edible	See edible
32	Hepatic Inn	I			I	I		I 2	VP	I	V 1		VP	VP	PI			VP
33	Hind legs							VP										
34	Iliac Inn		I		V	V	I		V	I	V	P	V	V				
35	Internal iliac Inn	I																
36	Internal pterygoid	I																
37	Internal surfaces carcass	V			V	V 1			V									
38	Intestines	V			V			V	V				V	V			V	
39	Ischiatic Inn		I				I				P	P	P	P				
40	Joints							VP	V		VP 1		VP	VP				VP 2
41	Kidneys (e)	VP			VP 1	VP 14		VP	V 1		V 123		VP 1	VP 1	VP 4		VP 5	VP 16
42	Kidneys (i)	see edible			see edible	see edible		see edible	see edible		V 12		see edible	see edible	VP		see edible	See edible
43	Left bronchial In	I			I	I												
44	Limb joints	V						VP										
45	Liver (e)	VP 1			VP 12	VP 124		VP 3	V 1	P	VP 1		VP 13	VP 13	VP 4		VP	VP
46	Liver (i)	see edible			see edible	see edible		see edible	see edible	P	V 12		see edible	see edible	VP 1		see edible	See edible
47	Lumber chain Inn	I	I		V	V	I			I								
48	Lungs (e)	VPI 1			VP 2	VP 24		VPI 1	VPI 3		VP		VP	VP	VP 4		VP	VPI 5
49	Lungs (i)	VPI 1			see edible	see edible		VP	VP		V		see edible	see edible	VP		see edible	VP
50	Mammary glands								VP 1									
51	Mediastinal Inn				I	I		VP	VPI 1	I	P 2		P	P	I			P
52	Mesenteric Inn	VPI 1			VP		I 3	VP	VP	I			VP 2	VP 2				V
53	Mesentery							V 1										V
54	Middle mediastinal In	I																
55	Nasal cavity							V										
56	Neck							V			V		V	V		PI 12		
57	Neural canal	V																
58	Oesophagus	VP		VP	V			V	V				VP	VP				V
59	Omasum												V	V				
60	Omental fat												V	V				
61	Omentum								V									
62	Oral Cavity	V			V	V		V										V
63	Pancreas	V			V			V					V	V				
64	Parotid Inn	I			I	I												P
65	Pelvic cavity							VP			V		V	V	VP			
66	Pericardium	VP			VP 2	VP 2		V	V		V 1		VP	VP	VP 2			V

ID	Tissue	Cattle NZ	Cattle TB NZ see *1	Cattle T. saginata see *2	Farmed Deer NZ	Feral Deer NZ	Deer TB NZ see *3	Bobby NZ	Pigs NZ	Pigs TB NZ see *4	Lambs NZ	CLA see *5	Sheep NZ	Goats NZ	Game NZ	Vaccine for Johne's disease see *6	Ratites	Horses NZ
67	Peritoneum	V			V	V 1			V						VP			V
68	Peritoneum, visceral												V	V				
69	Pizzle (e)	VP			VP	VP					VP		VP	VP				
70	Pizzle (i)	No			No	No					No		No	No				
71	Pleura	V			V	V 1			V						VP			V
72	Popliteal Inn		I				I			I	P	P	P	P				
73	Posterior mediastinal In	I																
74	Precrural Inn	P 1 & I 2	I		P	P	I			I	VP	I 3	VP	VP				
75	Prepectoral Inn		I				I			I								
76	Prescapular Inn	P 1 & I 2	I		I	I				I	P	I 3	P	P		I 4		
77	Rectal cavity										V 1		V 1	V 1				
78	Renal Inn	I	I		V	V	I		V	I								
79	Reticulum	VP			V								V	V				
80	Retropharyngeal Inn	I			I	I										V 1		P
81	Right apical In	I																
82	Right bronchial In	I			I	I												
83	Rumen	V			V								V	V				
84	Rumino-reticular junction	VP																
85	Scrotal area								VP 1									
86	Spinal column	V																
87	Spleen (e)	VP 1			V			VP	V		V		VP	VP			VP	V
88	Spleen (i)	see edible			see edible			see edible	see edible		No 1		see edible	see edible			see edible	See edible
89	Stomach								V									
90	Submaxillary Inn	I			I	I			I									P
91	Superficial inguinal Inn	I	I		P	P	I		VPI 1	I	VP	I 2	VP	VP				
92	Supramammary Inn	I	I		P	P	I		VPI 1	I	VP	I 2	VP	VP				V
93	Tail (e)																	
94	Tail (i)																	
95	Tendon (e)																	
96	Tendon (i)																	
97	Testicles (e)	VP 1			VP 1	VP 1		V	VP 1		V		VP 1	VP 1				
98	Testicles (i)	No			No	No	No	No	No		No		No	No				
99	Thoracic cavity	V						VP			VP		VP	VP	VP			
100	Thymus	V 1						V										
101	Tongue (e)	VP		VPI 2	VP	VP		VP	V		VP		VP	VP		P 1		VP

ID	Tissue	Cattle NZ	Cattle TB NZ see *1	Cattle T. saginata see *2	Farmed Deer NZ	Feral Deer NZ	Deer TB NZ see *3	Bobby NZ	Pigs NZ	Pigs TB NZ see *4	Lambs NZ	CLA see *5	Sheep NZ	Goats NZ	Game NZ	Vaccine for Johne's disease see *6	Ratites	Horses NZ
102	Tongue (i)	see edible		see edible	see edible	see edible		see edible	see edible		No 1		No 1	No 1		P 2		See edible
103	Tonsils	V 1			V 1	V 1		V 1										
104	Trachea (e)	VI 1			VI			VI 1	VPI 1		V 2		V 2	V 2			V	VI 3
105	Trachea (i)	V			V			V	V		V		V	V			see edible	V
106	Udder (e)	VPI																V
107	Udder(i)	No																See edible
108	Umbilical area							V										VP 1
109	Uterus	V			V				V									
110	Ventral surface abdomen										V		V	V				
111	Ventral surface carcass							V										
112	Mediastinum														V			
113	Anal Lnn											P 1						
114	Axillary Inn															I 1		
115	Carcass			V													V2	V
116	Proventriculus																V	
117	Gizzard																V	
118	Abdominal air sacs																V	
119	Thoracic air sacs																V	
120	Gastric Inn																	V
121	Genital organs																	V 1
122	Pancreatic Inn																	V
123	Subrhomboid Inn																	I 1
124	Throat																	V 1
125	Shoulder																	VI 1
126	Ears							V										
127	Apical Inn				I			I										
128	Testicles (Integ)				P 1	P 1												
129	Tail (Integ)				No 1	No 1												
130	Tendon (Integ)				No 1	No 1												
131	Pizzle (Integ)				No 1	No 1												

\* 1  
For reactor animals or animals in which lesions suspicious of tuberculosis

\* 2  
Suspected T. saginata cysts. (Not suspect lines)  
Reinspection by

\* 3  
For animals in which lesions suspicious of tuberculosis are found and for Tb reactors.

\* 4  
Where Tb-like lesions are found in the carcass or viscera during

\* 5  
If CLA lesions detected on main chain and for lines suspected

#\* 6  
Vaccinated Sheep, Cattle, Goats and Deer.  
If the status of cattle, sheep (including lambs) deer and goats is unclear in respect of Johne's Disease vaccine status, they must be considered to

ID	Tissue	Cattle NZ	Cattle TB NZ see *1	Cattle T. saginata see *2	Farmed Deer NZ	Feral Deer NZ	Deer TB NZ see *3	Bobby NZ	Pigs NZ	Pigs TB NZ see *4	Lambs NZ	CLA see *5	Sheep NZ	Goats NZ	Game NZ	Vaccine for Johne's disease see *6	Ratites	Horses NZ
----	--------	-----------	---------------------	---------------------------	----------------	---------------	-------------------	----------	---------	-------------------	----------	------------	----------	----------	---------	------------------------------------	---------	-----------

tuberculosis are found.

by veterinarian or leading hand meat inspector if no veterinarian at the premises.

during routine inspection.

suspected to be heavily affected by CLA.

status, they must be considered to have been treated with Johne's Disease vaccine unless the operator can confirm by making appropriate enquiries that the animals have never been on a property where Johne's Disease vaccination is administered.

V = View  
P = Palpate  
I = Incise  
e = edible  
i = inedible  
Integ = Standard applies to product with some integument still attached  
1-6 = refer Appendix 3 Inspection Table Notes 1-6

Premises No.

Month Ending :

eg enter February 1998 as 2/98

		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						
<b>TOTAL</b>	<b>49</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>

Number slaughtered

Premises No.

Month Ending :

eg enter February 1998 as 2/98

		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						
<b>TOTAL</b>	<b>99</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>

Number slaughtered

Amendment 3 - July 2001

Premises DSP

Month - Year

eg enter February 1998 as 2/98

Total number of carcasses inspected

Total number of male deer inspected

\* Total number of male deer of which the testicles have been inspected.

including condemned carcasses

	Number of Affected Deer	Number of Condemn ed deer	Percentage Prevalence
Arthritis_Infectious			
Arthritis_Non-infectious			
Bruises_Forequarter			
Bruises_Middle			
Bruises_Hindquarter			
Bruises			
Wounds			
<i>E. granulosus</i>			
ISL			
Neoplasms			
Peritonitis			
Pleurisy_Broken rib			
Pleurisy_Other			
Pyogenic Lesions			
Septicaemia			
Tuberculosis			
Other Causes			
Orchitis/epididymitis			

Note that the column with affected deer includes condemned animals

Premises No.

Month Ending :

or Email:

	FERAL DEER		FERAL PIGS		FERAL 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 Inspected

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 Inspected

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 Inspected

# Cervine orchitis/epididymitis form

Number of inspected feral male deer this month

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

Comments

Appendix 3 - Inspection Table Notes - Amendment 7 - October 2005

ID	Tissue	Notes 1	Notes 2	Note 3	Note 4	Note 5	Note 6
1	Abdominal cavity						
2	Abomasum						
3	Anterior cervical Inn						
4	Anterior mediastinal In						
5	Atlantal Inn						
6	Axillae						
7	Back carcass						
8	Bile duct (e)	In conjunction with liver inspection	Incise major ducts anterior and posterior to the cystic duct.	See Liver			
9	Bile duct (i)	Carcass alone edible	In conjunction with liver				
10	Brisket						
11	Bronchial Inn	Incise if lungs are saved as edible	Only in the case of edible lungs				
12	Buccal cavity						
13	Carcass Inn	Exposed Inn	Carcasses detained for disease conditions				
14	Caul Fat	Lift and turn to view both sides					
15	Diaphragm	Lift to view the pleural cover.	Both sides.				
16	Exposed lymph nodes cavities	Abdominal, thoracic and pelvic cavities					
17	Exposed lymph nodes heads						
18	External masseter	Two incisions for EU market					
19	External surfaces carcass	Both skin-on and skinned carcass inspection					
20	External surfaces head						
21	Eyes						
22	Forelegs						
23	Forequarters						
24	Front of hind legs						
25	Gall bladder						
26	Gastro-intestinal tract	Not required to be manipulated, unless to view the spleen					
27	Head (e)	View the buccal cavity and the pharynx. The head does not need to be picked up.	Including exposed muscle surfaces				
28	Head (i)	If the head, tongue nor the brains are required for human consumption					
29	Head Inn	Exposed Inn					
30	Heart (e)	Opening of heart, then through septum, then additional incisions.	Outside surface	Must be inspected but cannot be used for edible purposes	Open the ventricles and cut through the interventricular septum lengthwise		
31	Heart (i)	Carcass alone edible	Outside surface				
32	Hepatic Inn	In conjunction with visceral surface of the liver	One incision in the largest hepatic lymph node.				
33	Hind legs						
34	Iliac Inn						
35	Internal iliac Inn						
36	Internal pterygoid						
37	Internal surfaces carcass	Both skin-on and skinned carcass inspection					
38	Intestines						
39	Ischiatic Inn						
40	Joints	Foreleg and hindleg	Young animals				
41	Kidneys (e)	Enucleate first	Lifted from viscera table	If in carcass VP	Must be inspected but cannot be used for edible purposes	View kidneys in situ and then View and Palpate kidneys after removal from the carcass	Incise entire kidney in grey and white horses
42	Kidneys (i)	Carcass alone edible	Observe on viscera table				
43	Left bronchial In						
44	Limb joints						
45	Liver (e)	The parietal and visceral surfaces	Make a longitudinal incision which passes through the major bile ducts, parallel to the long axis of the liver.	Especially the umbilical fissure.	Must be inspected but cannot be saved for edible purposes		
46	Liver (i)	Both sides	Carcass alone edible				
47	Lumber chain Inn						
48	Lungs (e)	Incise in their posterior third, perpendicular to their main axes. Inspect trachea and main branches of bronchi to edible standard.	View dorsal and diaphragmatic surfaces.	Transverse cut into the posterior third of the lung	Must be inspected but cannot be used for edible purposes	The main branches of the bronchi must be opened lengthwise and the lungs must be incised in their posterior third, perpendicular to their main axes	
49	Lungs (i)	A large incision along the length of each diaphragmatic lobe.	Lungs inspected to the edible standard (ID 48) can also be used for inedible purposes without additional procedures.				
50	Mammary glands	Adult breeding animals					
51	Mediastinal Inn	Incise if lungs are saved as edible	Only in the case of edible lungs				
52	Mesenteric Inn	Incise in cattle with lesions suspect of TB and those made SPVD	Palpate a representative proportion.	Farmed deer only			
53	Mesentery	Both surfaces.					
54	Middle mediastinal In						
55	Nasal cavity						
56	Neck	Palpation and deep incision of the muscles lateral and parallel to the ligamentum nuchae at or about the likely site of injection	Lengthen the incisions when suspicious the lesions have migrated along the lymphatics of fascial planes				
57	Neural canal						
58	Oesophagus						
59	Omasum						
60	Omental fat						
61	Omentum						
62	Oral Cavity						
63	Pancreas						
64	Parotid Inn						
65	Pelvic cavity						

ID	Tissue	Notes 1	Notes 2	Note 3	Note 4	Note 5	Note 6
66	Pericardium	In conjunction with heart inspection	Open pericardium				
67	Peritoneum	Both skin-on and skinned carcass inspection					
68	Peritoneum, visceral						
69	Pizzle (e)	Company check					
70	Pizzle (i)						
71	Pleura	Both skin-on and skinned carcass inspection					
72	Popliteal Inn						
73	Posterior mediastinal In						
74	Precurral Inn	Prime cattle and young bulls, see 2 for incise	Prime cattle and young bulls which are SPVD on AM or with tuberculous or actinoform lesions; young bulls if overlying tissue prevents effective palpation; all other cattle.	Can be performed by Company.			
75	Prepectoral Inn						
76	Prescapular Inn	Prime cattle and young bulls, see 2 for incise	Prime cattle and young bulls which are SPVD on AM or with tuberculous or actinoform lesions; young bulls if overlying tissue prevents effective palpation; all other cattle.	Can be performed by Company.	But axillary Inn if vaccinated in dewlap		
77	Rectal cavity	Put two fingers in the rectal cavity and pull the tail back. View the muscular groove on either site of the tail.					
78	Renal Inn						
79	Reticulum						
# 80	Retropharyngeal Inn	When saving head meats for human consumption					
81	Right apical In						
82	Right bronchial In						
83	Rumen						
84	Rumino-reticular junction						
85	Scrotal area	Palpate castration wounds and scars					
86	Spinal column						
87	Spleen (e)	Both sides					
88	Spleen (i)	Carcass alone edible					
89	Stomach						
90	Submaxillary Inn						
91	Superficial inguinal Inn	Incise in adult breeding animals	Can be performed by Company.				
92	Supramammary Inn	Incise in adult breeding animals	Can be performed by Company.				
93	Tail (e)	Company check					
94	Tail (i)	Company check					
95	Tendon (e)	Company check					
96	Tendon (i)						
97	Testicles (e)	Including the epididymis.					
98	Testicles (i)						
99	Thoracic cavity						
100	Thymus	Young cattle					
101	Tongue (e)	When saving head meats	Ventral longitudinal midline incision through the suspensory muscle				
102	Tongue (i)	If the tongue, the head, nor the brains are required for human consumption	When saving head meats				
103	Tonsils	As part of viewing the mucous membranes pharyngeal cavity and associated areas of the head					
104	Trachea (e)	Open trachea and main braches of the bronchi. Inspect the lungs to edible standard.	Do not save for human consumption if lung abnormalities that could involve the trachea.	If lungs are saved for human consumption			
105	Trachea (i)						
106	Udder (e)						
107	Udder(i)						
108	Umbilical area	Young animals					
109	Uterus						
110	Ventral surface abdomen						
111	Ventral surface carcass						
112	Mediastinum						
113	Anal Lnn	If still available					
114	Axillary Inn	In cattle vaccinated in the dewlap					
115	Carcass		All external and internal surfaces				
116	Proventriculus						
117	Gizzard						
118	Abdominal air sacs						
119	Thoracic air sacs						
120	Gastric Inn						
121	Genital organs	For stallions and mares					
122	Pancreatic Inn						
123	Subrhomboid Inn	Grey or white horses					
124	Throat	After freeing the tongue					
	Shoulder	View muscles of one shoulder beneath the scapular cartilage of grey or white horses after loosening the attachment					
125							
126	Ears						
127	Apical Inn						
128	Testicles (Integ)	May be palpated through scrotum and plastic bag					

ID	Tissue	Notes 1	Notes 2	Note 3	Note 4	Note 5	Note 6
129	Tail (Integ)	No requirement for inspection by the inspection service but instead quality check by the company. The product must have been derived from animals which have been passed as fit for human consumption					
130	Tendon (Integ)	No requirement for inspection by the inspection service but instead quality check by the company. The product must have been derived from animals which have been passed as fit for human consumption					
131	Pizzle (Integ)	No requirement for inspection by the inspection service but instead quality check by the company. The product must have been derived from animals which have been passed as fit for human consumption					

## **Appendix 4: Disposition Table**

Appendix 4 : Disposition Table - Amendment 6 - May 2003

Disease or Defect	Details	Livestock class	Disposition	Parts of slaughtered animal	Comments
Abrasions	Small to head.	C	Condemn	Affected parts	Inspector 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	
Arthritis	Acute polyarthritis.	CPS	Condemn	All	
	Number of affected joints in more than one limb or region.				
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
<i>Ascaris lumbricoides</i>	Minor blemishes (milk spots).	P	Condemn	Affected parts	
<i>Ascaris lumbricoides</i>	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	
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 inspection.	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

Disease or Defect	Details	Livestock class	Disposition	Parts of slaughtered animal	Comments
CLA	Four or more extensive lesions, affecting most of a lymph node on carcass and viscera inspection, soft wet lesions.	S	Condemn	All	
CLA	Four or more extensive lesions, affecting most of a lymph node on carcass and viscera inspection, 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	
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 to remove.		
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	
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 incisors.	CS	Pet food	Kidneys	
Kidneys	Cull velveted 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	Inspector 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	
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 lymph nodes.	
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	

Disease or Defect	Details	Livestock class	Disposition	Parts of slaughtered animal	Comments
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)
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.	CPS	Pet Food	Affected parts	
Parasites	Not harmful to humans, numerous parasitic lesions, Removal renders carcass unsightly.	CPS	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 MAF orASURE supervision
Pigmentation	Xanthosis and melanosis affecting bones, muscles and fat tissue generally.	CPS	Pet Food	Carcass	
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	<i>Oesophagostomum venulosum</i> , <i>Oesophagostomum columbianum</i> .	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.	CPB	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	
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	
<i>Stephanurus dentatus</i>	Kidney worm minor blemishes (milk spots).	P	Condemn	Affected parts	

Disease or Defect	Details	Livestock class	Disposition	Parts of slaughtered animal	Comments
<i>Stephanurus dentatus</i>	More extensive lesions.	P	Condemn	Liver	
<i>Stephanurus dentatus</i>	Perirenal fat, Sublumbar muscles.	P	Condemn	Affected tissue	
Suppurating lesions		C	Condemn	Affected parts	
<i>T. hydatigena</i>	Grossly affected livers.	S	Condemn	Liver	
<i>T. hydatigena</i>	More than six minor lesions.	S	Pet food	Liver	
<i>T. hydatigena</i>	Requiring up to six minor trims should be shallow and not larger in diameter than a 20 cent piece.	S	Condemn	Affected tissue	
<i>T. ovis</i>	Carcass judgement. More than 5 cysts in skeletal muscles excluding the diaphragm.	S	Pet food	Carcass	
<i>T. ovis</i>	In the heart, tongue or diaphragm.	S	Pet food	Affected organ	
<i>T. ovis</i>	Head and tongue.	S			See head and tongue judgements
<i>T. saginata</i>	< 3 cysts in the musculature of the carcass, head and tongue but excluding the heart.	C	Freeze	Meat	Based on laboratory results
<i>T. saginata</i>	> 2 cysts in the musculature of the carcass, head and tongue but excluding the heart.	C	Condemn	All	Based on laboratory results
<i>T. solium</i>		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	Inspector pass, company to remove
Abrasions	Part of the carcass only.	CP	Condemn	Affected parts	
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 a	Any tuberculous lesion which is acute and actively progressive.	C	Condemn	All	
Tuberculosis a	The lesions are generalised, ie when they are distributed in a manner made possible by haematogenous spread.	C	Condemn	All	
Tuberculosis a	There is associated cachexia.	C	Condemn	All	
Tuberculosis a	A lesion is found in any part of the carcass, liver or spleen but not including the head.	C	Condemn	All	
Tuberculosis a	The lesions are extensive in the tissue of either the thoracic or abdominal cavities, including "grapes".	C	Condemn	All	

Disease or Defect	Details	Livestock class	Disposition	Parts of slaughtered animal	Comments
Tuberculosis b	Head Inn.	C	Condemn	Head, tongue	Carcass domestic or export cooked/canned, not affected ofal cooking or pet food, applies only to localised chronic lesions that are not Tuberculosis a.
Tuberculosis b	Mesenteric Inn.	C	Condemn	Abdominal viscera	Carcass domestic or export cooked/canned, not affected ofal cooking or pet food, applies only to localised chronic lesions that are not Tuberculosis a.
Tuberculosis b	Hepatic Inn.	C	Condemn	Carcass, head, tongue, viscera	
Tuberculosis b	Bronchial Inn.	C	Condemn	Pluck	Carcass domestic or export cooked/canned, not affected ofal cooking or pet food, applies only to localised chronic lesions that are not Tuberculosis a.
Tuberculosis b	Mediastinal Inn.	C	Condemn	Pluck	Carcass domestic or export cooked/canned, not affected ofal cooking or pet food, applies only to localised chronic lesions that are not Tuberculosis a.
Tuberculosis b	Head Inn Mesenteric Inn.	C	Condemn	Head, tongue, abdominal viscera	Carcass domestic or export cooked/canned, not affected ofal cooking or pet food, applies only to localised chronic lesions that are not Tuberculosis a.
Tuberculosis b	Head Inn, Bronchial II.	C	Condemn	Head, tongue, pluck	Carcass domestic or export cooked/canned, not affected ofal cooking or pet food, applies only to localised chronic lesions that are not Tuberculosis a
Tuberculosis b	Head Inn, Mesenteric Inn, Bronchial Inn.	C	Condemn	Head, tongue, abdominal viscera, pluck.	Carcass domestic or export cooked/canned, not affected ofal cooking or pet food, applies only to localised chronic lesions that are not Tuberculosis a.
Tuberculosis b	Head Inn, Mesenteric Inn, Mediastinal Inn.	C	Condemn	Head, tongue, abdominal viscera, pluck.	Carcass domestic or export cooked/canned, not affected ofal cooking or pet food, applies only to localised chronic lesions that are not Tuberculosis a
Tuberculosis b	Head Inn, Mesenteric Inn, Bronchial Inn, Mediastinal Inn.	C	Condemn	Head, tongue, abdominal viscera, pluck	Carcass domestic or export cooked/canned, not affected ofal cooking or pet food, applies only to localised chronic lesions that are not Tuberculosis a
Tuberculosis b	Mesenteric Inn, Bronchial Inn.	C	Condemn	Abdominal viscera, thoracic viscera	Carcass domestic or export cooked/canned, not affected ofal cooking or pet food, applies only to localised chronic lesions that are not Tuberculosis a.
Tuberculosis b	Mesenteric Inn, Mediastinal Inn.	C	Condemn	Abdominal viscera, thoracic viscera	Carcass domestic or export cooked/canned, not affected ofal cooking or pet food, applies only to localised chronic lesions that are not Tuberculosis a.
Tuberculosis b	Mesenteric Inn, Bronchial Inn, Mediastinal Inn.	C	Condemn	Abdominal viscera, thoracic viscera	Carcass domestic or export cooked/canned, not affected ofal cooking or pet food, applies only to localised chronic lesions that are not Tuberculosis a.
Tuberculosis b	Bronchial Inn, Mediastinal Inn.	C	Condemn	Thoracic viscera	Carcass domestic or export cooked/canned, not affected ofal cooking or pet food, applies only to localised chronic lesions that are not Tuberculosis a.
Tuberculosis b	Precural Inn.	C	Condemn	All	
Tuberculosis b	Popliteal Inn.	C	Condemn	All	
Tuberculosis b	Anal Inn.	C	Condemn	All	
Tuberculosis b	Inguinal or Supramammary Inn.	C	Condemn	All	
Tuberculosis b	Ischiatic Inn.	C	Condemn	All	
Tuberculosis b	Iliac Inn.	C	Condemn	All	
Tuberculosis b	Lumbar Inn.	C	Condemn	All	
Tuberculosis b	Renal Inn.	C	Condemn	All	
Tuberculosis b	Sternal Inn.	C	Condemn	All	
Tuberculosis b	Prepectoral Inn.	C	Condemn	All	
Tuberculosis b	Prescapular Inn.	C	Condemn	All	
Tuberculosis b	Atlantal Inn.	C	Condemn	Head, tongue	Carcass domestic or export cooked/canned, not affected ofal cooking or pet food, applies only to localised chronic lesions that are not Tuberculosis a.
Tuberculosis	Any lesion.	S	Condemn	All	
Tuberculosis a	Liver, spleen, kidneys and/or associated Inn, which is acute/invasive and the source of septicaemia/bacteraemia.	P	Condemn	All	Lesions in the peripheral lymph nodes eg prescapular, precural, superficial inguinal/supramammary and popliteal lymph nodes are not necessarily of haematogenous spread.
Tuberculosis a	Lesions at multiple tissue sites, and one (or more) occur in the liver, spleen, kidneys and/or associated lymph nodes.	P	Condemn	All	
Tuberculosis a	Lesions are extensive in either the thoracic and/or the abdominal cavities.	P	Condemn	All	
Tuberculosis a	Concurrent presence of cachexia.	P	Condemn	All	
Tuberculosis b	Organ or part or corresponding lymph nodes.	P	Condemn	Affected organs or parts	Not Tuberculosis a.
Tuberculosis b	Head Inn.	P	Condemn	Lesion and adjacent Inn	Not Tuberculosis a, If cannot be removed without contamination of surrounding tissue condemn head.
Tuberculosis b	Lung Inn	P	Condemn	Lungs	Not Tuberculosis a, Heart and liver also condemn if not separated from pluck prior to inspection and cross-contamination has occurred subsequent to evisceration.

Disease or Defect	Details	Livestock class	Disposition	Parts of slaughtered animal	Comments
Tuberculosis b	Mesenteric Inn	P	Condemn	Intestines and mesentery	Not Tuberculosis a, Other GI tissues condemned if contamination has occurred subsequent to evisceration.
Tuberculosis b	Carcass Inn, not involving surrounding tissue.	P	Condemn	Affected Inn	Not Tuberculosis a
Tuberculosis b	Carcass Inn and extension involving surrounding tissue.	P	Condemn	Affected part of the carcass	Not Tuberculosis a
Tuberculosis reactor	No lesions.	C	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	
Neoplasia 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 exceeding 0.5 cm into musculature.	B	Condemn	All	
Bruises	With secondary carcass changes (eg oedema or generalised hyperaemia).	B	Condemn	All	
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	
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	B	Condemn	Affected parts	

Disease or Defect	Details	Livestock class	Disposition	Parts of slaughtered animal	Comments
	other organs.				
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.
Lungs	Pleural scar tissue if no active inflammation or thoracic exudate.	L	Pet Food	Lungs	
<i>T. saginata</i>	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	
# Lungs	Acute inflammation	B	Condemn	All	
# Pleura	Acute inflammation	B	Condemn	All	
# Heart	Acute inflammation	B	Condemn	All	

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

Codes:  
 \* All All Livestock classes  
 B bobby calves  
 C cattle  
 H horses  
 P pigs  
 L lambs  
 S sheep (lambs, adult sheep & goats)  
 G goats

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".

\*

## **Appendix 5: Tb Surveillance & Submission Report**

# TB SURVEILLANCE & SUBMISSION FORM



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

<b>Charge:</b>	
AgriQuality	
MAF-VA	
Asure NZ	

## 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	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
-----------------	---	--------------------------	--------------------------	--------------------------	--------------------------	--------------------------

		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