Notifiable Diseases

Chapter Overview

In this chapter

The tables below lists the sections and annexes in this chapter.

Note:
TB Annexes are now located at the end of Section 7 of this Chapter

Section 1 – Introduction

Section Overview

In this section

The table below lists the topics in this section.

Purpose

Background

The prompt identification and notification of certain animal diseases allows FSS, Animal and Plant Health Agency (APHA) and Scottish Government to take action to prevent the spread of the disease. This chapter covers day to day procedures in notifiable disease monitoring and surveillance.

When an outbreak is declared, emergency instructions will be issued at the time, since different rules may apply depending on the specifics of the case.

Legislation

Powers to control notifiable diseases are derived from the Animal Health Act 1981 (as amended) and specific Orders made under the Act or Regulations made under the European Communities Act 1972.
Animal Health and Welfare (Scotland) Act 2006.

Enforcement

The legislative powers are usually enacted by APHA staff or Local Authority (LA) inspectors. Some FSS staff are authorised under the legislation to undertake certain functions. The legislation is enforced by Local Authorities (LAs).

Introduction to FSS duties

FSS staff have a duty to notify the Secretary of State or Divisional Veterinary Manager (DVM) of any suspect case of a notifiable disease that they may encounter during the course of their work. In practice, they will deal with the Duty Veterinary Officer (VO).

The decision whether to take further action or not rests with the Duty VO and it is the responsibility of the OV to report suspect cases for the decision to be made by APHA.

Also, FSS participates in monitoring and surveillance schemes aimed at the detection of certain notifiable diseases.

Note: Suspect animal includes any animal in which disease is suspected and any animal which came from the same premises of origin.

Section 2 - Action on Notifiable Diseases

In this section

The table below lists the topics in this section.

Current Notifiable Diseases

Reporting suspicions

Any person who suspects a notifiable disease has a duty to report it to the Duty VO.

A table of notifiable diseases and further guidance can be found on the following websites:

- OIE Listed diseases 2012: OIE - World Organisation for Animal Health
- http://www.defra.gov.uk/animal-diseases/notifiable/
- Diseases - Notifiable Diseases

Bluetongue

The whole GB is now part of one Lower Risk Zone for BT and no movement restrictions apply. No action is currently required by FSS. Emergency instructions will be issued in the event that this changes.

FSS Responsibilities and Action

When to report

The OV must immediately report suspicious signs of notifiable disease in:

- live animals or birds, and/or
- carcases and offal

If the OV is not present the MHI must consult an OV before reporting a notifiable disease, provided that such consultation will not cause undue delay.

Reports of notifiable disease are to the Duty VO at APHA and to Operations Assurance (OpA) at FSS.

The OV (or MHI where applicable) MUST keep a written record in the daybook of the time when the suspect cases were reported and the name of the person making the report.

The OV (or MHI where applicable) must follow precisely the instructions given by the Duty VO. The period between when the OV (or MHI where applicable) reports suspicion of disease and arrival of the VO into the establishment may be critical in controlling the spread of disease.

Reporting details

Provide the following information to the Duty VO:

- The plant name, address and contact telephone number.
- The animal's breed, age, sex and identification mark(s) e.g. eartag number or slapmark.
- Details of any clinical signs and history in the suspect cases and any in-contact animal from the same establishment.
- Details of the lesions found during meat inspection.
- The name, address and the holding (CPH) number of the establishment where the suspect animal or carcase(s) came from. This will allow APHA to arrange an investigation at this establishment if needed.

Continued on next page

FSS Responsibilities and Actions, continued

Instructions from APHA

Instructions given by the Duty VO could include:

- isolating the animal until an investigation has been completed
- restricting movement of all animals, birds, products, vehicles or people into or out of the slaughterhouse until an investigation has been completed
- stopping slaughter

Record keeping

The OV must keep a contemporaneous record in the daybook of all instructions received from the Duty VO and confirm that they have been followed.

Cleansing & disinfection

No disinfectant should be used on or near animals, birds or carcases suspected of disease, while waiting for the VO to attend, as this may adversely affect the likelihood of correct laboratory diagnosis.

Continued on next page

FSS Responsibilities and Action, continued

Consultation case

Providing that the OV is in the establishment and remains there, APHA may decide to deal with the investigation as a "consultation case".

A consultation case takes place between two or more veterinary surgeons when one of them considers that a notifiable disease may be included in the differential diagnosis for a specific case, but the probability of it being that disease is very low.

The OV should discuss the report of disease with the VO on arrival at the establishment.

The VO will place restrictions only if the result of the consultation is that a notifiable disease is suspected.

Report case

In other cases, APHA may call the case a "Report Case" and place specific restrictions on the establishment pending veterinary enquiry. These restrictions may affect the movement of animals, products, people and vehicles from the establishment.

Legislative responsibilities

The OV remains responsible for:

- ensuring that all public health legislation is complied with while the establishment is under APHA restrictions
- monitoring hygiene and animal welfare
- following APHA instructions and informing them immediately if any of them cannot be implemented

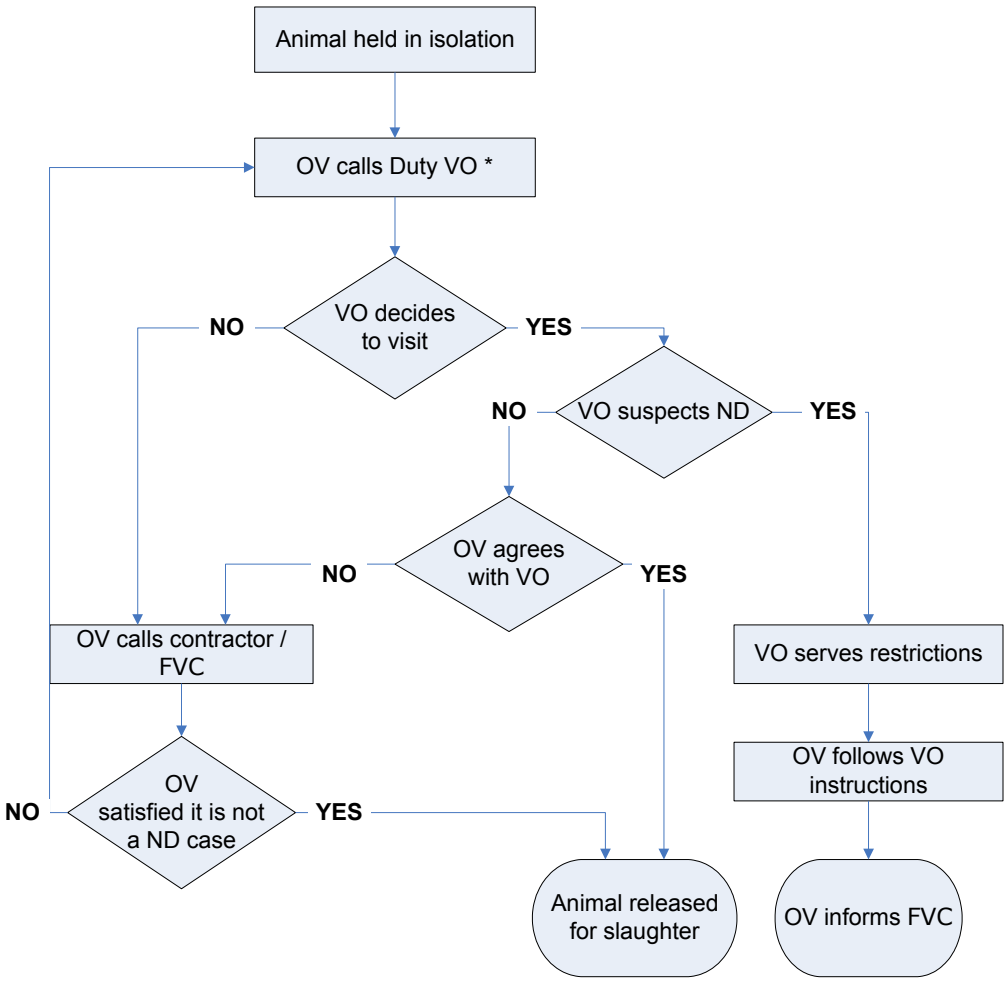
Procedure for suspect notifiable disease

The chart below outlines the procedure to follow if the OV suspects a notifiable disease.

Continued on next page

FSS Responsibilities and Action, continued

Procedure for suspect notifiable disease, (continued)



Note: * If the Duty VO agrees the possibility of a Notifiable Disease, the premises should be treated as contaminated, until proven otherwise. The FBO should:-

(i) not bring more susceptible animals on to the premises
(ii) not slaughter live suspect animals (so the VO can sample them)
(iii) isolate suspect/potentially contaminated carcases

Responsibilities of APHA

Main duties

APHA has responsibility for:

- applying animal health disease control measures to minimise the spread of notifiable disease
- fully investigating the OV (or other FSS AO) report

VO investigation

A VO will visit the slaughterhouse to carry out an investigation. Other VOs may be sent to the farm of origin to undertake a simultaneous veterinary enquiry.

Once at the establishment, the VO will discuss the report with the OV/MHI/Food Business Operator (FBO) and examine the suspect animals/carcases/ offal. The VO may also consult with other VOs who may have gone to the farm of origin to gain a full clinical picture, and with APHA Veterinary Exotic Notifiable Diseases Unit.

After investigations

If the presence of notifiable disease cannot be ruled out, the VO will:

- serve a restriction notice closing establishments (or parts), or
- amend any restriction notice that has already been served, and/or
- collect whatever samples are necessary for diagnostic purposes

If the initial investigation began as a consultation case, it will now become a report case.

Restrictions

APHA may seek to limit the extent of the restrictions on the establishment. In many cases only one part of the establishment e.g. a chiller or freezer unit(s) containing the restricted meat, will remain under restrictions.

Other Responsibilities

Compliance	All persons at the establishment, including FSS staff, must comply with any restrictions in any notices served on the establishment.
Local Authority	The LA is responsible for taking enforcement action under disease control legislation.

Detained Meat Storage

Storage sites

Any meat detained at the slaughterhouse will be kept under control of the OV and APHA, and locked in a "storage site". Access to this storage site will be facilitated through the OV or VO. The FBO is responsible for the way the meat is stored, in compliance with (EC) 853/2004.

The storage site is likely to be kept under restrictions until the final results are known.

Preparation for storage

The FBO may discuss procedures for preparing the meat for storage with APHA and FSS.

Test results

Negative results take longer to reach completion. APHA will provide information on how long it could take before the results are known.

Public health

FSS is fully responsible for ensuring that public health legislation is complied with at all times the meat is at the establishment.

According to (EC) 854/2004, Annex I, Section II, Chapter V, Paragraph 1(e), meat is to be declared unfit for human consumption if it "derives from animals affected by animal diseases for which animal health rules are laid down in the Union legislation listed in Annex I to Council Directive 2002/99/EC, except if it is obtained in conformity with the specific requirements provided for in that legislation, unless otherwise provided for in Section IV;" specifically Chapter IX - Specific Hazards

See also Chapter 2.4, Section 2- topic "Decisions Concerning Meat".

Clearance

Meat detained on suspicion of disease will usually be released once all the tests are negative. The OV must seek clearance from APHA and keep a written record before opening any sealed container.

Cleansing and Disinfection

Requirement to C&D

When certain diseases cannot be ruled out, APHA may require the FBO to cleanse and disinfect (C&D) specified parts of their establishment. FBOs are responsible for doing this at their own expense. APHA may request FSS assistance in supervising the cleansing and disinfection of the establishment.

When carrying out C&D activities in the event of an outbreak (or during the investigation of a suspected outbreak) of a Notifiable Disease, FBOs are requested to use the relevant disinfectant as listed on the Defra website. See link: http://disinfectants.defra.gov.uk/Default.aspx?Location=None&module=ApprovalsList_SI

These C&D activities need to be documented by protocols where the FBO should describe how to C&D the relevant equipment, utensils and vehicles. This should at least be in line with the manufacturers' instructions for the chemical in use.

After C&D

The VO will be able to confirm when the operations can re-commence after the cleansing and disinfection - in some cases the establishment may have to be rested for a specified period. The aim will always be to allow resumption of operations as soon as possible.

Section 3 - Anthrax

Section Overview

In this section

The table below lists the topics in this section.

Introduction

Background

The OV (or MHI where applicable) may consider the possibility of Anthrax in the course of normal duties. In reaching a decision, the OV must take into account factors such as history or clinical signs.

Anthrax – clinical & pathological signs

Anthrax should be suspected:

- if the cause of death, particularly sudden death, is unexplained
- if clinical signs at ante-mortem inspection indicate that the disease might be present, e.g. high temperature, bloody diarrhoea or a discharge of dark tarry uncoagulated blood from the nose, mouth and anus
- if post-mortem evidence suggests that the animal might have been suffering from Anthrax

Note: If the OV is suspicious of Anthrax, the carcase should not be opened as this can result in the formation of highly resistant Anthrax spores.

Suspect live animal

Suspect animals and animals in direct contact must be detained, isolated and reported to the APHA Duty VO immediately.

The VO will place restrictions upon the animal, but it will not be slaughtered. It may be treated in situ, but for as long as the animal shows signs of disease the restrictions will remain in place.

Continued on next page

Introduction, continued

Suspect carcases

In some cases, suspicion of disease will not be raised until the carcase has been opened. The whole of the suspect carcase, offal, hide and blood must be detained (including any parts already removed) and people kept away from the carcase, its parts and the area where the carcase is held.

All other carcases and offal at the establishment should be detained pending completion of enquiries. No other animals should be allowed to enter the slaughterhall until the results of the enquiry are known.

Holding pens should not be cleaned, and no other product or waste allowed to leave the site until authorised by APHA staff.

Details to report

The OV (or MHI where applicable) must report suspect cases to the Duty VO immediately, giving details as instructed in Section 2 of this chapter. The decision whether to take further action or not rests with the VO and it is the duty of the OV to report suspect cases for the decision to be made by APHA.

APHA action

The VO will inform that restrictions apply and will also arrange for an immediate enquiry to be carried out by a VO or Local Veterinary Inspector (LVI) authorised to undertake Anthrax enquiries (Panel 1c).

If the OV is a designated LVI, the VO may instruct him/her to undertake the enquiry providing suitable facilities are available for testing.

LVI's can carry out anthrax enquiries only on receipt of VO's instructions. LVI's cannot carry out enquiries in anticipation of authorisation.

Note: It may be appropriate for a Panel 1c designated OV to have an arrangement with a local PVS where stain and access to a microscope is available.

Continued on next page

Introduction, continued

Cleansing and disinfection

Holding pens should not be cleaned and no other product or waste allowed to leave the site until authorised by APHA staff.

It is likely that APHA requires the FBO to carry out the cleansing and disinfection of any place on the Infected Place (IP) associated with any animal notified as a suspect case pending the veterinary inquiry. If the results of the veterinary inquiry are positive or inconclusive, the FBO will be required to carry out a more thorough cleansing and disinfection procedure.

Investigation and Diagnostic Sampling

Anthrax bacilli suspected – initial investigation

Under no circumstances must the OV attempt to collect and examine samples for Anthrax without having informed the VO and being authorised to do so.

If the OV is authorised under Panel 1c and facilities are available, the VO may request him or her to make the initial investigation.

BSE testing

If a bovine animal is found dead in the lairage or dead on arrival and the OV suspects Anthrax, then the animal must be tested for Anthrax before being despatched for BSE testing (where BSE testing is appropriate).

Suspect Anthrax out of hours

If it is necessary for an examination for suspected Anthrax to be carried out at a slaughterhouse outside normal OV hours of attendance, the VO will request a Defra vet on Panel 1c to attend the establishment to conduct such an examination. If the OV is Panel 1c accredited, the VO may ask them to do this.

Anthrax suspected

If disease is suspected, the Veterinary Inspector will report this to the VO who will make arrangements for the submission of samples for testing.

Detention of suspect carcases

Where Anthrax is suspected, the carcase should be detained until the results are received.

If the FBO so wishes, they may dispose of the carcase as Category 2 ABP.

Continued on next page

Investigation and Diagnostic Sampling, continued

Anthrax ruled out

Where the Veterinary Inspector is satisfied that Anthrax does not exist in the live animal, they will notify the VO and FBO by completing form AN2 (Certificate – Non existence of Disease in a Carcase).

Reference: See Annex 3 for a sample AN2 certificate.

If the animal has died and requires TSE testing, the procedure for testing fallen stock must be followed once the presence of Anthrax has been ruled out.

If an owner requests an investigation into the cause of death, this is a private matter which must be arranged between the owner and veterinary surgeon.

Section 4 - Bovine Brucellosis

Section Overview

In this section

The table below lists the topics in this section.

Overview

Introduction

The UK achieved official Brucellosis free status in 1985.

There are three measures in place to prevent the disease being re-introduced and subsequently spreading:

- post import testing of imported cattle
- compulsory reporting of all bovine abortions and premature calvings with investigation of all outside a specified low risk category
- quarterly testing of bulk milk samples from all dairy herds, including those of producer retailers

Responsi-bilities

APHA will inform FSS about proposed slaughter of reactors. Collection and packaging of samples from Brucellosis cases consigned for slaughter is a FSS responsibility, and will include:

- reactors and inconclusive reactors to the Brucellosis tests, and
- contacts with confirmed cases

The despatch of the samples to the laboratory is the responsibility of APHA who will collect the samples from the slaughterhouse.

Note: The OV must report any abortions and premature births to APHA and follow any additional instructions. All FSS staff should be aware of the potential danger of infection primarily from the uterus and udder.

Continued on next page

Overview, continued

Movement licence

Cattle from restricted premises will be consigned directly to slaughterhouses accompanied by a BS112 (Licence authorising the movement of cattle on to or off premises under restriction or authorising the movement of specified cattle which are under restriction awaiting the completion of tests for brucellosis).

APHA will send a copy of the BS112 licence by fax, to the OV as advanced warning.

Reference: See Annex 5 for a sample BS112.

In addition, where the owner has opted to slaughter the animal at his / her own expense (private slaughter) the animal will be accompanied by form BS15B. These are handed to the FBO on arrival.

Reference: See Annex 6 for a sample BS15B licence.

Slaughter and Sampling

Slaughter procedure

The animal(s) should be slaughtered without delay or isolated until slaughter can take place. They should, if possible, be slaughtered last to minimise the risk of contamination.

It is advisable the FBOs make appropriate arrangements with live animal intakes to facilitate the above.

Collection of samples

The OV/MHI must collect the following samples from the carcase:

ALL ANIMALS
Paired lymph nodes • retropharyngeal (supra pharyngeal) • supramammary (female) or superficial inguinal (male) • internal iliac

IN ADDITION FOR BULLS
• paired deep inguinal lymph nodes • paired testicles, epididymes and seminal vesicles

Sample packaging

Samples must be taken as cleanly as possible using sterilised knives, and placed in a labelled polythene bag (each pair of nodes or organs should be placed in a separate bag), which is then sealed.

All specimens from each animal sampled should then be placed together in a further single outer polythene bag and this bag then sealed and labelled.

Polythene bags should be self-sealable or tightly knotted and of sufficient strength to prevent leakage and potential cross-contamination.

Labelling

Label all sample bags with the ear tag number plus the details of any reactor tag.

Storage

All samples should be placed in a refrigerator (not freezer) until collected by APHA staff. FSS staff should inform APHA when the samples are ready for collection.

Section 5 - Enzootic Bovine Leukosis (EBL)

Section Overview

In this section

The table below lists the topics in this section.

Introduction

Enzootic Bovine Leukosis (EBL)

The OV must notify the APHA Duty VO of:

- any live animal affected with, or suspected of being affected with, EBL, and
- any carcase or offal showing certain tumorous changes

Detain any suspect live animal or any suspect carcase with its offal until the VO issues instructions. Retain the passport and Food Chain Information (FCI) until any investigations have been carried out.

Signs to report

The OV should report suspect cases in live animals or carcases when there is evidence of tumours (other than papillomata or haemangiomata) or of swollen lymph nodes. Tumours in young animals normally arise from sporadic leukosis and not EBL; the latter being associated with tumours in animals aged three years or more.

Note: Swollen lymph glands identified in a live animal suffering from EBL will be painless.

Documentation

Animals from establishments under movement restrictions because of EBL may be moved to slaughter under licence from APHA (Form EBL 9). Reactors, inconclusive reactors and their closely related family relatives that are so licensed, will normally be inspected at slaughter by an APHA VO and the OV will be informed of this.

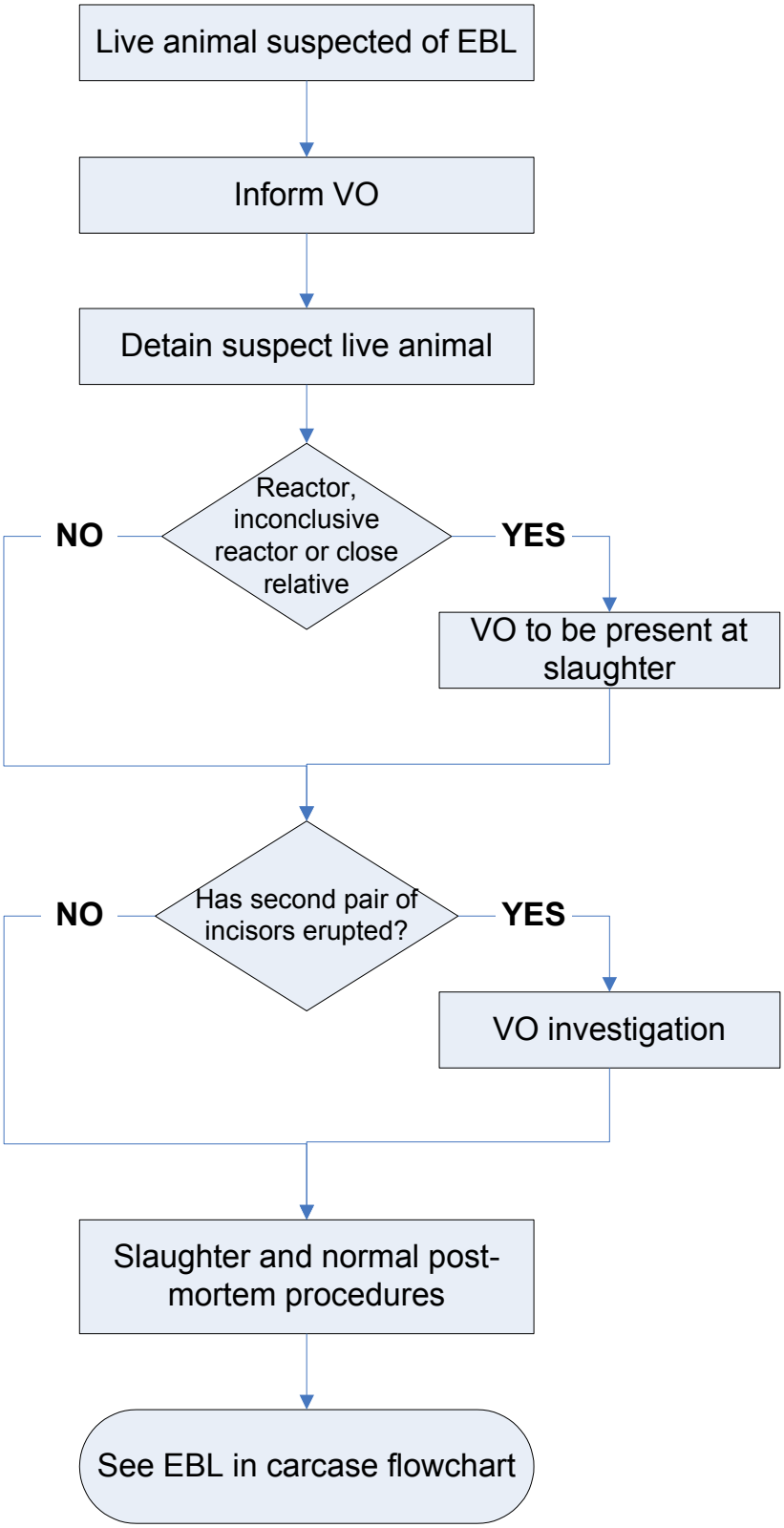
Reference: See Annex 7 for a sample of EBL 9 form.

Other animals licensed for slaughter from restricted establishments will not usually need to be inspected by a VO and FSS should subject such carcases and their offals to normal meat inspection procedures, paying particular attention for evidence of tumourous change.

Continued on next page

Introduction, Continued

Enzootic Bovine Leukosis (EBL) – Investigation of suspect live animal



Continued on next page

Introduction, continued

Dentition check

Whenever suspect disease is reported in a **live** animal, the APHA Duty VO will ask whether either of the animal's second pair of permanent incisors has erupted - i.e. whether there are more than two "broad teeth".

If the answer is no, then in most cases no further action will be required other than the provision of outline data (APHA is required to keep a record of such cases for reporting to the EU), and the animal can be slaughtered and subjected to normal post-mortem inspection procedures and judgement.

3 or more permanent incisors

If either of the second pair of permanent incisors has erupted (i.e. there are three or more "broad teeth"), then APHA will instruct a VO to carry out an investigation, and the OV must ensure the animal is detained in the lairage pending this investigation.

After the investigation

Following the completion of the VO investigation, the animal may be slaughtered and subjected to normal post-mortem inspection procedures and judgement.

Appropriate samples of tumourous swollen lymph nodes should be taken from the carcase or offals at the request of the VO, where EBL has not been ruled out.

The carcase and offal need not be detained pending the results of the tests on any collected samples.

Investigation of Tumours in Cattle Carcases or Offals

Tumours in cattle

All cattle tumours seen at post-mortem inspection are notifiable, with the exception of papillomata or haemangiomata and should therefore be reported IMMEDIATELY to the APHA Duty VO, who will note the details of all cases and instruct when sampling by FSS or a VO is to be carried out.

A large proportion of tumour notifications concern animals aged less than two years. Although collection of tumour specimens from cattle with fewer than three permanent incisors is not normally required, APHA retains discretion to require sampling or to instruct a VO to carry out an investigation.

Sampling of tumours

When asked to do so, FSS is responsible for collecting the appropriate samples from carcases and/or offals and retaining these along with details of the tumour site and the FCI. Cattle passports and FCI should always be retained by FSS to assist APHA in the process of tracing.

The APHA VO will arrange for collection of the samples and the relevant details from FSS and it is the responsibility of APHA to prepare, pack and send the samples along with the completed submission forms to the laboratory.

FSS staff must positively differentiate between lesions which are tumourous (EBL) and those which are tuberculosis (TB) as different sampling and diagnostic testing is required.

When the VO requests the OV to sample a tumourous carcase and/or its offal, the following 3 sets of samples should be collected:

- Tissue samples for Polymerase Chain Reaction Test (PCRT).
- Tissue samples for histology.
- Blood sample.

Sampling of Tumour Carcases

Samples for PCRT

A PCRT has been developed to detect the presence of Bovine Leukosis Virus (BLV – the agent responsible for EBL infection) in cattle tissues, lymph nodes and blood.

The PCRT requires fresh or immediately frozen tissue samples.

Samples for Histology

Samples for histological analysis are also needed as a back up should the fresh samples prove unsatisfactory for PCRT.

These samples should consist of a specimen from each of the grossly affected organs and representative enlarged lymph nodes.

Collection of samples

Follow the steps in the tables below to collect the samples.
Note: Remove samples within 24 hours of slaughter.

PCR Test:

Step	Action
1	Use sterilised knives and gloves for each carcase
2	Take tissue sample from undisturbed part of tumour and from one accessible non-lesioned lymph node
3	Transfer sample to individual sterile container
4	Write "PCR Test", eartag number and organ tissue sampled on label
5	Store chilled until collected by APHA

Sample for histology:

Step	Action
1	Take sample from affected organs and representative enlarged lymph nodes
2	Remove sample within 24 hours of slaughter
3	Cut specimens about 1cm thick. A slice of organ should show both normal and diseased tissue
4	Lymph nodes should be transverse across the long axis of the node and should include the capsule
5	Write "Histo Test", eartag number and organ tissue sampled on label
6	Store chilled until collected by APHA

Continued on next page

Sampling of Tumour Carcases, Continued

Blood sample

If it is possible, collect a sample of blood from the carcase (e.g. from the heart or great vessels) in a plain vacutainer (red stopper) labelled to identify the sample.

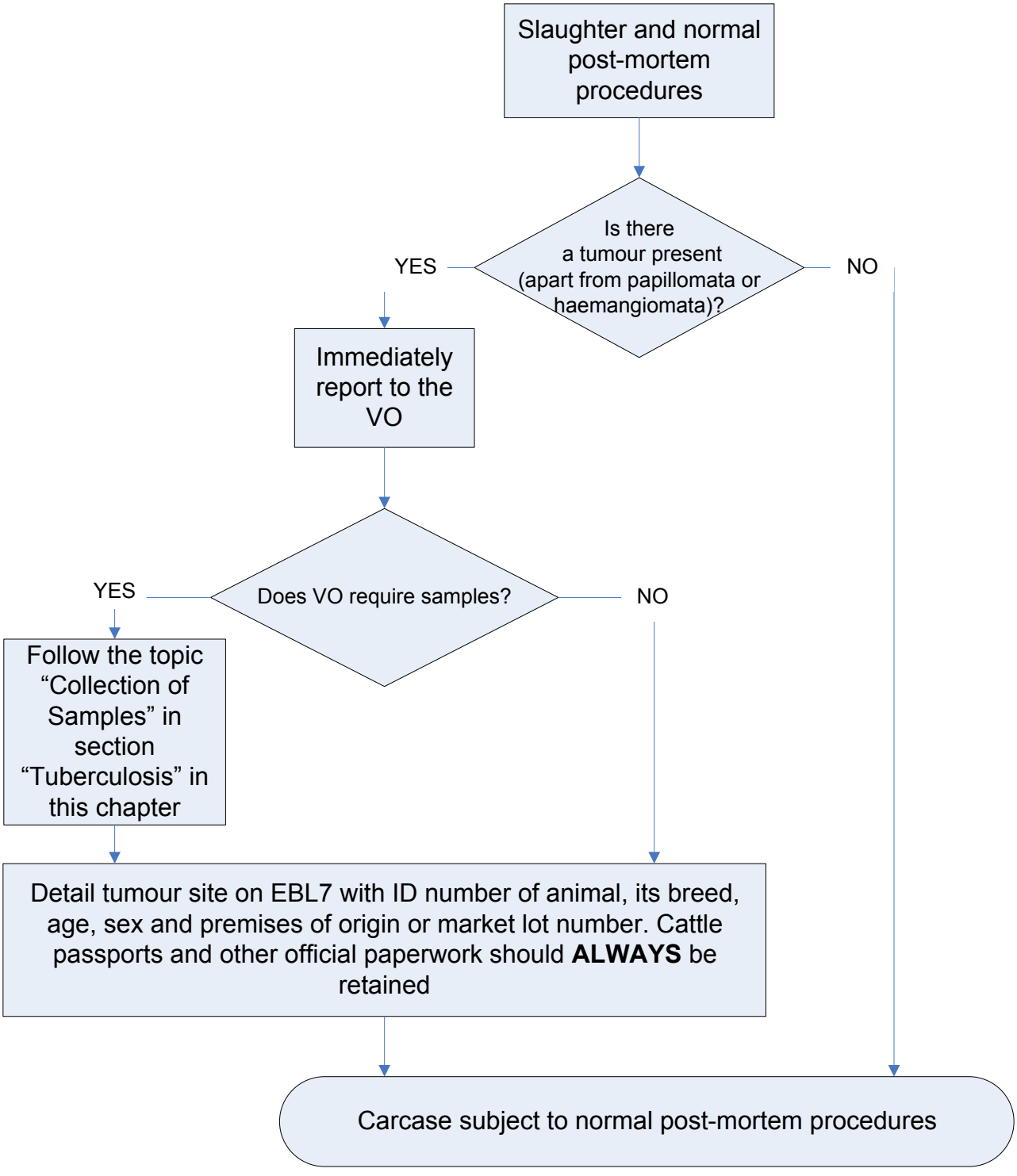
Store chilled until collected by APHA.

Procedure

The following flow chart outlines the procedure to follow if the OV suspects EBL.

Continued on next page

Sampling of Tumour Carcases, Continued



Continued on next page

Sampling of Tumour Carcases, continued

Post-mortem inspection

Once the required samples have been removed, the carcase may be subjected to normal post-mortem inspection procedures and judgement – it need not be detained pending the results of the tests for EBL.

Recording of post-mortem findings

Details of the tumour site should be recorded on the form EBL7, together with all available identification information. Complete only those parts of the form for which you have information; the remainder will be completed by APHA staff.

Reference: See Annex 8 for a sample EBL 7 form.

Keep EBL7 with the samples awaiting collection by APHA.

Notifying FSA

The OV should notify FSS Operations SLA and Contracts team by email of the following details of the sample:

- passport number of the sampled animal
- name of owner
- name of APHA office contacted
- date despatched via Topspeed.

Packaging and Despatch

Packing

1. All samples must be submitted in a 60ml pot.
   - Outside of pot must be kept clean.
   - Remember to tighten lids. Give an extra turn before packing.
   - Avoid cross threading the lids as they will cause the pots to leak.
2. Place each individual pot in a plastic bag which is knotted tightly. Trim off excess bag.
3. Place all bagged pots into a biobox / biobottle along with the absorbent pad / material and seal the box. The process for sending forms is as follows:
   - Signed original EBL 7 forms must be placed in an envelope, this envelope should be marked "Originals" and placed between the outer box and the biobox / biobottle. APHA laboratory staff will forward the original forms internally to the relevant APHA regional office
   - Copies of the EBL 7 forms should be placed in a ziplock bag and taped to the outside of the biobottle / placed in biobox. Copies of these forms should be faxed or emailed to the relevant APHA office. The OV should retain a further copy in the plant files for future reference (retention period 12 months).
4. Place biobottle into the outer box.
5. Attach address label.
6. Attach security seal
7. Store the package in the chiller until the time of collection. Ideally place in a waterproof bag / container to avoid contamination.

Continued on next page

Packaging and Despatch, continued

Despatch

The current courier for the new sampling process is Topspeed Couriers. The courier process is as follows:

As soon as you receive the sampling request information from APHA, email ebl@topspeedcouriers.co.uk with the following information:

- establishment name and approval number
- slaughter date of the samples (this information will allow Topspeed Couriers to plan the collections to include multiple pickups where possible)
- destination laboratory:
  BLV – PCR Virology Department
  APHA Weybridge
  New Haw
  Addlestone
  Surrey
  KT15 3NB
- name and telephone number for the FSA contact at the plant.

On detection of a tumour that needs samples submitting, notify the courier that samples are required to be collected. The courier will organise a collection which meets the two working days delivery requirement (e.g. a tumour found on Monday; samples are required to be with APHA by 5pm Wednesday. However, collection could take place on Monday, Tuesday or Wednesday, as the couriers are required to consolidate their delivery runs to be cost effective.)

Section 6 - Transmissible Encephalopathies (TSE)

Section Overview

In this section

The table below lists the topics in this section.

TSE Overview

Introduction

This section outlines action to be taken when a TSE is suspected in an animal.

Instructions regarding sampling of animals when TSEs are not suspected can be found in the TSE Chapter.

Information about TSEs

Information about TSEs is carried on Defra's website:

- A-Z of diseases « Animal Diseases

Reporting requirements

TSEs are notifiable diseases and their suspicion must be reported immediately to APHA.

Records

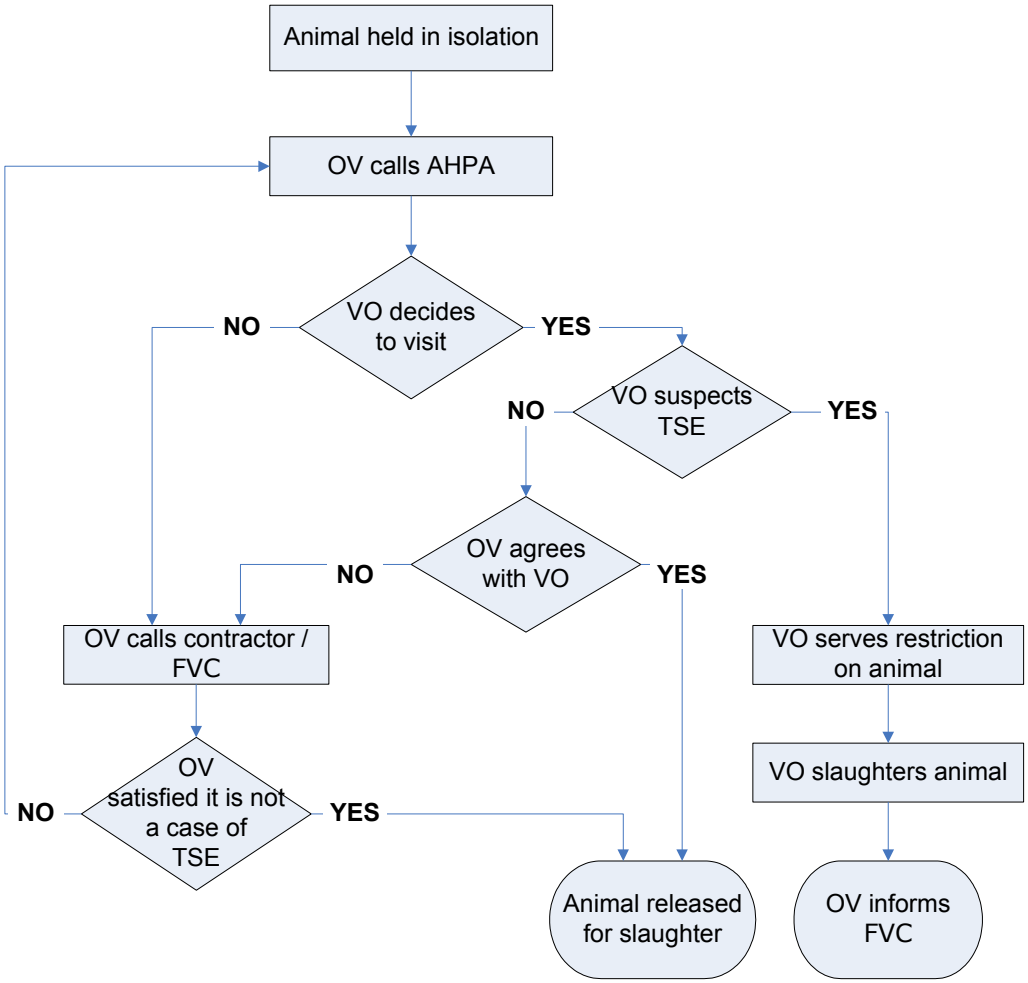
For all reported cases, the OV should ensure accurate details are recorded in the daybook.

Continued on next page

TSE Overview, continued

Procedure

The following flow chart outlines the procedure to follow if the OV suspects a TSE.



Reporting Suspicions

Suspect live animals

If FSS or plant staff suspects that live cattle, sheep, goats or deer are affected with BSE, Scrapie or other TSE, they must take action as detailed in this topic.

Caution: The OV, especially in the case of BSE, should be aware that an affected animal may, because of behavioural changes associated with the disease, be likely to cause injury to itself, other livestock or staff.

Step	Action
1	Suspect animal is held in isolation in the lairage. On no account should a suspect animal be allowed to enter the main slaughterhall unless and until the OV is satisfied that it should no longer be considered a suspect.
2	The OV telephones the APHA Duty VO to notify the suspicion of a TSE. There are two possible outcomes to the telephone conversation: 1. The VO agrees with the OV suspicions and agrees to visit the slaughterhouse 2. The VO disagrees with the OV and does not agree to visit the slaughterhouse. If 1. occurs then the OV should follow Option 1 below. If 2. occurs the OV should follow steps at Option 2 below.

Option 1

The table below details the action to take if the VO agrees with the OV suspicions.

Step	Action
1	The Duty VO makes arrangements for a VO to visit the slaughterhouse as soon as possible to carry out an investigation. Defra may request the following details: • Clinical description of the animal • Eartag identification of the animal • Date of birth of the animal • Details of origin.
2	The OV obtains FCI before the VO arrives.
3	The FBO informs the owner of the animal.
4	The VO examines the animal and determines whether it is clinically positive, negative or inconclusive for TSE.

Continued on next page

Reporting Suspicions, continued

Option 2

The table below details the action to take if the VO does not agree with the OV's suspicions and does not agree to visit the slaughterhouse.

Step	Action
1	The OV must obtain further advice from their FVC
2	The OV should discuss the case and decide whether or not the animal is still a TSE suspect.
3	If after discussion the OV still suspects a TSE he/she gives formal notification to the Duty VO, and the Duty VO must then send a VO out to examine the animal.

At Visit: VO Does Not Suspect TSE

Suspect not confirmed by VO

There are two possible outcomes to the VOs visit and decision that the suspect is not suffering from TSE:

Outcome 1: the OV agrees with the VOs decision
Outcome 2: the OV does not agree with the VOs decision.

Outcome 1

If the VO considers that the suspect is not affected by BSE, Scrapie or other TSE, provided that the OV is in agreement with the VOs decision and an alternative diagnosis does not preclude it, the animal may be submitted for slaughter for human consumption.

Note: Certain bovine animals which are not considered to be BSE suspects require TSE testing.

Outcome 2

If the OV is not in agreement with the VOs conclusion, the OV should contact their FVC.

The OV should discuss the case and decide whether or not the animal should still be considered a TSE suspect. If after discussion the OV still suspects a TSE he/she gives formal notification to the VO.

At Visit: VO Suspects TSE

Restrictions on animal	If the VO considers the case to be clinically positive he/she will serve restrictions on the animal. Once restricted, the FBO must not allow the animal to be slaughtered.
Slaughter & destruction	The VO will slaughter the animal by injection of barbiturate and arrange for the dead animal to be transported either to an incineration plant or a veterinary laboratory where the head will be sampled. In the case of sheep or goats, if the suspect animal is considered fit to travel, the VO may make arrangements to transport it live under licence to the nearest available veterinary laboratory.
Restrictions on premises	No restrictions will be imposed on the slaughterhouse premises in the case of a TSE suspect, although the VO may give advice on cleaning and disinfection in clinically positive cases.
Informing Operations Assurance (OpA)	The OV should inform OpA that a TSE suspect animal has been killed at or removed from an approved establishment by Defra staff.

Section 7 - Tuberculosis (TB)

Section Overview

In this section

The table below lists the topics in this section.

TB Annexes
TB Annex 1 - Licence authorising movement of Cattle to Slaughterhouse. (TB24)
TB Annex 2 – Licence authorising general movement of cattle from a herd under TB2 restrictions to a licensed slaughterhouse. (TB24c)
TB Annex 3 – Licence authorising movement of cattle from premises under restriction to an Approved Finishing Unit (AFU)/Approved Quarantine Unit (AQU), to a TB restricted premises in possession of a TB16c or to a slaughterhouse through a Dedicated Sale for TB Restricted Cattle. (TB16b)
TB Annex 4-Licence Authorising Movement of Cattle from premises under restriction to a Slaughterhouse through a TB approved dedicated slaughter gathering (TB24b)
TB Annex 4a – Licence authorising general movement of cattle from an approved finishing unit under TB2 restrictions to a licensed slaughterhouse. (TB24g)

Continued on next page

Section Overview, continued

Annexes
TB Annex 5 – Food Chain Information for TB Restricted cattle. (TB104)
TB Annex 6 – Reactor Sampling & Submission Form. (TB110)
TB Annex 7 – Material for examination at APHA Laboratories (TB50)
TB Annex 8 – Description of Lesion template
TB Annex 9 – Licence authorising movement of Deer to a slaughterhouse. (TB24a)
TB Annex 10 – Proposal to Slaughter Deer. (TB55A)
TB Annex 11 – FSS consumables requisition form – available via bookmarks on left
TB Annex 12 – DNA equipment form CS115 - available via bookmarks on left
TB Annex 13 – Material for DNA analysis form GEN03 - available via bookmarks on left

Introduction

Introduction

Bovine tuberculosis (bTB) is an infectious and contagious disease of cattle and one of the biggest challenges for the cattle farming industry. It is caused by the bacterium *Mycobacterium bovis* (*M. bovis*), which can also infect and cause TB in many other mammals.

APHA is responsible for the control of TB in farms. FSS, through a service level agreement, deals with sampling of tuberculin tested animals at APHA's request and suspect TB lesions identified at slaughterhouses.

If TB is suspected in the carcase of any bovine, deer or farmed mammal, APHA must be notified immediately.

Regulation: The Tuberculosis Orders in England, Scotland and Wales (as amended)

Note: Health & Safety procedures must be adhered to when handling suspect TB lesions. See FSA's Health and Safety Manual at:
http://fsahome/human/health/Pages/HealthandSafetyManual.aspx

Definitions

TB reactor plants are red meat slaughterhouses where animals that have undergone a tuberculin test are sent for slaughter. Slaughterhouses access this status through a contract with APHA.

Depending on the result of the tuberculin test, animals can be classed as reactors (R), inconclusive reactors (IR) and direct contacts (DCs). These animals can be compulsorily (R and DC) or voluntarily (IR) slaughtered.

Restricted premises are those farms where APHA has established cattle movement restrictions.

A full list of the movement licences for these animals and the relevant TB forms is given in the Annex list.

Introduction, continued

Timesheet coding

All work undertaken by FSS on behalf of APHA (e.g. additional inspection requirements, Reactor tag checking, collection and submission of samples and record keeping) must be coded to **GNTB**.

Scope of the instructions

This section details instructions to FSS staff for dealing with reactors and other cattle from restricted premises, including:

- forms accompanying animals from restricted premises
- inspection of R, IRs and DCs
- death of R/IRs/DCs before reaching the slaughterhouse
- collection and submission of samples
- form completion
- carcases and offal from cattle with suspicious lesions encountered in the course of normal production, also known as 'The Slaughterhouse case'
- carcases and offal from other species with suspicious TB lesions

The instructions apply to:

- R and DCs compulsorily slaughtered by APHA
- IRs voluntarily slaughtered but for which APHA require samples i.e. stock accompanied by a TB24 and where advance warning has been given by APHA by means of entering information on TB110 (reactor abattoirs) or via SLA and Contract team (elsewhere), whether alive or dead.
- cattle and any other mammals that have been slaughtered in the course of normal production, where lesions consistent with TB are found during post-mortem inspection, also known as slaughterhouse cases

They do not apply to other cattle from TB restricted herds.

Note: The OV must be aware that animals with clinical tuberculosis must not be slaughtered for human consumption.
Regulation: (EC) 854/2004 Annex I. Section II Chapter III, 4.

Slaughter

Where or when to slaughter

Where animals have reacted positively or inconclusively to the tuberculin test, or there are other grounds for suspecting infection, they are to be slaughtered separately, taking precautions to avoid the risk of contamination of other carcases, the slaughter line and staff present in the slaughterhouse.

This applies to:

- Cattle that require a TB24 movement licence and have been entered on a TB110 by APHA;
- Cattle that have a TB24 marked 'Inconclusive Reactor';
- Deer that require a TB24a movement licence and APHA has advised of intended slaughter by means of a TB55a form.
- Sheep or other mammals that were tuberculin tested.

It does not apply to animals moved under any other licences, or with a TB24 where the animal is not included on a TB110.

To reduce cross-contamination, the slaughter line must be cleansed and disinfected after processing reactor cattle, IRs and DCs. All such cattle should either be slaughtered:

- last in the day, before full cleaning and disinfection of the slaughter line,
- at any other time provided that the slaughter line is cleaned and disinfected before the slaughter of non suspect animals resumes, or
- in a separate slaughterhall used for diseased animals or those suspected of being diseased.

Reference: Regulation (EC) 854/2004, Annex I, Section IV, Chapter IX, E1.

Any species with TB suspect lesions found during the course of post mortem inspection, particularly where there are no suitable facilities for detailed inspection and sampling in the dressing line, should immediately be placed in the detained area.

Slaughter, continued

Transfer of carcases and offal to the detained facilities

When transferring offal / carcases to a detained area for further inspection or sampling, care must be taken to prevent cross-contamination of other meat / equipment / fittings in the slaughterhall. In the event of suspected contamination, cleansing and disinfection of the affected area / equipment must take place before production recommences.

Note: Failure by the plant operator to co-operate with this procedure would constitute a contravention of the operator's responsibility to prevent cross-contamination and must be dealt with accordingly.

Regulation: (EC) 854/2004 Annex I, Section IV, Chapter IX, E.

Reactor animals

Types of animals

The table below shows the animals that may be despatched from TB-restricted premises.

CONSIGNED to slaughter…	BY…	EXAMPLES…
compulsorily	APHA	test reactors, DCs
voluntarily	herd owner	fat stock, surplus calves, culled cows, and reactors/IRs which the herd owner chooses to slaughter.

Forms

In addition to the official identification documents and the Food Chain Information, animals from TB-restricted establishments may also be accompanied by one or more of the following forms:

- Emergency Slaughter Certificate
- TB24, TB24b, TB24g, TB16b, TB24a, TB55a
- Electronic notification by APHA via a TB110 sent to the OV by noon the day before the kill

Reference: See TB Annexes 1 to 5 for sample movement licences and FCI forms.

Food chain information

All animals sent for slaughter must be provided with Food Chain Information (FCI).

Since some TB restricted animals are compulsorily slaughtered, the OV should verify that withdrawal periods have been observed for veterinary medicines and other treatments administered to the animals, this includes substances used for diagnosis purposes such as tuberculin.

Keepers submitting cattle from a farm with movement restrictions due to tuberculosis must declare this as part of the FCI. APHA requires **all** cattle moving for slaughter from TB-restricted herds to be marked with an orange stripe along the back. This is irrespective of test results so applies to animals moving under general licence as well as with movement licences.

Continued on next page

Reactor animals, continued

Food chain information (continued)

The OV must be present on site during the processing of animals from a TB restricted farm.

Reference: 854/2004, Annex I, Section III, Chapter II, 3(b)

TB110 Electronic TB Sampling & Submission Form

APHA will submit electronically a TB110 form providing details of the reactor and DC cattle sent for compulsory slaughter and the sampling code that applies to each herd. This code determines the level of sampling that is required.

Note: these animals will only be sent to selected slaughterhouses contracted by APHA for processing TB suspect cattle. Contact the SLA and Contract Team for the current list of those slaughterhouses and the associated APHA TB diagnostic laboratory.

A number of IRs may be voluntarily slaughtered by the owner. The owner can choose any abattoir to slaughter them, but similar arrangements to those above apply.

APHA will e-mail a TB110 to the OV and other agreed FSS officers by noon the day before the kill date.

The TB110 must be completed after post-mortem inspection, recording the findings. The process for sending the forms is as follows:

- Signed hard copy TB110 must be placed in an envelope, this envelope should be marked 'Originals' and placed between the outer box and the biobox/biobottle. APHA laboratory staff will forward the signed hard copies internally to the relevant APHA regional office.

- Copies of the form should be placed in a ziplock bag and taped to the outside of the biobottle / placed in biobox. Copy of the forms should be faxed or emailed to the relevant APHA office. The OV should retain a further copy in the plant files for future reference. (Retention period 12 months).

Reference: see TB Annex 6 for a sample of form TB110.

Continued on next page

Reactor animals, Continued

TB55a Movement licences

Form TB55a is the proposal to slaughter deer. It will inform the OV of the arrival of deer from a restricted TB premises.

A copy of the TB55a will be sent by fax to the OV in advance.

Reference: See TB Annex 10 for a sample copy of form TB55a

Regulation: See The Tuberculosis (Deer) Order 1989 (as amended)

Note: Reactor deer moved for slaughter under movement licence must have a broad arrow 15 cm long clipped on the left hind quarter.

TB24 movement licences

Form TB24 is a movement licence issued by APHA authorising transport of cattle (reactors, IRs, DCs and any cattle from TB restricted herds that have not been tested for TB) to a slaughterhouse. It must accompany animals during transport. Most animals accompanied by a TB24 need to be slaughtered separately, and if they appear on the TB110, inspected in detail.

Some cattle that are not reactors or DCs may travel to slaughter under a TB24. These cattle do not in principle have a higher risk of infection with tuberculosis than other cattle from restricted herds. These may be cattle that have not been tested for TB and animals that have had an inconclusive response to the skin test.

Since the EC regulations require that animals that have reacted inconclusively to the tuberculin are to be slaughtered separately, APHA will mark the TB24 of these animals with the words 'Inconclusive Reactor'.

When animals that should have arrived with a TB24 are found not to have one, this should be reported to APHA and the relevant Trading Standards department.

Reference: see earlier topic "where or when to slaughter" from page 7-5 onwards

Reference: See TB Annex 1 for a sample copy of form TB24

Continued on next page

Reactor animals, continued

TB24a movement licences

Form 24a is a licence issued by APHA authorising movement of deer to a slaughterhouse. It must be given to the FSS representative on arrival to the slaughterhouse.

A copy of the TB24a will be sent by fax to the OV in advance.

Note: for welfare reasons the deer should be slaughtered within 3 hours of arrival at the slaughterhouse and shall not be removed from there alive.

Reference: See TB Annex 9 for a sample copy of form TB24a.

TB24b/g movement licences

Form TB24b is a movement licence issued by APHA authorising transport of cattle, listed by ear tag, from TB restricted herds to a slaughterhouse via an approved collection centre/slaughter market.

Form TB24g is a licence authorising movement of cattle from approved finishing units under restrictions to a licensed slaughterhouse.

Animals eligible for a TB24b/g are not considered reactors, IRs or DCs. They need only be subject to normal inspection procedures.

Reference: See TB Annex 4 for a sample copy of form TB24b and TB Annex 4a for a sample copy of form TB24g.

Continued on next page

Reactor animals, continued

TB24c movement licences

Most clear testing cattle and calves under 8 weeks of age travelling direct to slaughter from holdings under TB restrictions, no longer require a specific TB24/TB24b licence. These animals can be consigned to slaughter by their owners under the terms of a general movement licence (TB24c), issued by the APHA at the time the herd is placed under restrictions.

Herd owners who are granted a general TB24c licence will not be required to forward a copy to the slaughterhouse, nor will it be necessary for a copy of the general TB24c licence to travel with the animals.

These animals, as with all cattle from a TB restricted herd, should be identified by means of an orange stripe along the back and FCI should indicate the herd is under restriction, but they will be subject to the normal inspection procedures.

General TB24c licences will automatically expire on lifting of TB restrictions. APHA retains the power to rescind a general movement licence at any time.

Reference: See TB Annex 2 for a sample copy of form TB24c.

Exclusions from general licence (TB24c)

Reactors, IRs, DCs and any untested cattle aged 8 weeks or more are explicitly excluded from the general licence and will continue to be licensed to slaughter by APHA i.e. under a specific TB24 travelling with the animal.

Animals may arrive at the slaughterhouse accompanied by TB24s prior to the OV receiving notification from APHA. In these circumstances, FSS staff should inform APHA of the arrival of such animals and wait for instructions.

Continued on next page

Reactor animals, continued

TB 16b movement licences

TB16b movement licences are issued to authorise movement of ear tag listed cattle from restricted premises to Approved Finishing Units, Approved Quarantine Unit or to a slaughterhouse through a Dedicated Sale for TB Restricted Cattle. These animals have passed a tuberculin test in the 90 days before movement and are not reactors, IR or DC. The licences should accompany the animals to the abattoir but, as with animals moved under a TB24b/g, they need only be subject to normal post-mortem inspection procedures.

Reference: see TB Annex 3 for a sample copy of form TB16b.

FSS copy of licences

The person transporting the animals, on arrival at the slaughterhouse, must give a copy of the TB24, TB24b, the TB24g, TB16b, TB24a or the TB55a licences to the FSS representative.

The table below shows which forms, licences and certificates accompany which animals to the slaughterhouse.

Form/ licence	Reactors	DCs	IRs	Cattle not tested for TB	Clear-testing cattle and calves under 8 weeks	On-farm slaughter
FCI	✓	✓	✓	✓	✓	✓
TB110	✓	✓	✓			✓
TB24	✓	✓	✓	✓	May Happen	
TB24b					✓	
TB24c					✓	
TB24g				✓	✓	
TB16b					✓	
TB24a (deer)	√	√	√			
TB55a (deer only)	√					

Continued on next page

Reactor animals, continued

Irregularities

APHA will contact the OV if after submission of the TB110 there is any change to the number of cattle sent for slaughter or to the sampling code.

Note: in some cases fewer cattle may be delivered than expected, but never more than pre-arranged.

If the OV believes that animals from a TB restricted establishment have been presented for slaughter without all the necessary documentation, they should inform APHA and the Local Authorities.

APHA should also be contacted if, due to missing paperwork, conflicting information, etc., the OV is not sure if an animal from a TB restricted establishment requires detailed post-mortem examination and sampling.

Reactor animals: notification and responsibilities

Overview of responsibilities

The table below outlines the responsibilities.

Type	Responsibility	Duty
Reactors, IRs and DCs	APHA	• Inform FBO and FSS in advance of the date and number of animals delivered for slaughter. • Electronic submission of spreadsheet for each batch of animals for recording of post-mortem findings (TB110) • Allocation and communication of sample code that applies to each batch. • Issue licences (TB24, TB24a). • Provide Work Schedule Activity (WSA) and reactor tagging information.
	FSS	• Detailed inspection of carcase and offal from reactors. • Collection of tissue samples as determined by the batch sampling code ensuring traceability during the inspection and sampling process. • Packing and despatch of all samples to the assigned APHA TB diagnostic laboratory. • Completion of electronic documentation, including the details of lesions in a way that facilitates tracing them back to the herd of origin and sign paperwork accompanying the samples to the lab. • Order of consumables (labels, pots, bags, etc.)

Reactor animals: inspection requirements

Additional detailed inspection

A detailed inspection must be carried out on animals included in the following categories:

- Reactor or direct contact cattle compulsorily purchased and slaughtered by APHA at contracted slaughterhouses. (These animals must arrive at the slaughterhouse with FCI advising they originate from a restricted herd, a movement licence (TB24), and be listed on the TB110.)
- Reactors or IR cattle voluntarily slaughtered for which APHA require samples (these will be accompanied by the same documents as above but they may be sent to any slaughterhouse). When samples are required for animals in this category, APHA will inform the SLA and Contract team, who will in turn forward the information to FSS staff at the selected slaughterhouse.
- Deer compulsorily purchased and slaughtered by APHA.

In the case of reactor animals the following lymph nodes (LN) and organs must be examined in detail (visual inspection, palpation and incision) if they have not been examined already:

Routine inspection	**Additional requirements**
Retropharyngeal LN*	Prescapular LN
Parotid LN	Superficial inguinal LN
Submandibular/Submaxillary LN	
Bronchial* and Mediastinal* LN	
Lungs*	
Pleura	
Hepatic LN	
Liver	
Mesenteric LN (representative sample)	
Supramammary LN	
Udder**	

* Tissues where tuberculosis lesions are most commonly found
** See subtopic below

Note: Additional examinations of any other lymph nodes, such as those enlarged and/or haemorrhagic, may take place whenever considered necessary.
Regulation: (EC) 854/2004, Annex I, Section I, Chapter II, D, 2 (b)(i).

Continued on next page

Reactor animals: inspection requirements, continued

Udder inspection

The inspection of udders from reactor cattle is particularly important as they are not routinely incised unless they are for human consumption. In addition to the visual inspection and incision of the supra-mammary lymph nodes, the udder of cows must be visually inspected and palpated. If abnormalities are found during these, or when the udder is intended for human consumption, then deep incisions must be done into each quarter of the udder as far as the lactiferous sinuses.

Regulation: (EC) 854/2004, Annex I, Section IV, Chapter I, B 11.

Incision method

Cuts into the lymph nodes should be made across the node in at least two directions (criss-cross pattern) to reveal as much as possible of the core of the node. Care should be taken to examine the tips of the node. This method will reveal most TB lesions or reveal an area which appears abnormal which can be further incised.

Lesions in the lungs, liver and udder are most commonly found on inspection or palpation. Where abnormalities are felt on palpation the abnormal areas should be incised for further investigation. Careful small incisions at the border of the lesions should be made to reduce exposure to infective material. If the lesion is found to be typical of TB, no further incision is required into that lesion.

Hygiene precautions

Any equipment used to incise or examine the lymph nodes must be cleansed and sterilised before undertaking post-mortem procedures on subsequent carcases.

Continued on next page

Reactor animals: post-mortem decision

Judgement of meat

Decision on whether meat is fit for human consumption is based on the findings during post-mortem inspection.

Where there are indications of generalised TB or TB lesions with emaciation the entire carcase and all the blood and offal should be rejected as unfit for human consumption.

All meat from animals in which post-mortem inspection has revealed localised tuberculosis in a number of organs or a number of areas of the carcase are to be declared unfit for human consumption. However, when a TB lesion has been found in the lymph nodes of only one organ or part of the carcase, only the affected organ or part of the carcase and the associated lymph nodes need to be declared unfit for human consumption.

Regulation: (EC) 854/2004, Annex I, Section IV, Chapter IX, E.

Reactor animals: sampling

Relevant animals

In general, the collection of diagnostic samples by FSS is limited to reactors, DCs compulsorily slaughtered and some reactors or IRs which have been voluntarily slaughtered (i.e. cattle entered on a TB110 as requiring detailed post-mortem inspection).

In the rare but possible occurrence when reactors arrive to a non-contracted plant (considering that farmers do have the option of refusing valuation and private slaughter), APHA will issue a TB110 and advice on the sampling protocol. These animals cannot be considered/treated as slaughterhouse cases.

Responsibility for collecting samples

APHA, before sending animals to the abattoir, will provide the OV with the details of likely numbers and sampling protocol 48 hours in advance and will then submit electronically to the OV a copy of the TB110 (see TB Annex 6) by noon the day before the kill date. The form will include:

- The number of animals to be sent from each holding.
- The reason for submission (e.g. reactor, IR, DC).
- The sampling code for each batch.

Once the required samples have been collected the carcases and offal can be released if they have been found fit for human consumption.

Death of Reactors / DC / IR on arrival or in lairage

In the event of a Reactor being found dead on arrival (DOA), or dead in the lairage (DIL), the OV must contact APHA and explain the circumstances. APHA will inform the OV if any diagnostic samples for TB are to be collected.

Reference: The OV must be aware of the requirement to test for TSEs in over 48/over 24 month DOA or DIL bovines as per instructions in Chapter 2.6 "TSE Testing" and also consider the possibility of Anthrax.

Continued on next page

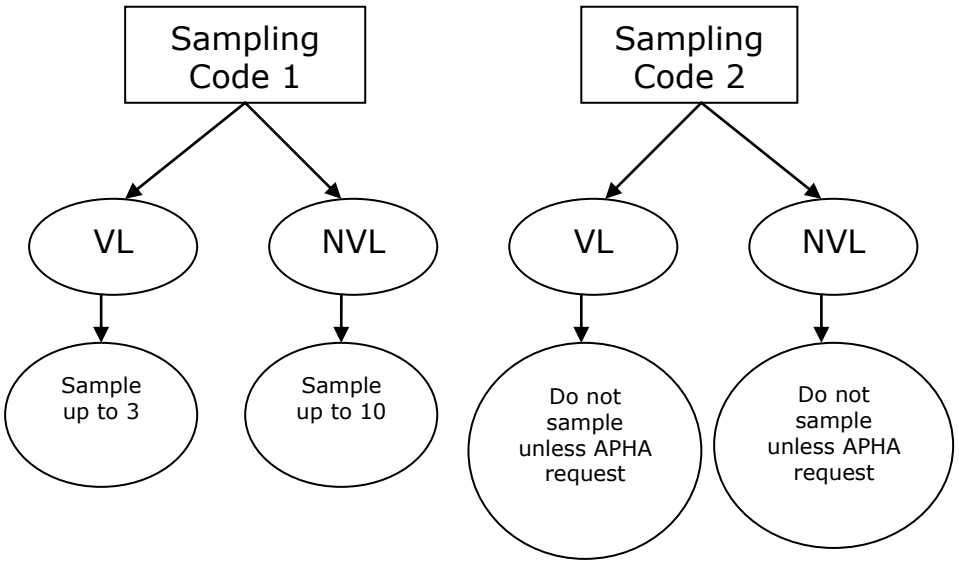
Reactor animals: sampling, Continued

Sampling codes

APHA will request a sampling protocol for suspect animals from each farm using two sampling codes (SC 1 and SC 2). The sampling codes are allocated by APHA depending on the herd history and its current status. In addition, APHA will indicate whether additional or exceptional sampling is required.

Sampling Code 1		**Sampling Code 2**	
Visible lesions (VL)	No visible lesions (NVL)	Visible lesions (VL)	No visible lesions (NVL)
Collect samples from maximum of 3 VL animals per herd. No NVL samples required.	Submit samples from 10 animals per herd (or from all if less than 10 animals)*	Do not collect samples unless APHA request	Do not collect samples unless APHA request

***APHA will indicate which 10 need to be sampled where all are NVL and more than 10 cattle are submitted from each farm**



Continued on next page

Reactor animals: sampling, continued

Sampling code 1 - Typical lesions identified (VL)

All lesions typical of TB should be collected when required (i.e. sampling code 1 or sampling code 2 with specific request from APHA).

A typical lesion is where infection with *M bovis* is suspected and common colours (cream / yellow) and common consistency (caseous / calcified / purulent) are identified.

APHA has defined a visible lesion (VL) as a lesion that is visible to the naked eye and typical of infection with *M bovis*.

Lesions due to skin TB should not be collected and will not be classed as VL.

All the lesions from each carcase should be pooled and placed in a single sealed 60 ml plastic pot to give one submission per animal. The samples should be no larger than approximately two-thirds of the pot and should include the lesion plus some normal tissue from the border of the lesion, where possible. However, this may result in a large amount of tissue if a carcase presents multiple TB lesions. In this situation, sample only the two most characteristic lesions; however, if the lesion in its entirety does not fill two-thirds of the pot, please include comments to that effect in the relevant comments box of the form.

Note: Unaffected lymph nodes must never be submitted when typical TB lesions have already been found in the same carcase.

Sampling code 1 - Typical lesions not identified (NVL)

Non visible lesions are those where no lesions typical of infection with *M bovis* are visible to the naked eye.
While this is not part of the APHA definition of NVL, for practical purposes this includes both where no lesions are found and where there are lesions that can be seen but infection with *M bovis* has been ruled out.
Where no lesions are found it is necessary to collect samples from all the following lymph nodes:

- all bronchial and mediastinal lymph nodes
- paired retropharyngeal lymph nodes
- any other lymph node if enlarged, abnormal and/or haemorrhagic

Continued on next page

Reactor animals: sampling, continued

Sampling code 1 – Atypical lesions identified

An atypical lesion is a lesion where infection cannot be definitely attributed to *M bovis* and where common colours (cream/yellow) or common consistency (caseous/calcified/purulent) are not identified, but where infection with *M bovis* cannot be ruled out.
Please note that an atypical lesion is neither a VL nor NVL for reporting purposes.

If both typical and atypical lesions are found on the same carcase, submit samples from the typical lesion only. The only exception to this is when suspect udder/supra-mammary lesions are found; these should be submitted in addition to the typical lesion and in a separate pot (one per holding).

Where only atypical lesions are found, sample a pool of lymph nodes and record as NVL but also collect and send the atypical lesion in a separate pot. Ask for urgent histology and laboratory fast track of this sample.

This should only be used where a decision cannot be made and the possibility of infection with TB cannot be ruled out.

Sampling code 2

Where APHA has allocated a sampling code 2 to a batch of animals there is no need to collect any samples, with only two exceptions:

- APHA may specifically request samples in certain cases.
- Where atypical lesions are found and there are no typical lesions in any animal from the same herd, sample the atypical lesion only and send for urgent histology / culture, making remarks to that effect on the "specific information" section of the TB110.

Method

Each animal from which samples are needed must be individually sampled. Samples from more than one animal must never be pooled in the same pot. Care must be taken to prevent cross-contamination.
The following method should be used to collect samples for TB diagnosis.

Continued on next page

Reactor animals: sampling, continued

<table>
<tr><th>Stage</th><th colspan="2">Description</th></tr>
<tr><td>1</td><td colspan="2">Collect samples cleanly to limit contamination. Ensure the equipment used for inspection and sampling of carcases is disinfected between carcases to prevent the possibility of cross-contamination.</td></tr>
<tr><td>2</td><td colspan="2">Dissect samples free of surrounding tissues to limit the volume of tissue submitted. Samples should be as fat and muscle free as possible.</td></tr>
<tr><td rowspan="3">3</td><td colspan="2">Where the carcase had visible lesions (VL) or non visible lesions (NVL) samples are to be treated as follows:</td></tr>
<tr><td>VL</td><td>NVL</td></tr>
<tr><td>Remove suspicious node or lesion in its entirety if small or a sample the size of approximately 2/3 of a pot if large and pool up to two of the lesions from the same area of the carcase in a pot.</td><td>Pool lymph nodes collected from the same carcase and place in a pot. The 60ml pot should be approximately 2/3 full. If there are any atypical lesions, collect separately from pool.</td></tr>
<tr><td>4a

4b</td><td colspan="2">Mesenteric chain lymph nodes should only be collected when no other lesions are present. They must not be included in the pooled sample and must be collected separately from other lymph nodes from the same carcase. This is to minimise contamination of the pooled sample with bacteria that could inhibit the growth of M. bovis in the laboratory.

Suspicious lesions in the supramammary nodes should always be submitted from any carcase (max. 1 per CPH). As for mesenteric nodes they should not be included in any pool of samples they need to be submitted in a separate pot.</td></tr>
<tr><td>5</td><td colspan="2">The OV must be present in the slaughterhall during the post-mortem inspection to ensure that the correlation is maintained and that findings are accurately recorded for each carcase. The OV must also ensure that the samples are secured prior to despatch.</td></tr>
</table>

Continued on next page

Reactor animals: sampling, continued

Stage	Description
6	APHA requires complete and accurate records of all findings from each animal, including those from which no samples have been taken, in the electronic form (TB110). This information will be used in deciding the future management of the herd. The completed form must be e-mailed to APHA (at the email address from which the TB110 originated) before despatch of samples (i.e. by 3pm if samples sent to the lab on the same day, or by noon next day when the samples are despatched the following day). If samples are collected, the TB110 must also be emailed to the APHA laboratory: (TBDiagnosticTeam@apha.gsi.gov.uk). A hard copy of the TB110 must be signed by the OV and should be faxed without delay to the relevant APHA office. The signed hard copy must be placed in an envelope, this envelope should be marked 'Originals' and placed between the outer box and the biobox/biobottle. APHA laboratory staff will forward the signed hard copies internally to the relevant APHA regional office. A copy of the form should be placed in a ziplock bag and taped to the outside of the biobottle / placed in biobox. The OV should retain a further copy in the plant files for future reference.
7	Each sample pot must have a unique traceability label stuck on the outside of the pot. The outside of the pot must be kept clean and the lids must be tightly closed to prevent leakage. In the event of the pot getting wet, it must be dried to ensure that the traceability label can be affixed when the sample is placed inside the pot. To maintain traceability, pots must be labelled before being moved from the slaughterhall. Each pot must then be placed inside a bag which is knotted tightly and excess bag trimmed off.
8	If more than one pot is submitted for a single animal (e.g. pool in one pot and atypical lesion in a separate pot) place all the individual sample pots, each in its own bag.
9	All bagged pots must then be placed in a biobox or biobottle (depending on number of pots) which is sealed. A copy of the completed forms must then be placed in a ziplock bag which is taped to the outside of the biobox.

Continued on next page

Reactor animals: sampling, continued

Stage	Description
10	Further packaging (box/bag) is then applied in line with courier instructions (see topic 'Packing and Despatch of samples' at the end of this section).
11	Retain chilled, pending their collection by a courier for transfer to the APHA laboratory. They must not be frozen unless instructed to do so by APHA. If frozen the sample and the packaging must be marked: "frozen sample".

Completion of Sampling and Submission form (TB110)

The TB110 has two parts.

- The first will be completed by APHA with details of the holding, CPH number, ear tags, etc. and the sampling code that applies to each batch.
- The second part must be completed by FSS and be signed by the OV. The findings in each carcase, including those for which samples are not required, must be recorded using codes to identify the lymph nodes/tissues and the description of the lesions where applicable (see below).

Where lesions are found in the lungs and/or udder suggestive of possible discharge of bacilli to the exterior (open tuberculosis) this has epidemiological importance and should be recorded in the comments box of the TB110.

The form must be sent electronically on completion to the originating email address and a hard copy, signed by the OV, must also be faxed and posted.

The TB110 must also be sent electronically to the APHA laboratory (TBDiagnosticTeam@apha.gsi.gov.uk) and a signed hard copy must accompany the samples.

Reactor Animals: Sampling, continued

Completion of form TB 50

The TB50 form is used to record post-mortem findings on suspect TB carcases in all species (see "slaughterhouse case" section)

Note: There is no need to complete TB50 forms for reactors slaughtered at APHA contracted abattoirs as the post-mortem findings are collated on the TB110.

Reference: see copy of TB50 form in Annex 7

Codes used to complete the TB forms

Codes will be used to describe the lesions, with six criteria used: location, number, size, colour, consistency/texture and presentation.

1. **Location**: Retropharyngeal (RP); Parotid (PA); Submandibular/Submaxilary (SM); Bronchial and Mediastinal (BM); Lungs (Lu); Pleura (Pl); Hepatic (HEP); Liver (Li); Prescapular (PSc); Superficial Inguinal (SI); Mesenteric (MES); Supramammary (SMA); Udder (U); Other (O)

2. **Number**:
   Single (S) – a distinct single lesion in the lymph node / organ
   Multiple (M) – up to 6 distinct lesions in the lymph node / organ
   Diffuse (D) – multiple lesions throughout the lymph node / organ that may or may not coalesce

3. **Size**:<2mm – (1); 2-10mm – (2); 11-50mm-(3); >50mm- (4)

4. **Colour**: Cream (C); Yellow (Y); White (W); Other (O)

5. **Consistency / texture**: Caseous (Ca); Calcified (Cf); Purulent (P); Granulomatous (Gr); Mixed [Ca & CF] or [Ca & P] (Mx)

Reactor Animals: Sampling, continued

Codes used to complete the TB forms continued

6. **Presentation**: Typical (T); Atypical (A)

For atypical lesions if the description cannot be provided from the above options a description can be entered in the comments box.

Reference: a template for recording findings on the line during post-mortem inspection is available at TB Annex 8.

Note: For packing and despatch of samples, please see Packing and Despatch of All TB Samples later in this section.

Reactor tag sampling

Overview

The aim of this programme is to compare the ears collected from TB reactors in order to audit fraudulent procedures in relation to reactor removal. This will be audited by cross matching 2 tissue samples:

- Tissue collected in the DNA capsule when tagging TB reactors at the time of the TB test.
- Tissue taken from the ear of TB reactors at the point of slaughter.

The Reactor Ear testing programme will comprise of 3 elements:

- Targeted collection where FSS have identified at point of slaughter possible tampering with tags, either official or reactor tags, or missing reactor tags.
- Targeted collection where APHA identify a risk and request FSS to collect both whole ears (which do not have to be connected), from specifically identified animals.
- Random collection of the required number of ears selected by FSS at each slaughterhouse on a monthly basis.

Reactor tag sampling, continued

Notification to Slaughterhouse/FSS of reactor details

Animals submitted for slaughter for TB control will either be R or DCs and will be sent for slaughter in one of the following ways:

- submitted as part of haulage and salvage to one of the slaughterhouses contracted by APHA to process TB reactors
- private slaughter organised by the owner but moved under licence issued by APHA

DCs will not have reactor tags and are excluded from this programme, however any other suspicion of fraud should be investigated as described in the MOC.
Most TB reactors will have a reactor tag applied. However, there are a few exceptions to that rule where reactors may not be tagged and are considered ineligible categories:

- reactors identified following re-interpretation (standard to severe) after PM/culture results
- animals have not been tagged at Tuberculin Test 2 (animal reading) for operational reasons
- gamma positive reactors

The assumption is therefore that apart from those ineligible for this programme all reactors disclosed at a skin test and entering the slaughterhouse will be marked with a reactor tag. In the comments box of the TB110, the following reasons will be given to indicate that an animal will not have a reactor tag and is ineligible:

- "tag not applied" – where APHA are aware that an animal has not been tagged for any reason
- "re-interpretation" where an animal became a reactor after the skin test due to re-interpretation of the skin measurements
- "gamma" where an animal has failed the gamma interferon test

Continued on next page

Reactor tag sampling, continued

Action when animal arrives at slaughterhouse

Apart from those specifically requested by APHA, the level of reactor animal identity checking by FSS should be as per existing instructions in the MOC.
Where FSS undertake an identity check, the following details should be compared with the information submitted to them by APHA:

- ear tags match the cattle passport
- reactor tag present if not reported as "tag not applied" or one of the categories not eligible for tagging (re-interpretations or gammas)

The following action should be taken:

- record findings, on ID checklist or FBO sheets where applicable
- check if any evidence of tampering or other fraud
- if evidence found, notify Local Authority Trading Standards as per existing processes and retain relevant part of the animal

Reactor tag sampling, continued

When is an ear sample required?

The reactor tag scheme requires a sample (comprising both whole ears and all tags present in those ears) to be collected from any animal which comply with one of the criteria described below.

A sample will be required in the following circumstances unless otherwise instructed. The FSS Targeted and the APHA Targeted may be required in slaughterhouses in Scotland.

- **FSS Targeted** – Whenever a FSS Ops Group officer finds evidence of fraud evidence, the tag has been tampered with or other ID non-compliance.
  - e.g. reactor tag missing when expected to be present (TB110 will state if "not applied" or one of the other ineligible categories), ear tags tampered with, indecipherable documentation, animal does not appear to match that expected, e.g. age, breed, sex, etc. Guidance is being produced, that gives details of what constitutes ear tag tampering.
- **APHA Targeted** - When requested by APHA, Intelligence led targeted examination of animal ID and sampling.
  - APHA will state 'COLLECT EARS' in the TB110 comments box when ears are required to be collected.
  - In exceptional cases APHA may contact the FSS representative at a slaughterhouse (by phone) to request an urgent identify check and request ear samples to be taken.

Continued on next page

Reactor tag sampling, Continued

When is ear sample required?, continued	For all other animals, i.e. TB reactors that have not had a reactor tag applied or Direct Contacts, any suspicion of fraud should be investigated as described in the MOC, Chapter 6 Section 7.

Reactor tag sampling, Continued

Collection of Sample, Packing & Dispatch of Ear Samples from FSS

For continuity of evidence all processes should be completed by the same person i.e. removal of the ears, completion of sample submission form, labelling and bagging in tamperproof/evidence bag and packaging of samples packed for dispatch.

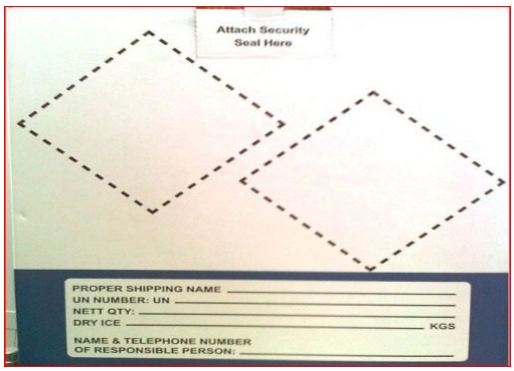
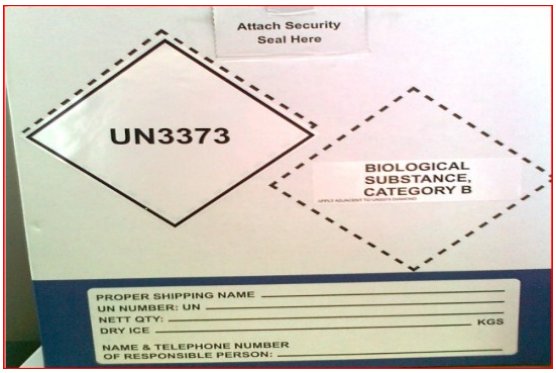
The following protocol should be followed:

A. Preparation of Packing Systems:

Step	Action
1	The packing materials consist of the following: • Biotherm boxes (system 5, 10 or 15, depending on number of samples collected) • Grip seal bags (8" x 11") • Absorbent pads • Tamperproof/ evidence bag • Ice Brix (2 per box)
2	Biotherm 5 boxes have been issued for routine sampling and only one pair of ears should be packed in this system. In the event multiple sample collection is required (targeted sampling) the Biotherm 10 & 15 systems should be used and will be supplied by APHA.
3	All Biotherm systems will be supplied by APHA and need to be prepared for first initial use; once preparation has been completed, using the protocol below, the systems can be re-used and will be returned by APHA. **Nett Qty:** One Sample **Dry Ice:** less than 1 kilogram. **Name & Telephone Number of Responsible Person:** FSS contact name and number • Ice Brix must be 'hard' frozen before use, x2 Ice Brix should be sufficient for the Biotherm 5 system.

Continued on next page

Reactor tag sampling, Continued

4	On the lid of the box complete legibly and accurately.  a) Consignee details with: APHA TB DNA Testing Food Standards Scotland Sample Reception Area New Haw Addlestone Surrey KT15 3NB b) Consignor details with: Full Address of the abattoir Postcode
5	Open the box and remove the labels supplied, place to one side.
6	On the front panel stick the UN3373 label in one of the pre-marked diamonds and place the Biological Substance Category B label adjacent to the UN3373 diamond (see photographs).  

Continued on next page

Reactor tag sampling, Continued

7	Discard the Infectious Substance label; **this must not be used**.
8	Complete legibly and accurately the front panel: **Proper shipping name:** Biological Substance Category B **UN Number**: UN3373 **Nett Qty:** One Sample **Dry Ice:** less than 1 kilogram. **Name & Telephone Number of Responsible Person:** FSS contact name and number • Ice Brix must be 'hard' frozen before use, x2 Ice Brix should be sufficient for the Biotherm 5 system.

B. Notify APHA that ear samples have been taken:

Step	Action
1	Whenever ear samples are taken, FSS abattoir staff must notify APHA Central Tagging Team that a sample has been taken and submitted to APHA Lab at Weybridge.
2	A copy of the signed sample submission form (TB Annex 13) should be faxed **or** scanned and emailed to the APHA central tagging team at: Fax: 01905 768649 Email: AHspecialistservicecentreworcester@apha.gsi.gov.uk

Continued on next page

Reactor tag sampling, Continued

C. Collection and Preparation of Ears (x1 pair):

Step	Action
1	Place the pair of ears (from the same animal) into a grip seal bag (8" x 11"); remove any excess air from the bag and seal.
2	Place the bagged sample (x1 pair of ears) inside another grip seal bag (8" x 11"), add an absorbent pad, remove excess air and seal.
3	Place the 'double bagged' sample (x1 pair of ears) into the tamperproof/ evidence bag and seal to meet continuity of evidence requirements.
4	Complete legibly and accurately the tamperproof/evidence bag in the section marked **'FSS Use Only'.**
5	Put in the refrigerator or freezer for chilling. This will reduce excessive moisture collecting in the bag.
6	Complete the sample submission form legibly and accurately. If samples have been taken due to evidence of tampering, ensure the tampering suspected box is ticked on the sample submissions form.
7	Send a copy by fax to APHA Central Tagging Team (as above at B step 2) and place in a grip seal bag (8" x 11") remove excess air and seal.
8	Add the hard frozen Ice Brix to the Biotherm system and place the sample next to the Ice Brix (x2 Ice Brix per biotherm system).
9	Place the sample submission form on top of the sample (inside a plastic bag), close the polystyrene lid (expanded polystyrene), close outer flaps and seal with security label or brown tape. Where samples from more than one animal are in the box, ensure the bag containing the sample submission form is attached to the corresponding tamperproof bag.
10	As soon as you receive the sampling request information from APHA, email the APHA Preferred Courier (currently Topspeed Couriers at tb@topspeedcouriers.co.uk) with the following information: • establishment name and approval number • date for each kill day and whether samples are likely to be sent from that day (will depend on whether any are sample code 1); this information will allow Topspeed Couriers to plan the collections to include multiple pickups where possible • destination laboratory name and telephone number for the FSA contact at the plant.

Continued on next page

Reactor tag sampling, Continued

D. Preparation of Biotherm Replacement of outer box:

Step	Action
1	If the outer carton becomes damaged a replacement carton should be obtained and prepared for use, using the protocol below: **N.B. A replacement outer carton is not supplied with UN3373 label and this will need to be obtained when ordering replacement carton** • Assemble the flat pack box • On the front panel stick the UN3373 label in one of the pre-marked diamonds • Write in permanent black marker pen, in letters at least 6mm high and adjacent to the UN3373 label **"BIOLOGICAL SUBSTANCE CATEGORY B"**
2	Complete legibly and accurately the front panel: **Proper shipping name:** Biological Substance Category B **UN Number**: UN3373 **Nett Qty:** One Sample **Dry Ice:** less than 1 kilogram. **Name & Telephone Number of Responsible Person:** FSS contact name and number
3	Insert the polystyrene box
4	Ice Brix must be 'hard' frozen before use, x2 Ice Brix should be sufficient for the Biotherm 5 system.
5	Follow Collection and Preparation of Ears (x1 pair) protocol
6	Resupply of packaging and dispatch equipment should be ordered by completing and submitting the CS115 form (TB Annex 12)

The slaughterhouse case

Definition

Carcases and offal with suspicious TB lesions found during routine meat inspection are called "slaughterhouse cases". The animals may or may not have come from a TB restricted premises.

Responsibilities

The table below outlines the responsibilities.

Slaughter house cases	APHA	• Advise and authorise whether samples are required and provide batch number (Work Schedule Activity- WSA) • Requesting and authorising the submission of suspected tissue samples.
	FSS	• Reporting of cases found during post-mortem inspection where TB is suspected to APHA. • Additional detailed inspection of the carcases and offal, • Collection of samples, packing, completion of paperwork and submission of samples (when authorised) to the APHA TB diagnostic laboratory as per instructions. • Ensuring traceability of samples during the inspection, collection and despatch of samples. • Order consumables (labels, pots, bags, etc.)

Skin tuberculosis

Animals presenting skin lesions only should not be treated as a slaughterhouse case, surveillance is not required and samples do not need to be collected. M bovis is rarely isolated from skin lesions.

The slaughterhouse case, continued

Differentiate between lesions

Because different sampling and diagnostic testing is required in each situation, FSS staff must positively differentiate between lesions which are:

- tuberculous (TB). Action – Inform APHA and collect samples for analysis.
- tumourous (EBL). Action – Reference: See section "Enzootic Bovine Leukosis" in this chapter for additional information.

Notifying APHA

Where the OV cannot positively rule out TB as the possible cause of the lesion(s) the suspect case must be reported to APHA without delay. The OV must inform APHA by telephone, to allow trace back to the farm of origin, giving details of the case such as:

- the nature of lesions found with their location
- the name and address of the person submitting the animal with ear tag number, lot number, CPH number and kill number in the additional remarks box of the TB50
- a description of the animal
- when the sample can be despatched

The details need to be recorded in a TB50 and faxed to the local APHA office so that they can make a decision as to whether samples must be sent to the laboratory.

Regulation: the Tuberculosis Orders in Scotland (as amended).

APHA Action

On notification from FSS of the finding of suspect TB lesions, APHA must provide the sample Work Schedule Activity (WSA) ID number that must be recorded in the box at the top of the TB50 form. Once they have received the completed TB 50 form APHA will advise whether samples should be submitted for culture and of any special conditions. Where required, samples must be collected and submitted to the APHA laboratory for analysis.

The slaughterhouse case, continued

Movement to detained area

After dressing, carcases and offal suspected of being affected with tuberculosis should be placed immediately in the detained area before additional detailed inspection is carried out and before being sampled, if required by APHA.

Transfer of carcases and offal

When transferring offal / carcases to a detained area for further inspection or sampling, care must be taken to prevent cross-contamination of other meat / equipment / fittings in the slaughterhall. In the event of suspected contamination, cleansing and disinfection of the affected area / equipment must take place before production recommences.

Note: Failure by the plant operator to co-operate with this procedure would constitute a contravention of the operator's responsibility to prevent cross-contamination and must be dealt with accordingly.

Regulation: (EC) 854/2004 Annex I, Section IV, Chapter IX, E.

Continued on next page

The slaughterhouse case: additional detailed inspection

Detailed Inspection

In the case of animals in which there are grounds for suspecting TB the following lymph nodes (LN) and organs must be examined in detail (visual inspection, palpation and incision) if they have not been examined already:

Routine inspection	Additional requirements
Retropharyngeal LN*	Prescapular LN
Parotid LN	Superficial inguinal LN
Submandibular/Submaxillary LN	
Bronchial* and Mediastinal* LN	
Lungs*	
Pleura	
Hepatic LN	
Liver	
Mesenteric LN (representative sample)	
Supramammary LN	
Udder**	

* Tissues where tuberculosis lesions are most commonly found
** See subtopic below

Note: Additional examinations of any other lymph nodes, such as those enlarged and/or haemorrhagic, may take place whenever considered necessary.
Regulation: (EC) 854/2004, Annex I, Section I, Chapter II, D, 2 (b)(i).

The slaughterhouse case: additional detailed inspection, continued

Udder inspection

The inspection of udders from is particularly important as they are not routinely incised unless they are for human consumption. In addition to the visual inspection and incision of the supra-mammary lymph nodes, the udder of cows must be visually inspected and palpated. If abnormalities are found during these, or when the udder is intended for human consumption, then deep incisions must be done into each quarter of the udder as far as the lactiferous sinuses.

Regulation: (EC) 854/2004, Annex I, Section IV, Chapter I, B 11.

Incision method

Cuts into the lymph nodes should be made across the node in at least two directions (criss-cross pattern) to reveal as much as possible of the core of the node. Care should be taken to examine the tips of the node. This method will reveal most TB lesions or reveal an area which appears abnormal which can be further incised.

Lesions in the lungs, liver and udder are most commonly found on inspection or palpation. Where abnormalities are felt on palpation the abnormal areas should be incised for further investigation. Careful small incisions at the border of the lesions should be made to reduce exposure to infective material. If the lesion is found to be typical of TB, no further incision is required into that lesion.

Hygiene precautions

Any equipment used to incise or examine the lymph nodes must be cleansed and sterilised before undertaking post-mortem procedures on subsequent carcases.

Continued on next page

The slaughterhouse case: additional detailed inspection, continued

Judgement of meat

Decision on whether meat is fit for human consumption is based on the findings during post-mortem inspection.

Where there are indications of generalised TB or TB lesions with emaciation the entire carcase and all the blood and offal should be rejected as unfit for human consumption.

All meat from animals in which post-mortem inspection has revealed localised tuberculosis in a number of organs or a number of areas of the carcase are to be declared unfit for human consumption. However, when a TB lesion has been found in the lymph nodes of only one organ or part of the carcase, only the affected organ or part of the carcase and the associated lymph nodes need to be declared unfit for human consumption.

Regulation (EC) 854/2004, Annex I, Section IV, Chapter IX, E.

The slaughterhouse case: sampling

Collection of samples

When visible lesions found during post-mortem inspection cause suspicion of tuberculosis, samples need to be collected and may need to be sent for analysis, if requested and authorised by APHA. The sampling procedures are the same as previously described for reactors, where VL are found and Sampling Code 1 applies. Please note that NVL samples are NOT to be sent for slaughterhouse cases.

Remove suspicious node or lesion in its entirety if small or a sample the size of approximately two-thirds of the pot if large and pool up to two of the suspected lesion tissues from the same carcase. Samples may be held in a polythene bag until APHA confirm that they are needed.

If the size of the affected tissue and/or lesions from slaughterhouse cases is too small to make up approximately two-thirds of the pot, then comments must be included on the TB50 form to that effect. If the lesion identified is small, but there are multiple lesions, the multiple lesions must be included to make up the maximum required volume, to enable part of it to be used for histological examination. However, mesenteric lymph node and supramammary / udder tissue are exceptions and should be submitted separately.

The above is required because, where histology cannot be carried out on a sample and the initial culture result is negative, the culture must be extended. Extending the culture period increases the costs for APHA and impacts on the farmer's business, as restrictions will remain in place on the farm during the extended culture period; this could be up to 10 weeks.

Samples are not required from clear testing cattle from TB restricted establishments (ie cattle arriving at the slaughterhouse without a TB24), unless lesions suggestive of TB are found during post-mortem inspection. In this case, the "slaughterhouse case" procedures apply.

Note: Refer to instructions in previous topic for reactor animals "Collection of Samples" for further information.

The slaughterhouse case: sampling

Completion of TB50 form

In addition to the telephone report, fill in a separate sample submission form (TB50) for each slaughterhouse case detected. The OV must give a detailed description of the location and nature of the suspect lesions on the TB50, including comments where the sample is smaller than required for histological examination. A properly completed TB50 form (including the WSA number) will enable APHA to quickly trace back the slaughterhouse case to its herd of origin. Based on this information APHA will decide whether samples need to be sent to the laboratory and put in place the appropriate TB control measures.

In this type of scenario the OV is expected to either confirm the lesion as being characteristic of TB or, alternatively, be able to rule it out. If the OV has any doubts and/or difficulties are found when completing the TB50 form, the OV can contact APHA and discuss any concerns with the duty Veterinary Officer to obtain the necessary advice.

Reference: See TB Annex 7 for a sample TB50 form.

Continued on next page

The slaughterhouse case: sampling, Continued

Distribution of the TB50 form

The properly completed and signed TB50 form must initially be faxed to the local APHA office as soon as possible.

If APHA require the samples to be submitted to the laboratory the process is as follows:

- Signed hard copy original TB50 form must be placed in an envelope, this envelope should be marked 'Originals' and placed between the outer box and the biobox/biobottle. APHA laboratory staff will forward the signed hard copies internally to the relevant APHA regional office.
- A copy of the form should be placed in a ziplock bag and taped to the outside of the biobottle / placed in biobox. Copy of the forms should be faxed or emailed to the relevant APHA office.
- OV should retain a further copy in the plant files for future reference (retention period 12 months).

Packing and Despatch of All TB Samples

If APHA confirm that samples are required they must be transferred from the polythene bag(s) into pots.

Samples must be sent to APHA Weybridge with the forms. They should be sent as soon as possible and by the next working day at the latest.

If APHA advise that the samples do not need to be sent to the laboratory then they must be disposed of as Cat 1 ABP.

Reference: See topic 'Packing and Despatch of Samples' at the end of this section.

Packing and despatch of samples

Packing

1. All samples must be submitted in a 60ml pot.
   - Outside of pot must be kept clean.
   - Remember to tighten lids. Give an extra turn before packing.
   - Avoid cross threading the lids as they will cause the pots to leak.
2. Stick label on outside of pot: eartag/CPH printed on label.
3. Place each individual pot in a plastic bag which is knotted tightly. Trim off excess bag.
4. If submitting more than one pot for a single animal eg. pool in one pot, atypical lesion in a separate pot :
   - Label each pot and write on label what is in each pot e.g. pool/mesenteric, etc.
   - Place each pot in a separate bag and tie as previously.
   - Place both bagged pots in a third bag and tie the bag.
   - Make note in comments section on the TB110 or TB50 detailing how many pots submitted and what is in each pot.
5. Place all bagged pots into a biobox/biobottle along with the absorbent pad/material and seal the box. The person introducing samples inside the biobox / biobottle must wipe their hands with 70% ethanol wipes before introducing the samples. The outside of the biobox / biobottle must also be wiped. The process for sending forms is as follows:
   - Signed hard copy TB110 and original TB50 forms must be placed in an envelope, this envelope should be marked 'Originals' and placed between the outer box and the biobox/biobottle. APHA laboratory staff will forward the signed hard copies internally to the relevant APHA regional office.
   - Copies of those forms should be placed in a ziplock bag and taped to the outside of the biobottle / placed in biobox. Copies of these forms should be faxed or emailed to the relevant APHA office. The OV should retain a further copy in the plant files for future reference. (Retention period 12 months)

Continued on next page

Packing and despatch of samples, Continued

Packing, continued

6. Place biobottle into the outer box. Before use the biobox / biobottle must be stored in a separate clean area to avoid possible cross contamination.
7. Attach address label.
8. Attach security seal.

Store the package in the chiller until the time of collection. Ideally place in a waterproof bag / container to avoid contamination. The outer box needs to clearly read: "TB samples open only in CL3". If the box has not been pre-stamped, please write or use the sticker provided.

Despatch

The current courier for the new sampling process is Topspeed Couriers. The courier process is as follows:

Step	Action
1	As soon as you receive the sampling request information from APHA, email the APHA Preferred Courier (currently Topspeed Couriers at tb@topspeedcouriers.co.uk) with the following information: • Establishment Name and Approval number • The date for each kill day and whether samples are likely to be sent from that day (will depend on whether any are sample code 1). This information will allow Topspeed Couriers to plan the collections to include multiple pickups where possible • The destination laboratory • Name and telephone number for the FSS contact at the plant
2	APHA Preferred Courier will confirm the date that the samples will be collected. If samples need to be kept at the establishment overnight, please ensure that they are sealed in the packaging requested from APHA and store in a chiller or cold room.
3	The APHA Preferred Courier is required to deliver the samples within 2 working days. For example if samples are taken on Tuesday, samples are required to be with APHA by 5pm on Thursday. Samples can be delivered up to 3pm only on a Friday.
4	On detection of a slaughterhouse case that needs samples submitting, notify the courier that samples are required to be collected and they will organise a collection which meets the 2 working days delivery requirement e.g. for a SH case found on a Monday, samples are required to be with APHA laboratory by 5pm Wednesday but collection could either take place on Monday, Tuesday or Wednesday, as the couriers are required to consolidate their delivery runs to be cost effective.

Continued on next page

Packing and despatch of samples, Continued

Ordering consumables

The OV at each abattoir is responsible for ensuring that there are sufficient supplies of consumables for packing samples. It is important that only the specified packaging materials (pots, labels, etc.) are used as failure to do so may result in the sample being un-assayable at the lab.

The consumables must be ordered directly from APHA Weybridge by using the following procedure:

1. Fill in the requisition form (see examples at TB Annexes 11 and 12) specifying the type of materials required and the number of units. Form CS118 should be used for APHA contracted slaughterhouses and CS117 for the others. Requisition forms should be obtained from FSA Core:

   FSA Core>Community>Operations>FSA TB Sampling & Submissions>information Package & Supporting Documents

2. Make sure that you complete all the boxes (establishment name, address, FSA contact name and telephone number, etc.).

3. The requisition form should be emailed to: StoresStockOrders@apha.gsi.gov.uk or faxed to APHA Weybridge: 01932 357497.

APHA will endeavour to complete delivery of consumables orders within 7 working days of receipt. If you have any queries regarding an order that you have placed you should telephone the APHA stores in Weybridge on 01932 359451.

Reference: See TB Annexes 11 and 12 for example copies of the CS118 and CS117.

TB - Annex 1- Sample TB24

(1st page sample only)

AHVLA
Animal Health and Veterinary Laboratories Agency

Department for Environment, Food and Rural Affairs
Scottish Government
Welsh Government

(Insert address)

(Insert AHVLA office address)

Tel:Tel Number
Fax: Fax Number
Email: Email Address

Document Ref: OCE Reference Number
Incident Ref: Incident Reference Number

CPHH:CPHH

Animal Health Act 1981
The Tuberculosis (England) Order 2007 (as amended)
The Tuberculosis (Scotland) Order 2007 (as amended)
The Tuberculosis (Wales) Order 2010 (as amended)

Licence Authorising Movement of Cattle to a Slaughterhouse

I authorise, subject to the conditions attached to this licence, the movement of the cattle specified at Appendix 1.

Total number of cattle listed: (Number)

From:

Premises Details:
(Location)
(Location)

To (slaughterhouse address):

Premises Details:
(Location)

This licence must accompany the cattle throughout the movement.

This licence does not override any restrictions on the movement of animals imposed on account of any other animal disease.

This licence is valid:

Valid From	Date
Valid Until	Date

Name: Signature

Date: Doc Issued Date

Veterinary Inspector appointed by Secretary of State / Veterinary Inspector appointed by Welsh Minsiters / Veterinary Inspector appointed by Scottish Ministers

The Animal Health and Veterinary Laboratories Agency is an Executive Agency of the Department for Environment, Food and Rural Affairs working across Great Britain on behalf of Defra, the Scottish Government and Welsh Government.

TB24 (Rev. 06/14) PROTECT - Personal 1 of 4

TB - Annex 2 – Sample TB24c

(1st page sample only)

AHVLA
Animal Health and Veterinary Laboratories Agency

Department for Environment, Food and Rural Affairs
Scottish Government
Welsh Government

(Insert address)

(Insert AHVLA office address)

Tel: Tel Number
Fax: Fax Number
Email: Email Address

Date: Document issued date
Document Ref: OCE Reference Number

CPHH: CPHH
Incident Ref: Incident Reference

Animal Health Act 1981
The Tuberculosis (England) Order 2007 (as amended)
The Tuberculosis (Scotland) Order 2007 (as amended)
The Tuberculosis (Wales) Order 2010 (as amended)

Licence Authorising General Movement of Cattle to a Licensed Slaughterhouse

I authorise, subject to the conditions attached to this licence, general movements of cattle direct to slaughter at a licensed slaughterhouse from premises with the TB Notice(s)/Restriction(s) listed below.

Restriction Ref	*Notice/Restriction	Notice/Restriction Date Served
OCE Reference	Document ID	Doc Issued Date
OCE Reference	Document ID	Doc Issued Date

Animals that may be moved to slaughter under this licence.

All cattle on the restricted premises may be moved directly to slaughter at any time under this licence **except** any animals:

- identified as test reactors, inconclusive reactors or direct contacts by an Inspector or an approved veterinary surgeon, or
- over 8 weeks of age on the date of their movement to slaughter that have not had a tuberculin skin test with negative results in the 90 days before the intended date of departure, or
- that having had a TB test applied to them, are still waiting for the results to be read by an Inspector or an approved veterinary surgeon, e.g.:
  - those injected with tuberculin, but where the test has not been read yet, or
  - those sampled for the gamma-interferon blood test, but with results not yet officially reported by the laboratory.

Animals in any of the categories listed above can only be moved under a separate licence issued by AHVLA. TB Reactors and direct contacts will normally be disposed of by AHVLA. Inconclusive reactors must remain in isolation pending re-test or until sent to voluntary slaughter before re-test at your own expense and with the approval of this AHVLA office.

This licence remains valid until TB restrictions are lifted or it is cancelled by form TB24d issued by AHVLA. It is NOT valid for movements of TB-restricted cattle via collection centres or slaughter markets.

This licence does not override any restrictions on the movement of animals imposed on account of any other animal disease.

TB24c (Rev. 06/14) PROTECT - Personal 1 of 4

TB - Annex 3- Sample TB16b

Department for Environment, Food and Rural Affairs
Welsh Government

AHVLA
Animal Health and Veterinary Laboratories Agency

Animal Health Act 1981
The Tuberculosis (England) Order 2007 (as amended), Article 9(3)
The Tuberculosis (Wales) Order 2010 (as amended), Article 12

AHVLA office Stamp

Licence Authorising Movement of Cattle from premises under restriction through a Dedicated Sale for TB Restricted Cattle to:

- **an Approved Finishing Unit (AFU)(England Only),**
- **a Slaughterhouse**

Cattle moving under this Licence must have passed a Tuberculin Test in the 90 days before movement, except for calves under six weeks of age (and are not reactors, IRs or DCs).

Name and address of person to whom this Licence is issued prior to the purchase of the animals at the Dedicated Sale specified below.

Postcode:

CPHH:

Name and address of person to whom this Licence is issued following purchase of the animal/s listed at the Dedicated sale specified below. ***To be completed by the Market Operator***

Postcode:

CPHH:

PART 1 – To be completed by the AHVLA office

I authorise, subject to the Conditions listed overleaf, the movement of the cattle specified at Appendix 1

Number of Cattle

from

to the Approved Finishing Unit (AFU), which must not be in Wales, or licensed slaughterhouse specified in PART 2 below

Via

which is approved for a Dedicated Sale for TB Restricted Cattle

This licence is valid from **until** **and must accompany the cattle throughout the movement.**

Signed

Date

Veterinary Inspector of the Department

Name in BLOCK LETTERS

Telephone number for any enquiries

PART 2 - For completion by the Market Operator in ink other than black

Name and address of the *AFU/Slaughtehouse
** delete*

Signed (on behalf of the Market Operator)

Date

Name in BLOCK LETTERS

Please read the conditions overleaf

TB16b (Rev. 04/14) **OFFICIAL-SENSITIVE** Copy to AHVLA and Local Authority (LA)

TB - Annex 4 – TB24b

Department for Environment, Food and Rural Affairs
Welsh Government

AHVLA
Animal Health and Veterinary Laboratories Agency

Animal Health Act 1981
The Tuberculosis (England) Order 2007 (as amended)
The Tuberculosis (Wales) Order 2010 (as amended)

AHVLA office Stamp

Licence Authorising the General Movement of Cattle from premises under TB restrictions to a Slaughterhouse through an approved dedicated slaughter gathering

This licence authorises the movement of cattle from premises under TB restrictions in England and Wales to a place of slaughter via a designated gathering specifically approved for such purposes.
Cattle moving under this licence must have passed a Tuberculin skin test in the 90 days before the intended date of movement, except for calves under six weeks of age (and are not TB test reactors, inconclusive reactors or direct contact animals).

Name and address of person to whom this Licence is issued prior to sale of the animals at the slaughter gathering

Postcode: CPHH:

Name and address of the person to whom this licence is issued following purchase at the slaughter gathering
To be completed by the market operator

Postcode: CPHH:

PART 1 – To be completed by the AHVLA office/owner/keeper

I authorise, subject to the Conditions listed overleaf, the movement of the cattle specified at the Appendix:

Number of cattle being moved _____ *(To be completed by the owner/keeper)*

from _____

to the slaughterhouse specified in PART 2 below

via *(To be completed by the owner/keeper)* _____ a licensed market which is a dedicated slaughter gathering approved for TB-restricted cattle

This licence is valid from _____ **until** _____ **and must accompany the cattle throughout the movement.**

The market operator must copy the licence and delete the appropriate cattle identities in the Appendix if cattle are sold to more than one purchaser so that PART 1 accurately reflects the movements to the licensed slaughterhouse entered in PART 2.

Signed _____ Date _____
Officer of the Department

Name in BLOCK LETTERS _____ Tel No. for any enquiries (incl. National dialling code) _____

PART 2 - For completion by the Market Operator after the sale in ink other than black

Name and address of the slaughterhouse

Signed (on behalf of the Market Operator)

Date

Name in BLOCK LETTERS

Please read the conditions overleaf and be aware of your

TB24b (Rev. 04/14) **OFFICIAL-SENSITIVE** Copy to AHVLA and Local Authority (LA)

TB - Annex 4a – Sample TB24g

Department for Environment, Food and Rural Affairs
Welsh Government

Animal Health Act 1981
The Tuberculosis (England) Order 2007 (as amended), Article 14
The Tuberculosis (Wales) Order 2010 (as amended), Article 12 and 16

AHVLA office Stamp

Licence authorising general movement of cattle from an approved finishing unit under TB restrictions to a licensed slaughterhouse

Name and address of person to whom this Licence is issued

Postcode:

CPHH No:

1. I authorise, subject to the conditions listed overleaf, general movements of cattle direct to slaughter at a licensed slaughterhouse from the Approved Finishing Unit (AFU) owned or occupied by you under the above Holding Number (CPHH) and/or detailed in your TB restriction notice (TB02).

Animals that may be moved to slaughter under this licence

2. All cattle on the Approved Finishing Unit detailed on your TB02 notice may be moved directly to slaughter at any time under this licence except any animals:
   - identified as test reactors, inconclusive reactors or direct contacts by a Veterinary Inspector/Officer of the Department; or
   - those injected with tuberculin, but where the test has not been read yet, or
   - those sampled for the gamma-interferon blood test, but with results not yet officially reported by the laboratory.
3. Animals in any of the categories listed under paragraph 2 above can only be moved under a separate, specific licence issued by the Department. Reactors and DCs will normally be disposed of by the Department or Welsh Government. IRs must remain in isolation pending re-test or until sent to voluntary slaughter before re-test at your own expense and with the approval of this AHVLA office.

Total number of cattle to be moved

I authorise, subject to the conditions listed overleaf, the movement of the cattle specified from:

This licence remains valid until TB2 restrictions are lifted or it is cancelled by Form TB24d issued by the Department or Welsh Government. It is NOT valid for movements of TB-restricted cattle via collection centres or slaughter markets.

Signed

Date

Officer of the Department

Name in BLOCK LETTERS

Telephone No. *(including national dialling code)*

This Licence does not override any restrictions on the movement of animals imposed on account of any other animal disease.

TB24g (Rev. 04/14) **OFFICIAL-SENSITIVE**

TB – Annex 5 – Sample TB104

Department for Environment, Food and Rural Affairs
Scottish Government
Welsh Assembly Government

animalhealth

Food Chain Information for TB Restricted cattle

Name and address of herd owner

Animal Health office address or Office Stamp

CPH

OV practice

Official Animal ID	Breed	Age	Sex	Any Treatment, Injury or Abnormality, if present #

Owner/Herdperson to describe the **injury** the animal has suffered or **abnormality** it is showing, or if a veterinary surgeon has examined the animal, his/her **diagnosis. NB** The animal must still be fit to transport.

- The above animal(s) has/have received **no** treatment or medication within the last 28 days* **or** has/have received treatment or medication (as above) and the required withdrawal period has been completed.*
  (**delete as appropriate*)
- There are no reports concerning the exposure of the above animal(s) to feed or environmental contaminants.

Signed

Status
(*Owner/Herdperson etc.*)

Name in BLOCK LETTERS

Date

On farm medicines records have been seen.

Signed
Veterinary Officer/Animal Health Officer

Data Protection Act
Defra, the Scottish Government, the Welsh Assembly Government and the Food Standards Agency are data controllers in respect of personal data processed by Animal Health. For the purposes and usage of the data and the data sharing arrangements, please see full Data Protection Statement on the Animal Health website: http://www.defra.gov.uk/animalhealth/about-us/accesstoinformation/fairprocessing.htm. A hard copy of this can be provided if required; please contact your local Animal Health office. Animal Health will not permit any unwarranted breach of confidentiality or act in contravention of their obligations under the Data Protection Act 1998.

NB. It is an offence to transport a sick or injured animal if this is likely to cause it unnecessary suffering.

If in doubt regarding fitness to transport, or if medicines are administered to any of the above cattle after the date of this declaration please contact this office on the above number for advice before the date of collection.

Animal Health is an Executive Agency of the Department for Environment, Food and Rural Affairs and also works on behalf of the Scottish Government, Welsh Assembly Government and Food Standards Agency.

TB104 (Rev. 09/10) *Copies to Slaughterhouse/Owner/File*

TB – Annex 6 – Sample Reactor Sampling & Submission Form (1st page sample only)

TB110 Part A - Reactor Sampling & Submissions Form

Disposal Notification

animalhealth

Establishment approval no.	
Establishment name:	
Expected disposal / kill Date:	

AHDO	Holding name	CPHH number	Animal ID (i.e. UK123456 100001)	Date of Birth	Reason for submission	Breakdown status	Sample code	Specific info

TB Annex 7- Sample TB50 (1st page sample only)

Department for Environment, Food and Rural Affairs
Scottish Government
Welsh Government

AHVLA
Animal Health and Veterinary Laboratories Agency

Tuberculosis
Material for examination at AHVLA Laboratories

Material for examination from FSA Approved TB Reactor Processing Abattoirs should be sent to your designated AHVLA Regional Laboratory.

Material for examination from "Red Meat" processing abattoirs or Knackery/Hunt Kennel etc should be sent to:

TB Diagnosis Section
Statutory and Exotic Bacteria
AHVLA
New Haw, Addlestone,
Surrey, KT15 3NB

For FSA Use Only	
Manage Sample Activity	WSA
Date samples dispatched to Laboratory	

For AHVLA Laboratory/office Use Only	
VLA reference number	
AF	
Received on	
Additional Form completed (TB50c) *(Tick if attached)*	☐

Submitting AHVLA office name or Regional Laboratory

Slaughterhouse/Knackery Cases Ref No.

Year	Local AHVLA office No	Sequential No.

AHVLA office where animal originated and notification of results should be sent
(if different, copy form to originating AHVLA office)

Name and approval number of
*Slaughterhouse/Knackery/ Hunt Kennel or OV Practice
(delete as appropriate)

Reason for submission: (Please tick first appropriate box)

TB Skin test reactor/IRs ☐	g IFN test reactor ☐	DC ☐	Slaughterhouse case ☐	Wild animal found dead or culled ☐	AHVLA Submission ☐	Other ☐

CPHH		Official ID or other animal ID			
Breed		Species		Sex	
Date of Death		Date of Birth/Age		Date of PME	

Name of Owner		Premises of origin (or land where the animal/carcase was found).	
Address		Map reference or Postcode	

Lesions (if VL complete overleaf) (please tick appropriate box)

VL ☐	NVL ☐	Atypical ☐

Additional remarks (including AHVLA relevant project code)

*If processed in a slaughterhouse, indicate the FSA judgement on carcase and offal (tick one box):

Fit for human consumption ☐	Partial rejection for TB ☐	Total rejection for TB ☐	Total rejection for other ☐

Sent by (Print) VIO/VO/VI/OV *delete

Signature

Date

TB50 (Rev. 07/11) **PROTECT - Personal**

TB Annex 8- Description of lesion template

Description of lesions

Number of Lesions		Size of Lesions (maximum)		Colour of Lesions		Consistency/Texture		Nature of Lesions	
Single	S	< 2mm	1	Cream	C	Caseous	Ca	Atypical	A
Multiple	M	2-10mm	2	Yellow	Y	Calcified/Gritty	Cf	Typical	T
		11-50mm	3	White	W	Purulent	P		
		> 50mm	4	Other	O	Granulomatous	Gr		
						Mixture (of Ca & Cf)	Mx		

Tissue Abbreviations

Retropharyngeal LN	RP
Parotid LN	PA
Submandibular/Submaxillary LN	SM
Bronchial and Mediastinal LN	BM
Lungs	Lu
Pleura	Pl
Hepatic LN	HEP
Liver	Li
Prescapular LN	PSc
Superficial Inguinal LN	SI
Mesenteric LN	MES
Supramammary LN	SMA
Udder	U
Other	O
'Other' additional lymph nodes may be examined if considered to be affected. Details should be given on the Sample Correlation Form, comments column.	

Additional Comments

Kill number	Comments
Details should be transposed on to the TB110 Part B - Reactor Sampling & Submissions Form, comments column.	

TB – Annex 9- Sample TB24a

(1st page sample only)

Department for Environment, Food and Rural Affairs
Scottish Government
Welsh Government

The Tuberculosis (Deer) Order 1989 (as amended)

AHVLA
Animal Health and Veterinary Laboratories Agency

AHVLA office stamp

Licence authorising movement of Deer to a Slaughterhouse

Name and address of person to whom this Licence is issued

Postcode:

CPHH No:

I Description of Deer				II Description of Deer			
Official Animal Identity	Further Identification			Official Animal Identity	Further Identification		
	Species	Age	Sex		Species	Age	Sex

Total number of deer listed

I, a Veterinary Inspector appointed by the Secretary of State/Scottish Ministers/Welsh Ministers*, authorise, subject to the Conditions listed overleaf, the movement of the deer specified in Columns I and II above

from

in the country of

to
(address of slaughterhouse)

in the county of

This Licence is valid until and must accompany the deer throughout the movement.

Signed
Veterinary Inspector

Date

Name in BLOCK LETTERS

Tel No.
(incl. National dialling code)

please delete as necessary

Please read the conditions overleaf

TB24a (Rev. 01/12) **PROTECT - Personal**

TB - Annex 10 – Sample TB55A

Department for Environment, Food and Rural Affairs
Scottish Government
Welsh Assembly Government

animalhealth

Animal Health Act 1981
The Tuberculosis (Deer) Order 1989 (as amended)

Proposal to Slaughter Deer

Name and Address of person to whom this form is issued:

Postcode

CPHH No.

From: Regional Veterinary Manager (RVL)/Divisional Veterinary Manager (DVM)

Please note that under the Tuberculosis (Deer) Order 1989 (as amended) the *owner/person in charge of deer which are subject to Form A restrictions, proposes to slaughter the deer *referred to in the enclosed Notice/detailed below at the *export approved/non-export approved slaughterhouse at:

on:

Description of Animals	Official Animal Identity

Will you please *arrange/consider arranging for the examination of the carcases by the competent officer as to the fitness for human consumption.

Signature

Date

Veterinary Inspector/Officer of the Department

Name in BLOCK letters

Telephone Number

Data Protection Act
Defra, the Scottish Government, the Welsh Assembly Government and the Food Standards Agency are data controllers in respect of personal data processed by Animal Health. For the purposes and usage of the data and the data sharing arrangements, please see full Data Protection Statement on the Animal Health website: http://www.defra.gov.uk/animalhealth/about-us/accessto/information/fairprocessing.htm. A hard copy of this can be provided if required; please contact your local Animal Health office. Animal Health will not permit any unwarranted breach of confidentiality or act in contravention of their obligations under the Data Protection Act 1998.

Animal Health is an Executive Agency of the Department for Environment, Food and Rural Affairs and also works on behalf of the Scottish Government, Welsh Assembly Government and Food Standards Agency.

TB55A (Rev. 03/11) **PROTECT - Personal**

Section 8 - Warble Fly Infestation

Notification

If warble fly infestation is suspected in a live bovine animal /carcase, the OV should determine the farm of origin and notify the VO.

Detection in live animal

If it is necessary to slaughter the animal before the arrival of the VO, the carcase and hide, along with the identifying ear tag should be detained for inspection by the VO. A 7ml vacutainer sample of clotted blood should be collected at slaughter.

Detection in carcase

In the case of infestation detected at post-mortem examination, the carcase and hide, along with the identifying ear tag should be detained for inspection by the VO and an attempt should be made to collect any blood that may still be present in the carcase (e.g. in the heart, great vessels etc).

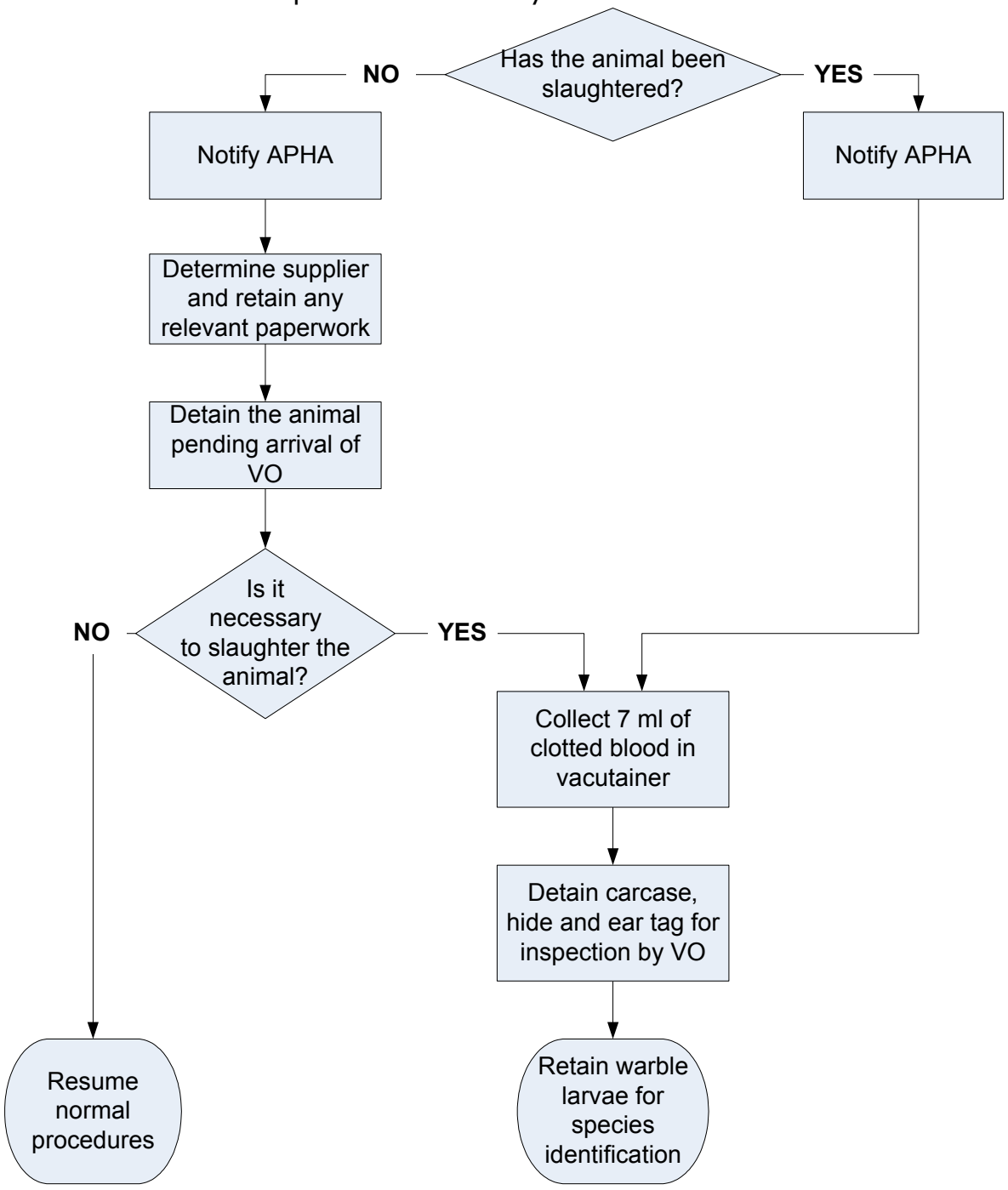
Larvae retention

Any warble larvae should be retained for species identification.

Continued on next page

Section 8 - Warble Fly Infestation, continued

Procedure The following flow chart outlines the procedure to follow if the OV suspects a Warble Fly infestation.



Department for Environment, Food and Rural Affairs
Scottish Executive
Welsh Assembly Government

Animal Health Act 1981
Anthrax Order 1991 (Article 10(2))

Case Ref. No.

Form A: Notice declaring infected place

Copies of this Notice should be sent to:

- the Local Authority
  (in Scotland, the Regional or Islands Council);
- the Animal Health office;
- the Director of Public Health Medicine at the District Health Authority (in Scotland, the Chief Administrative Medical Officer for the Health Board)
- the following water authorities:
  - In England - National Rivers Authority;
    and Wales: - the Water Companies Association;
    - the Water Services PLC.
  - In Scotland - the River Purification Board;
    - the Central Scotland Water Development Board (if appropriate)

Please use BLOCK LETTERS

Name and address of occupier of premises

Postcode

I the undersigned, being a veterinary inspector, give you notice as the occupier of the premises described below that, in accordance with the provisions of the above Order, the premises are hereby declared to be an infected place are subject to the requirements specified in Schedule 1 to the Order. Any infringement of the requirements may render you liable to prosecution under the Act.
This notice remains in force until it is cancelled by a notice in form B served by a veterinary inspector on the occupier of the infected place.

Description of infected place

Premises

Parish*/Community *
District/Borough*
County Regional
Islands* Council

* Delete as appropriate

Signature of Inspector

Name in
BLOCK LETTERS

Date

Tel No.

Ext.

Address

Postcode

Warning
If the person to whom this Notice is served fails to comply with the Notice, he/she may be guilty of an offence under the Act.

AN24 Rev. (04/09)

Requirements under Articles 5 and 7

Part I

1. The occupier of premises on which there is a diseased or suspected animal or carcase shall as soon as possible:
    a. block the drainage system of that part of the premises which contains the diseased or suspected animal or carcase so as to prevent the spread of disease;
    b. prevent the access of animals or poultry to the diseased or suspected animal or carcase and to any part of the premises on which the animal or carcase or any dung or discharge from the animal has been;
    c. disinfect with an approved disinfectant any place where the diseased or suspected animal or carcase has been;
    d. sterilise any milk produced by disease or suspected animal;
    e. sterilise any utensil into which any milk produced by a diseased or suspected animal has been put.

2. No person shall cut or cause or permit to be cut the skin of a diseased or suspected carcase, except a veterinary inspector in the course of obtaining a sample for examination.
3. No person shall mix the milk from a diseased or suspected animal with other milk.

Part II

4. (i) If so directed by a veterinary inspector, the occupier of the premises shall exhibit a notice at every entrance stating that the premises are an infected place.
    (ii) No person shall alter, remove or deface such notice.

5. No person shall enter any part of the premises unless overall clothing and footwear are worn which are capable of being disinfected or which are disposable.

6. (i) No person shall enter the premises unless overall clothing and footwear are worn which are capable of being disinfected or which are disposable
    (ii) No person shall leave the premises until his/her overall clothing and footwear have been thoroughly cleansed and disinfected or, if the overall clothing and footwear are disposable, removed and left on the infected place.

7. No person shall move any animal or carcase or thing derived form any animal or carcase or any thing used or intended to be used in connection with animals into or from the premises except under the authority of a licence issued by a veterinary inspector.

8. No person shall allow any animal or poultry to stray into or form the premises or come into contact with any animal or poultry on any other premises.

9. The occupier of the premises shall give notice of the death or slaughter of any animal on the premises with all practicable speed to a veterinary inspector.

10. The occupier of the premises shall ensure that:
    a. a receptacle, containing such disinfectant as specified by a veterinary inspector is kept in a convenient position, directed by the veterinary inspector, at every exit from the premises;
    and
    b. fresh disinfectant is placed in the receptacle daily and whenever directed by a veterinary inspector.

Department for Environment, Food and Rural Affairs
Scottish Executive
Welsh Assembly Government

Animal Health Act 1981
Anthrax Order 1991

animalhealth

Vet Net Authorisation No:

Report by Veterinary Inspector of the Department: Suspected Existence of Disease

Notes:

1. The local authority on receipt of this Report shall arrange for the suspected carcase to be destroyed in accordance with Article 9 of the Anthrax Order 1991.
2. The local authority will be informed as a result of the investigations whether the existence of anthrax is confirmed or other otherwise.

The completed form should be copied immediately to:

- The Regional Operations Director/DVM;
- the local authority for the area in which the premises are situated.

Please use BLOCK LETTERS

I, the undersigned, have this day examined the carcase (or a portion of the carcase):

of: (description of the animal including ear no. if applicable)

at: (full address of premises at which carcase was examined)

Postcode

in the parish of

in the county (in Scotland Region/Island Area) **of**

CPHH No.

in the occupation of (full name and postal address of the owner at time of animal's death)

I hereby report that I suspect the said animal to have been affected at the time of its death with anthrax.

Postage

Signature

Veterinary Inspector

Date

Name in BLOCK LETTERS

Address

Postcode

If LVI, please complete this section

LVI Claims

LVI SP No.

Mileage travelled

Engine capacity of vehicle used

No of nights spent on visit

Task of (total tasks)

I declare that the visits and mileage recorded in this form were undertaken and incurred by me while on official business. To the best of my knowledge and belief, the information provided is correct.

Signature

Data Protection Act

Defra, the Scottish Executive, the Welsh Assembly Government and the Food Standards Agency are data controllers in respect of personal data processed by Animal Health. For the purposes and usage of the data and the data sharing arrangements, please see full Data Protection Statement on the Animal Health website: http://www.defra.gov.uk/animalhealth/about-us/accesstoinformation/fairprocessing.htm. A hard copy of this can be provided if required; please contact your local Animal Health office. Animal Health will not permit any unwarranted breach of confidentiality or act in contravention of their obligations under the Data Protection Act 1998.

Animal Health is an Executive Agency of the Department for Environment, Food and Rural Affairs and also works on behalf of the Scottish Executive, Welsh Assembly Government and Food Standards Agency

AN1 Rev. (07/09)

Department for Environment, Food and Rural Affairs
Scottish Executive
Welsh Assembly Government

Animal Health Act 1981
Anthrax Order 1991
(Articles 6(2) and (4))

Certificate: Non-existence of Disease in Carcase

(For completion by Veterinary Inspector)

The completed form should be sent immediately to:

- the Regional Operations Director/DVM for the area in which the premises are situated.

Authorisation Number ☐☐☐ / ☐☐☐☐ / ☐☐

Please use BLOCK LETTERS

I, the undersigned, have this day examined the carcase:

of: (description of the animal including ear no. if applicable)	
at: (full address of premises at which carcase was examined)	
in the parish of	
in the county (in Scotland Region/Island Area) **of**	
CPHH No.	☐☐☐☐☐☐☐☐☐☐☐☐
in the occupation of (full name and postal address of the owner at time of animal's death)	

I hereby certify that the said animal was not at its death affected with anthrax.

Signature ☐
Veterinary Inspector

Date ☐

Name in BLOCK LETTERS ☐

Address ☐

Postcode

If LVI, please complete this section

LVI Claims

LVI SP No. ☐☐☐☐☐☐ Mileage travelled ☐☐☐

Engine capacity of vehicle used ☐☐☐☐ No of nights spent on visit ☐

Task ☐ of ☐ (total tasks)

I declare that the visits and mileage recorded in this form were undertaken and incurred by me while on official business. To the best of my knowledge and belief, the information provided is correct.

Signature ☐

AN2 Rev. (03/09)

Department for Environment, Food and Rural Affairs
Scottish Executive
Welsh Assembly Government

The Brucellosis (England) Order 2000 Articles 4, 10*
The Brucellosis (Scotland) Regulations 2000 Articles 5, 10*
The Brucellosis (Wales) Order 2006 Articles 5, 10*
* Delete as applicable

Licence authorising the movement of cattle on to or off premises under restriction or authorising the movement of cattle which are under restriction on to or off premises

Name	
Address	Postcode:
CPHH No.	

Animal Health Divisional Office Stamp

Description of animals

Official ear tag	Breed	Age	Sex	Official ear tag	Breed	Age	Sex

In accordance with the above Order/Regulations, I, the undersigned being an Officer of the Secretary of State/Veterinary Inspector appointed by the Welsh Ministers/Scottish Ministers/ hereby authorise subject to the conditions overleaf the movement of cattle specified in columns I and II above:

from premises at	Postcode:
to premises at	Postcode:

This licence is valid until (date) _____ and must accompany the cattle throughout the movement

Signature		Date	
Name in BLOCK LETTERS		Tel No.	

Data Protection Act

Defra, the Scottish Executive, the Welsh Assembly Government and the Food Standards Agency are data controllers in respect of personal data processed by Animal Health. For the purposes and usage of the data and the data sharing arrangements, please see full Data Protection Statement on the Animal Health website: http://www.defra.gov.uk/animalhealth/about-us/accesstoinformation/fairprocessing.htm. A hard copy of this can be provided if required; please contact your local Animal Health office. Animal Health will not permit any unwarranted breach of confidentiality or act in contravention of their obligations under the Data Protection Act 1998.

BS112 (Rev. 07/10)

This licence does not override any restrictions on the movement of animals imposed on account of any other animal disease.

Conditions of issue

1. **Isolation of animals in transit:**
   During movement the cattle must not be allowed to come into contact with nor be transported in the same vehicle as any other cattle except those being moved under a similar licence or steers or steer calves.

2. **Cleansing and disinfection of vehicle and container:**
   Any road or rail vehicle or container used for conveying animals under this Licence shall be cleansed and disinfected as required by the Transport of Animals (Cleansing and Disinfection) (England) (No.3) Order 2003 Transport of Animals (Cleansing and Disinfection) (Wales) (No. 3) Order 2003 Transport of Animals (Cleansing and Disinfection) (Scotland) Regulations 2005.

3. **This Licence must accompany the cattle throughout the movement.**

Notes

1. This Licence is issued to the owner or person in charge of the cattle being moved.
2. The person in charge of the cattle being moved shall on demand by a veterinary inspector, an officer of the Department or by an inspector of the local authority or by a member of a police force furnish his/her name and address and shall produce a copy of this licence and allow it to be copied.
3. The movement of the cattle pursuant to this Licence shall be entered in the record required to be kept under the Cattle Identification Regulations 2007 (as amended.)/The Cattle Identification (Wales) Regulations 2007/The Cattle Identification (Scotland) Regulations 2007 (as amended).

Animal Health is an Executive Agency of the Department for Environment, Food and Rural Affairs and also works on behalf of the Scottish Executive, Welsh Assembly Government and Food Standards Agency.

Department for Environment, Food and Rural Affairs
Scottish Executive
Welsh Assembly Government

animalhealth

Animal Health office stamp

Animal Health Act 1981 (Section 32)
The Brucellosis (England) Order 2000 (Articles 4,5)
The Brucellosis (Scotland) Regulations 2000 (Articles 5,6)
The Brucellosis (Wales) Order 2006 (Articles 5,6)

Owner opts to make his/her own arrangements for sale and slaughter

Notice requiring the marking and slaughter of reactor(s) which must go direct to a slaughter house and which may not be sold via market

Name and address of person to whom this Notice is issued

Postcode

CPH No.

Part A

The animal(s) specified below ahs/have failed to pass a test for brucellosis and is/are deemed to be (a) reactor(s)

Official ear tag	Reactor tag number (if appropriate)	Sex	Breed	Age

These animals must be sent direct to slaughterhouse for slaughter within 21 days of the date of this Notice. A licence (BS111) authorising the movement of these animals must be obtained from the *Regional Veterinary Lead/Divisional Veterinary Manager prior to the movement of the animal(s) taking place.

This Notice confirms exemption of the animal(s) listed from the levy of the Meat and Livestock Commission under section 13 of the Agriculture Act 1967 (as amended) if slaughtered within 21 days of the date of this Notice.

Signed

*Officer of *Minister/Secretary of State*

Name in BLOCK LETTERS

Date

*Delete as appropriate

BS15B (Rev. 08/09)

Part B

Certificate confirming slaughter of reactors

I certify that the animal(s) specified in Part A above were slaughtered on [date]

Slaughterhouse stamp/address

Signed

Slaughterhouse Manager

Name in BLOCK LETTERS

Date

Please read the conditions overleaf

BS15B (Rev. 08/09)

The Brucellosis Order 1997 – Articles 18 and 19
Animal Health Act 1981

Notes

1. Each animal must be marked as required

2. Any udders, uteri and genitalia will be condemned

3. During movement to the slaughterhouse the animal(s) must not be permitted to come into contact with any cattle, other than cattle being moved to the same slaughterhouse, or steers

4. The owner is required to notify the Ministry/Department after the animal(s) specified overleaf have been slaughtered. For this purpose the owner should obtain the signature of the slaughterhouse manager on two copies of the Certificate confirming slaughter and return one copy to the *Regional Veterinary Lead/Divisional Veterinary Manager at the address overleaf within 28 days of the service of this Notice. The owner should retain the other copy for his/her records.

5. A movement licence issued to the owner of the animals being moved must accompany the animal(s) throughout the movement and must be produced on request to a representative of the Ministry or Department or to a Local Authority.

Animal Health is an Executive Agency of the Department for Environment, Food and Rural Affairs and also works on behalf of the Scottish Executive, Welsh Assembly Government and the Food Standards Agency

Department for Environment, Food and Rural Affairs
Scottish Executive
Welsh Assembly Government

***Enzootic Bovine Leukosis (England) Order 2000**
***Enzootic Bovine Leukosis (Scotland) Regulations 2000**
***Enzootic Bovine Leukosis (Wales) Order 2006**

Name and address of person to whom this notice is sent

To

Animal Health Office Stamp

(CPHH)

(cc)	(ppp)	(hhh)	(hh)

Licence authorising the movement of cattle on to or off premises under restriction or authorising the movement of specified cattle which are under restriction awaiting the completion of tests for EBL

Description of animals

Official ear tag no.	Breed	Age	Sex	Official ear tag no.	Breed	Age	Sex

I, the undersigned, being a *Veterinary Inspector/Officer appointed by the *Secretary of State/Scottish Ministers/Welsh Ministers, hereby authorise subject to the conditions set out overleaf, the movement of cattle specified in columns 1 and 2 above:

- from premises at: Postcode
- to premises at: Postcode

Total number of animals listed .....

This licence is valid until

Signed

Name in BLOCK LETTERS

Tel. No. for enquiries

*delete as appropriate

EBL 9 (Rev. 11/07)

CONDITIONS

This licence does not override any restrictions on the movement of animals imposed on account of any other animal disease.

Conditions of issue

1. **Isolation of animals in transit:**
   - during movement the cattle must not be allowed to come into contact with nor be transported in the same vehicle as any other cattle except those being moved under a similar licence.
2. **Cleansing and disinfection of vehicle and container**
   Any road or rail vehicle or container used for conveying animals under this Licence shall be cleansed and disinfected as required by the "Disease Control Orders".

Notes

1. This Licence is issued to the owner or person in charge of the cattle being moved.
2. This Licence must accompany the cattle throughout the movement.
3. The person in charge of the cattle being moved shall on demand by a *veterinary inspector/officer appointed by the *Secretary of State/Scottish Ministers/Welsh Ministers, or by an inspector of the local authority or by a member of a police force furnish *his/her name and address and shall produce a copy of this licence and allow it to be copied.
4. The movement of the cattle pursuant to this Licence shall be entered in the record required to be kept under the Cattle Identification Regulations 2007 (as amended)/Cattle Identification (Wales) Regulations 2007/Cattle Identification (Scotland) Regulations 2007 (as amended).

Department for Environment, Food and Rural Affairs
Scottish Executive
Welsh Assembly Government

Case ref. no. (*when allocated*)	
EBL	

Enzootic Bovine Leukosis
Submission of Bovine Tumour Sample for EBL PCR Test

If completing in manuscript please use BLOCK letters

Sent by
Name and full postal address of Animal Health Office

Tel. no.

Name and address of herd of origin

CPHH no.

Name and address of carcass location

CPHH no.

For official use only

All samples for EBL surveillance and diagnosis should be sent to the VLA Weybridge

Laboratory reference

Date of receipt

Date of despatch

Minim code

Identification (including official ear tag number)

Breed

Age

Sex

Clinical history (if known)

- Died ..... ☐
- Killed as casualty ..... ☐
- Slaughtered for meat ..... ☐

(*pl. tick as appropriate*)

Post mortem findings

Organs from which specimens are enclosed

Any other relevant information (e.g. blood sample sent for serology)

Signature

VO/SAHO/OV

Name in BLOCK letters

Date

EBL 7 (10/07)

For laboratory use only

Laboratory reference number

Date of receipt

Date of despatch

Minim code

Result of PCRT

Result of Histophatolgy (*if required*)

Signature | Name in BLOCK letters | Date

For HQ use only (Page St./Pentland House/Cathays Park)

Follow up action required/ not required (*delete as appropriate*)

Signature | Name in BLOCK letters | Date

VA

EBL 7 (10/07)