

Chapter 20 Transmissible Spongiform Encephalopathy (TSE) Testing

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20. Introduction

Testing of cattle, sheep and goats for TSE diseases provides information on the level of these diseases in these animals. This information enables the effectiveness of disease control measures to be assessed and helps to ensure that controls to protect consumers are proportionate to the risk.

Removal of specified risk material is the key public health protection measure for BSE while the disposal of any cattle that test positive for BSE (and the one before and two after on the slaughter line) further reduces the possible risk to consumers of exposure to BSE.

Failure to follow TSE testing requirements would be a breach of UK and EU law and could undermine the public's confidence in the safety of UK meat production.

20.1. Legislation

The rules for the prevention, control and eradication of TSEs, including the requirements for BSE / TSE testing, are laid down in Regulation (EC) 999/2001 as amended. This Regulation is directly applicable in the UK and is administered and enforced through the following legislation:

- **England** – The Transmissible Spongiform Encephalopathies (England) Regulations 2010 (SI No. 2010/801) (as amended)
- **Wales** – The Transmissible Spongiform Encephalopathies (Wales) Regulations 2008 (SI No. 2008/3154 (W.252)) (as amended)
- **Scotland** – The Transmissible Spongiform Encephalopathies (Scotland) Regulations 2010 (SSI No. 2010/177)
- **Northern Ireland** – The Transmissible Spongiform Encephalopathies Regulations (Northern Ireland) 2010 (SR 2010 No. 406)

20.2. Cattle born before 1 August 1996

Cattle born or reared in the UK before 1 August 1996 are ineligible for the food supply. This includes cattle imported before 1 August 1996 but not cattle imported on or after 1 August 1996.

20.3. Slaughter of cattle that require BSE testing

“At risk” cattle aged over 48 months (O48M) and other cattle that require testing must receive a negative BSE test result before they are permitted to enter the food supply.

Cattle that were not born in one of the countries listed in the Annex to ‘Commission Decision 2009/719’ must be tested if aged over 30 months when slaughtered or over 24 months if subject to emergency slaughter or the OV judges testing is necessary at ante mortem inspection. See ‘Annex 1.’ which illustrates the BSE testing requirements for all cattle.

The slaughter for human consumption of cattle that require BSE testing may take place only in abattoirs that have a required method of operation (RMOP) approved by the FSA in England and Wales, FSS in Scotland or DAERA in NI.

For abattoirs that wish to slaughter cattle that require BSE testing, the approval process involves a series of steps. In summary these are:

- The premises must meet certain minimum requirements (the prerequisites). If the prerequisites are not in place, an application will not proceed.
- The FBO will need to document the proposed process in an RMOP. The RMOP must set out the procedures that will be followed to ensure the FBO complies with the BSE testing requirements and the processing of those animals.
- The completed RMOP is reviewed by the FSA OV (DAERA in NI) and verified by FSA Field Management.
- The OV’s signature constitutes approval to slaughter cattle for human consumption that require a BSE test.

Any cattle that require BSE testing discovered at post mortem in an abattoir that is not approved to slaughter cattle that require BSE testing must still be tested although the carcasses would not be eligible for the food supply.

Full guidance on the requirements for approval to slaughter cattle for human consumption requiring a BSE test are contained in an application pack available from FSA / FSS / DAERA.

20.4. Testing of sheep slaughtered for human consumption

Regulation 999/2001 requires the UK to carry out TSE surveillance on sheep. This surveillance includes testing a random sample of sheep slaughtered for human consumption aged over 18 months.

The sheep survey is carried out only at specific abattoirs selected by Defra, Welsh Assembly Government, Scottish Government or DAERA.

20.5. Legal requirements for cattle and TSE testing

The following sections set out the legal requirements that apply to the slaughter of cattle and sheep¹.

A. Cattle requiring testing

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Legal requirement

Schedule 2, paragraph 12(1)

A1. It is an offence for the occupier to use a slaughterhouse to slaughter for human consumption a bovine animal that requires testing at slaughter unless the Secretary of State has approved the Required Method of Operation ("RMOP") for that slaughterhouse and that occupier.

Schedule 2, paragraph 12(2)

A2. The RMOP must, as a minimum:

- (a) describe the procedures that will be followed; and
- (b) describe all the systems and procedures specified.

Schedule 2, paragraph 12(3)

A3. The Secretary of State must approve the RMOP if satisfied that all the requirements will be complied with. The occupier must demonstrate this by means of an assessment of two days duration in which animals are slaughtered (using bovine animals under 30 months old).

¹ References to the legal requirements refer to the Transmissible Spongiform Encephalopathies (England) Regulations 2010 (as amended). Please refer as necessary to the separate legislation for Wales, Scotland and Northern Ireland. See '20.1. Legislation'.

A1. to A3. Compliance regarding requirements for an approved RMOP

- Obtain approval to slaughter cattle that require testing before slaughtering any for human consumption.
- The RMOP must describe the procedures that will be undertaken to comply with all the legislative requirements.

A1. to A3. Good practice

Guidance on the slaughterhouse approval process is available at:

www.food.gov.uk/enforcement/sectorrules/meatplantsprems.

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Legal requirement

Schedule 2, paragraph 12(4)

A4. If a bovine animal that requires testing is slaughtered for human consumption other than in accordance with the RMOP, the occupier of the slaughterhouse is guilty of an offence.

A4. Compliance regarding the RMOP

- Slaughter and process cattle in accordance with the RMOP.

A4. Good practice

Make sure the RMOP is fully complied with at all times. An amendment to the RMOP may be requested at any stage, for example if required due to changes in plant practices or facilities. The OV must be informed of intended amendments. Amendments must be agreed and signed by both parties before being implemented.

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Legal requirement

Schedule 2, Part 2

A5. Animal identification and separation. The RMOP must describe the system that enables:

(a) bovine animals born or reared in the United Kingdom before 1st August 1996 to be identified and ensures that they are not slaughtered for human consumption;

(b) bovine animals that require testing to be identified and ensures that they are sampled; and

It must also describe the system that ensures that animals requiring testing are batched before slaughter separately from those that do not; and slaughtered in batches separately from those that do not.

A5. Compliance regarding cattle born in listed countries

- All cattle aged over 48 months that are subject to emergency slaughter, sick at ante-mortem, or fallen stock must be tested for BSE either when they are slaughtered for human consumption or when they die or are killed other than for human consumption.

A5. Good practice

Cattle born in one of the Member States should retain the country prefix on their eartag identification.

For further details see: www.publications.europa.eu/code/pdf/370000en.htm.

A5. Compliance regarding cattle born in any other country

- All cattle with eartags which do not have the country prefixes listed above, or which were born in a third country, must be tested for BSE as follows:
 - aged over 24 months if died or killed other than for human consumption
 - aged over 24 months if emergency slaughtered for human consumption or sick at ante-mortem inspection
 - aged over 30 months if slaughtered normally for human consumption

A5. Good practice

Cattle born in a third country (not one of the 28 EU Member States) and imported into a Member State will be re-tagged with a tag showing the importing Member State's country prefix (unless slaughtered within 20 days). The third country import information should be available in the passport.

A5. Compliance regarding batching

- There must be a system for batching animals that require testing from those that do not, and slaughtered in batches separately from those that do not.

A5. Good practice

The Regulations require cattle that require testing to be separately batched before slaughter from those that do not.

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Legal requirement

Schedule 2, paragraph 9

A6. The occupier of a slaughterhouse in which a bovine animal that requires BSE testing is slaughtered must:

- (a) take a sample comprising the brain stem for testing;
- (b) ensure that the animal from which the sample has been taken can be identified; and
- (c) arrange for the sample to be delivered to an approved testing laboratory.

A6. Compliance regarding obligation to sample

- Take a brain stem sample from all cattle that require BSE testing and send it to an approved testing laboratory.

A6. Good practice

A list of approved laboratories is available at:

www.gov.uk/government/organisations/animal-and-plant-health-agency.

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Legal requirement

Schedule 2, Part 2

A7. Brain stem sampling. The RMOP must show that there are:

- (a) sufficient staff trained and competent in the taking, labelling, packaging and dispatch of brain stem samples;
- (b) hygienic facilities for sampling; and
- (c) sampling procedures that do not jeopardise the hygienic production of meat intended for human consumption.

It must describe how health and safety guidelines designed to minimise the risk of exposure of staff to BSE during brain stem sampling and packaging will be complied with.

A8. Correlation of sample to carcase and all other parts of the body. The RMOP must describe the system linking the brain stem sample to the carcase and all parts of the body (including the blood and the hide).

A7. and A8. Compliance regarding brain stem sampling

- The RMOP must cover all the processes specified in the legislation.
- Ensure a sufficient number of staff are trained and competent in brain stem sampling procedures.
- Sampling must occur in hygienic facilities.
- Sampling procedures must not jeopardise hygienic meat production.

A7. and A8. Good practice

Health and safety guidelines will minimise the risk of exposing staff to BSE.

Guidance on drawing up the RMOP is available at:

<https://www.food.gov.uk/enforcement/sectorrules/meatplantsprems/otmplants>.

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Legal requirement

Schedule 2, Part 2

A9. Retention of carcasses. The RMOP must describe:

- (a) the system that ensures that all carcasses are retained either in a sealed or locked chiller or on a sealed or locked rail in an unsealed chiller pending the receipt of the test result;
- (b) the system that ensures that the chronological order in which the animals were slaughtered can be determined; and
- (c) how the occupier will ensure that there is suitable and sufficient chiller space for retaining carcasses.

A10. Retention of parts of the body. The RMOP must describe the system that ensures that all parts of the body (including the blood and the hide) are retained pending the receipt of the BSE test result.

Schedule 2, paragraph 13(1)

A11. Retention of products and disposal. Pending receipt of the BSE test result, the occupier of a slaughterhouse, hide market or tannery, must either:

- (a) retain all carcasses and all parts of the body (including the blood and the hide) that will have to be disposed of in the event of a positive result; or
- (b) dispose of them in accordance with sub-paragraph (2) ('A13.' below).

A9. to A11. Compliance regarding retention of products

- The RMOP must cover all the processes specified in the legislation.
- Retain all carcasses and body parts of sampled animals, including the blood and the hide, until the BSE test results have been received.
- All carcasses must be retained in an approved sealed and / or locked chiller.
- Record the chronological order in which animals were slaughtered.
- Ensure enough space is available for retaining carcasses.

A9. to A11. Good practice

The RMOP should describe a system that ensures the entire body is retained pending BSE test results.

Guidance on the requirements for retention of carcasses and body parts pending receipt of test results, and for disposal of carcasses and body parts where a positive, insufficient or "no test" result is received, may be obtained from the FSA / FSS.

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Legal requirement

Schedule 2, Part 2

A12. Disposal before receipt of the result. The RMOP must describe the disposal route for all carcasses and all parts of the body (including the blood and the hide) disposed of before the test result is received.

Schedule 2, paragraph 13(2)

A13. If a positive result is received for a sampled animal, the occupier must immediately dispose of:

- (a) the carcass and all parts of the body of that animal (including the blood and the hide); and
- (b) unless a derogation has been granted, the carcass and all parts of the body (including the blood and the hide) of the animal immediately preceding that animal on the slaughter line and the two animals immediately following it.

Schedule 2, paragraph 13(3) and 13(4)

A14. If a substandard or no sample has been sent to an approved testing laboratory, or if an insufficient test result is received, in respect of an animal required to be tested, the occupier must immediately dispose of:

- (a) the carcass and all parts of the body (including the blood and the hide) of that animal; and
- (b) unless a derogation has been granted, the carcass and all parts of the body (including the blood but not the hide) of the animal immediately preceding that animal on the slaughter line and the two animals immediately following it.

If a “No-test” result is received, the occupier must immediately dispose of the carcass and all parts of the body (including the blood and the hide) of that animal.

Schedule 2, paragraph 13(5)

A15. The Secretary of State may grant in writing a derogation if satisfied that the slaughterhouse operates a system that prevents contamination between carcasses.

A12. to A15. Compliance regarding disposal of products

- The RMOP must cover all the processes specified in the legislation.
- Ensure disposal routes for carcasses disposed before receipt of test results are recorded.
- Dispose of the carcass and all body parts of any animal that tests positive for BSE plus those of the ‘one before and two after’ (the animal immediately preceding that animal on the slaughter line and the two animals immediately following it).
- Dispose of the carcass and all body parts of any animal that receives an insufficient result plus those carcasses and all body parts, except the hides, of the ‘one before and two after’.

- Dispose of the carcass and all body parts of any animal that receives a “No-test” result.
- A derogation from the ‘one before and two after’ rule may be sought if there is a system in place preventing contamination between carcasses.

A12. to A15. Good practice

Guidance on the requirements for retention of carcasses and body parts pending receipt of test results, and for disposal of carcasses and body parts where a positive, insufficient or “no test” result is received, may be obtained from the FSA / FSS.

Hides – from tested animals may be either retained at the slaughterhouse under official control until BSE test results are received or transported to hide premises, if procedures set out in an agreed protocol are followed.

Strict conditions are applied for granting a derogation from the ‘one before and two after rule’. The OV can advise on the type of arrangements for preventing contamination between carcasses that might qualify.

Negative results – disposal in all cases where a negative result has not been received must be by incineration or rendering followed by incineration or biodiesel production (tallow) in line with ABP requirements.

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Legal requirement

Schedule 2, Part 2

A16. Removal of vertebral column. The RMOP must describe the system that ensures that:

- (a) those parts of the vertebral column that are specified risk material are not removed in the slaughterhouse; and
- (b) the meat containing that specified risk material is consigned to a cutting plant authorised to remove it.

A16. Compliance regarding removal of vertebral column

- The RMOP must cover all the processes specified in the legislation.
- The parts of the vertebral column that are specific risk material must be consigned to an authorised cutting plant and not be removed in the slaughterhouse.

A16. Good practice

The RMOP should describe a system that ensures the vertebral column removal procedures take place.

Guidance on drawing up the RMOP is available at:

<https://www.food.gov.uk/enforcement/sectorrules/meatplantsprems/otmplants>.

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Legal requirement

Schedule 2, Part 2

A17. Other measures following sampling. The RMOP must describe the systems in place that ensure:

- (a) brain stem samples are packaged in accordance with packaging instructions P650 of the European Agreement Concerning the International Carriage of Dangerous Goods by Road (version applicable as from 1st January 2005. ISBN 92-1-139097-4);
- (b) test results are received, either by fax or by other electronic means; and
- (c) everything required to be disposed of is identified and disposed of accordingly.

A17. Compliance regarding other measures following sampling

- The RMOP must cover all the processes specified in the legislation.
- Brain stem samples must be packaged in accordance with relevant packaging instructions.
- All materials required to be disposed of must be identified and disposed of accordingly.

A17. Good practice

Guidance on drawing up the RMOP is available at:

<https://www.food.gov.uk/enforcement/sectorrules/meatplantsprems/otmplants>.

B. Cattle and goats not intended for human consumption²

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Legal requirement

Part 1, Paragraph 1 and 2

B1. The occupier of a slaughterhouse in which a bovine animal aged over 48 months old or a goat aged 18 months or over, has died or has been killed but it is not intended for human consumption, must:

- inform the OV within 24 hours from the time the animal died or was killed, to ensure that it is tested for surveillance purposes as required by EU and domestic TSE Regulation;
- for bovines:
 - (a) arrange for the carcass to be sent to an animal by-products premises that is an approved sampling site so that a brainstem sample can be taken and tested; or
 - (b) if approved to slaughter cattle requiring BSE testing, take a brain stem sample and send it for analysis with other O48M samples but using code FSCA2. The carcass must then be disposed of by incineration or rendering and incineration or biodiesel production in line with ABP requirements (tallow) unless a negative result is received.
- for goats:
 - (a) detain the body until it has been collected free of charge by the Competent Authority to be tested and destroyed.

B1. Compliance regarding cattle aged over 48 months and cattle requiring BSE testing

- Within 24 hours either deliver the body or arrange for it to be delivered to an approved sampling site to arrive within 72 hours of death.

B1. Good practice

Circumstances may arise in which an animal has to be killed and disposed of as fallen stock. Examples include:

- A bovine animal born or reared in the UK before August 1996.
- Cattle without a passport and / or eartags where it is not possible to identify these animals.

A list of approved sampling sites for fallen cattle is available at: www.gov.uk/fallen-stock.

B1. Compliance regarding goats aged over 18 months

- Notify the Secretary of State within 24 hours of the death of a goat aged over 18 months. If directed, detain the carcass until it has been collected.

B1. Good practice

Goats aged over 18 months which are not intended for human consumption need to be treated as fallen stock and tested. Guidance on fallen stock can be found at: www.gov.uk/fallen-stock.

² EU and domestic TSE legislation require these animals to be treated as fallen stock and tested.

C. Testing of sheep

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Legal requirement

Schedule 2, paragraph 6(6) for sheep

C1. In relation to any sheep selected for sampling, the occupier of a slaughterhouse, hide market or tannery must:

- (a) retain the carcase and all parts of the body (including the blood and the hide) pending receipt of the test result; and
- (b) in the event of a positive result, immediately dispose of the carcase and all parts of the body (including the blood and the hide).

C1. Compliance regarding sheep surveying

- All parts of the body of any sheep sampled for testing must be retained pending receipt of the test result except for parts disposed of directly by incineration or rendering and incineration.
- All parts of any sheep that tests positive must be disposed of by incineration or rendering and incineration or biodiesel production (tallow) in line with ABP requirements.

C1. Good practice

Sampling of sheep for TSE testing is carried out only at certain slaughterhouses selected to participate in the survey.

Annex 1 Table illustrating the BSE testing requirements for all cattle

Country of birth	Eartag Country Codes	BSE Testing age from 1 March 2013		
		Healthy Slaughter Cattle	Emergency slaughter and sick at ante mortem (fit for human consumption)	Fallen Stock (not fit for human consumption)
Austria	AT	No Testing Required	Over 48 Months	Over 48 Months
Belgium	BE			
Cyprus	CY			
Czech Republic	CZ			
Denmark	DK			
Estonia	EE			
Finland	FI			
France	FR			
Germany	DE			
Greece	EL			
Hungary	HU			
Ireland (ROI)	IE			
Italy	IT			
Latvia	LV			
Lithuania	LT			
Luxemburg	LU			
Malta	MT			
Netherlands	NL			
Poland	PL			
Portugal	PT			
Slovakia	SK			
Slovenia	SI			
Spain	ES			
Sweden	SE			
UK (including Channel Islands and Isle of Man)	UK			
Bulgaria	BG	Over 30 months	Over 24 months	Over 24 months
Croatia	HR			
Romania	RO			
All other countries	UK (if not slaughtered within 20 days of import; import information is shown on the inside back page of the cheque-book style passport)			