

Scrapie – Advisory notes for farmers



Llywodraeth Cynulliad Cymru
Welsh Assembly Government



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These Advisory Notes are designed to be a general guide to assist sheep or goat keepers in fulfilling their legal obligations. They are not designed to be a complete guide to a sheep or goat keeper's obligations. Sheep or goat keepers should ensure they keep and refer to other publications sent by other government agencies. All the information contained in these Advisory Notes was correct at the time of going to press.

Introductions

Scrapie is a fatal brain disease of sheep and goats. It became a notifiable disease in 1993. Scrapie is not known to pose a risk to human health.

- **Classical scrapie** has been present in the UK for over 250 years. With classical scrapie, most animals are infected through exposure to scrapie-infected sheep and their environment. Clinical signs of disease appear some years after infection, and cases generally appear singly. Disease is most commonly seen between two and five years of age.
- **Atypical scrapie** has been detected in recent years, primarily through the testing programme for fallen stock and abattoir culls, using new tests. However, retrospective studies have indicated that it was present in the UK since at least the late 1980s. The route of infection is poorly understood and the disease is most commonly seen in animals over five years of age.

There is a risk that sheep and goats were exposed to the bovine spongiform encephalopathy (BSE) agent in contaminated feed, particularly before the ban on feeding mammalian meat and bone meal was reinforced in 1996. Natural BSE has been confirmed in a goat. Experiments show that sheep are susceptible to BSE. Both scrapie and BSE are transmissible spongiform encephalopathies (TSEs) and the clinical signs of scrapie are similar to those of BSE.

WHAT YOU MUST DO IF YOU SUSPECT SCRAPIE

You are legally obliged to report immediately any animal that you suspect of being affected with scrapie to Animal Health. This applies to animals in your possession or under your control at farms, markets, slaughterhouses or other places. You may wish to take advice from your private veterinary surgeon who will contact Animal Health if they suspect scrapie.

IF IN DOUBT, TELEPHONE YOUR LOCAL ANIMAL HEALTH OFFICE OR THE INFORMATION LINE 0844 8844600. THERE IS NO CHARGE. Animal Health would rather visit for a false alarm than not be called out.

HOW TO RECOGNISE SCRAPIE

Age

Most cases of classical scrapie occur in animals aged two to five years old. Although classical scrapie is rarely seen in sheep and goats aged less than one year or more than five years, age alone cannot be used to rule out the presence of disease. Atypical scrapie is detected more commonly in animals aged over five years.

Number affected

Clinical signs of classical scrapie appear a long time after infection and cases generally appear singly in a flock. Occasionally several cases can occur over a short period of time, particularly in genetically susceptible animals (i.e. some sheep and all goats) born at about the same time and possibly to the same dam or sire. Multiple cases are more likely where animals are kept indoors. Atypical scrapie cases generally occur singly.

Season

Scrapie cases can occur at any time of year but stress can cause the clinical signs to appear. Cases are more easily identifiable at times when animals are collected for management purposes such as lambing, weaning or tugging.

Clinical signs of scrapie

There is often a general change in temperament or behaviour weeks before more specific signs develop, although in some cases an affected animal's condition may worsen rapidly or it may be found dead. Animals with scrapie show a combination of the following signs, although skin irritation may be less evident in atypical scrapie. None of these signs are a definite indication of scrapie.

Changes in behaviour

- becoming excitable;
- drooping ears;
- increased nervousness or fear response;
- lagging behind;
- aggression;
- depression or vacant stare.

Skin Irritation

- repeated rubbing of the head and body against objects such as fences, posts or hay racks;
- repeated scratching of the flanks. Horned animals may scratch with their horns;
- nibbling or grinding teeth when rubbing themselves or when rubbed firmly on the back;
- continued scratching of the shoulder or ear with a hind foot. Unusual or agitated nibbling of the feet, legs or other parts of the body;
- excessive wool loss or damage to the skin.

Changes in posture and movement

- trembling (mainly of the head);
- unusual high stepping trot in early stages;
- severe inco-ordination;
- stumbling;
- standing awkwardly;
- weak hind leg;
- unable to stand.

Later clinical signs

- weight loss;
- death.

There is much more detailed information about the clinical signs of scrapie on the Veterinary Laboratories Agency (VLA) website at http://www.defra.gov.uk/vla/science/sci_tse_rl.htm. You can obtain a DVD on the clinical signs of scrapie from Animal Health.

WHAT ANIMAL HEALTH WILL DO

After receiving a report of a suspected scrapie case, a Veterinary Officer (VO) from Animal Health will visit and examine the animal as soon as possible. The subsequent action depends upon the outcome of the VO's examination.

Negative scrapie diagnosis

If the VO decides that your animal is not a scrapie suspect, they will not restrict its movement. You should then contact your private veterinary surgeon to discuss an alternative diagnosis or treatment. If you retain the animal and remain concerned that it is affected with scrapie because of further developments in clinical signs, you must again report your suspicions to Animal Health.

Sometimes, when the VO does not suspect scrapie, they may advise you that your animal requires killing on welfare grounds because it is suffering from another disease. You will not be paid compensation for the animal. You must comply with the requirements for disposal of fallen stock.

Animals placed under observation

In some cases the VO may decide that it is necessary to keep your animal under observation, to determine whether or not it is a scrapie suspect. If so, they will restrict the movement of all the sheep and goats from the farm. The VO will periodically visit the animal during the observation period. You remain responsible for the welfare of the animal. If at any time the VO is able to rule out scrapie, they will lift the movement restrictions.

If your animal dies or is killed for welfare reasons, while it is restricted during the observation period, you must report its death to Animal Health immediately.

If Animal Health suspects that your animal was affected with scrapie, they will take control of its carcase. Animal Health will arrange scrapie testing and disposal of the carcase. If Animal Health does not suspect that your animal was affected with scrapie they will lift the movement restrictions. You must comply with the requirements for disposal of fallen stock.

Scrapie suspected

If the VO decides that your animal is a scrapie suspect, they will issue a notice of intention to kill the suspect and they will restrict the movement of all the sheep and goats on the farm.

Following the issue of a notice of intention to kill, the VO will determine the compensation payable. The VO may arrange for the scrapie suspect to be transported to the VLA where it will be killed as soon as possible and tested for TSE. The VLA collects samples for vital research. In some cases, the VO will kill the scrapie suspect on the farm. Animal Health will then arrange for the collection, testing for scrapie and BSE, and disposal of the carcase.

Scrapie confirmed

Scrapie may be confirmed after death in a scrapie suspect or through the TSE testing programme described below. Most cases of scrapie are now detected through the TSE testing programme. If initial tests suggest that your animal was affected with scrapie or if BSE cannot be excluded, Animal Health will notify you and arrange to visit your farm. In all cases where scrapie is suspected or confirmed or BSE cannot be excluded, Animal Health will gather details about the case which are used to study the disease.

If scrapie is confirmed or if BSE cannot be excluded on initial tests, Animal Health will decide how to apply compulsory control measures to your flock or herd through the Compulsory Scrapie Flocks Scheme (CSFS). These may include a combination of the following controls for two years:

- restrictions on the movement of sheep and goats, and their semen, ova and milk, on and off your holding;
- genotyping (of sheep);
- killing of genetically susceptible animals (i.e. some sheep and all goats) and destruction of their semen and ova; and
- testing of culls and fallen stock.

Animal Health will provide you with detailed guidance on your legal obligations under the CSFS.

Compensation

Animal Health will pay compensation for a sheep or goat killed as a scrapie suspect.

Animal Health will also pay compensation for any other animals in the flock or herd which are compulsorily killed, or their products compulsorily destroyed, through the CSFS, following the confirmation of scrapie or where BSE cannot be excluded.

TSE TESTING PROGRAMME

In addition to the testing of reported scrapie suspects, the UK also tests the following animals for scrapie and BSE as part of the EU active surveillance programme:

- a quota of sheep and goats which die or are killed other than for human consumption (fallen stock) aged over 18 months;
- a quota of sheep which are killed for human consumption aged over 18 months; and
- fallen stock and culls from flocks and herds under CSFS restrictions.

You are legally obliged to report all fallen goats aged over 18 months to the Rural Payments Agency (RPA)'s TSE Helpline on 0800 525 890 within 24 hours of the animal's death. If instructed, you must keep the carcase on your premises until it is collected. Fresh goat carcasses will be collected, tested and destroyed free of charge unless the quota for the relevant period has been met or the carcase is not correctly identified.

The RPA also arranges for the collection, testing and destruction of a quota of fallen sheep aged over 18 months for testing. You may call the TSE Helpline on 0800 525 890 if you want to offer a sheep carcase for the survey. Sheep carcasses which are accepted into the fallen sheep survey will be collected and disposed of free of charge. The RPA will only collect fresh, correctly identified carcasses.

SCRAPIE MONITORING SCHEME

The Scrapie Monitoring Scheme (SMS) is a voluntary scheme administered by the Scottish Agricultural College. Membership of the SMS allows you to demonstrate that your flock or herd meets the requirements for exporting sheep and goats for breeding. Further information on the Scrapie Monitoring Scheme is available at

<http://www.defra.gov.uk/foodfarm/animaltrade/eu/animals/sms.htm>

REDUCING THE RISK OF CLASSICAL SCRAPIE

You should take precautions to reduce the risk of introducing scrapie into your flock or herd, as scrapie control measures will be applied to the whole flock or herd. However, where scrapie has been introduced we advise taking precautions to reduce the number of animals infected. This applies in particular to goat herds as goats appear to be more uniformly susceptible to classical scrapie.

Breeding for resistance

The genetic make-up of sheep affects their susceptibility to classical scrapie. NSP¹ Type 1 (ARR/ARR) sheep are most genetically resistant to classical scrapie. You can discuss genotyping and breeding sheep for resistance with your private veterinary surgeon.

Purchasing animals

Classical scrapie is caused by an infectious agent. Most flocks or herds which contract scrapie have purchased an infected animal which is incubating the disease. You are advised to source either genetically resistant replacements or animals from flocks and herds which have been monitored for the past three years and in which scrapie has not been identified.

Milk/colostrum

Classical scrapie can also be spread through colostrum and milk. If you purchase replacement colostrum or milk, you should only do so from flocks and herds which have been monitored for the past three years and in which scrapie has not been identified, particularly if you have genetically susceptible animals. In intensively managed flocks containing genetically susceptible animals, you can reduce the risk of spreading classical scrapie by avoiding using pooled colostrum and milk. In both cases cow colostrum and artificial milk replacers should be considered as an alternative.

Lambing/kidding

Classical scrapie is spread from an infected dam to her offspring and other sheep or goats. Birth fluids and afterbirth from infected animals will contaminate pastures or buildings. Contact between sheep and goats and afterbirths should be kept to a minimum. Prompt removal of afterbirths and regular cleaning and disinfecting of buildings used for lambing or kidding may reduce the risk of exposure of animals to the scrapie agent. This will help to control the disease but it is unlikely to remove all the contamination in the environment.

¹ National Scrapie Plan

Cleaning/Disinfecting

It is possible that the scrapie agent is also spread in other ways e.g. faeces or urine. The scrapie agent is known to persist in the environment for several years. It is resistant to most commercial disinfectants although thorough cleaning and disinfection of buildings are likely to reduce the level of infection. You are advised to ensure that any disinfection is carried out in accordance with Environment Agency or Scottish Environmental Protection Agency requirements.

REDUCING THE RISK OF ATYPICAL SCRAPIE

It is not yet known whether atypical scrapie spreads from animal to animal. Some of the biosecurity measures detailed above may also reduce the risk of purchasing atypical scrapie. However, the genetic susceptibility of sheep to atypical scrapie differs from that of classical scrapie in that atypical scrapie has been reported in NSP Type 1 sheep.



FURTHER INFORMATION

If you have further questions please discuss them with Animal Health. Contact details can be found on the Animal Health website at

<http://www.defra.gov.uk/animalhealth/index.htm> or via the Animal Health Information Line on 0844 8844600

Useful Websites

Animal Health

<http://www.defra.gov.uk/animalhealth/index.htm>

Scottish Agricultural College (for Scrapie Monitoring Scheme)

www.sac.ac.uk/sghs

Department for Environment, Food and Rural Affairs

<http://www.defra.gov.uk>

Welsh Assembly Government

<http://new.wales.gov.uk>

Scottish Government

<http://www.scotland.gov.uk>

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