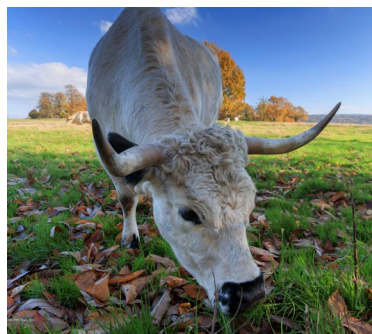




Llywodraeth Cymru  
Welsh Government

# Annual report to the Senedd on the monitoring programme for transmissible spongiform encephalopathies (TSEs) – 2023



December  
2024

Presented to the Senedd pursuant to Article 6.4 of Regulation (EC) No 999/2001 laying down rules for the prevention, control and eradication of certain transmissible spongiform encephalopathies.

This publication is available at [Transmissible spongiform encephalopathies \(TSE\) | Sub-topic | GOV.WALES](#)

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# Introduction

Assimilated Regulation (EC) No 999/2001 lays down rules for the prevention, control and eradication of transmissible spongiform encephalopathies (TSEs) in livestock. These consist of bovine spongiform encephalopathy (BSE) ('mad cow disease'), scrapie which affects sheep and goats, and chronic wasting disease (CWD), which affects cervids, such as deer.

Article 6 of the Regulation sets out the requirement for an annual monitoring programme for TSEs based on active and passive surveillance. The surveillance programme monitors the level of BSE, in particular, over time and thereby checks the continued effectiveness of the BSE controls. Article 6 also requires that the appropriate authority must, where possible, submit to their relevant Parliament an annual report for each calendar year on this monitoring programme. The report therefore covers data for Great Britain (England, Scotland and Wales) in 2023.

The information required is set out in the Regulation at Annex III, Chapter B, Part I (Reporting and recording requirements: requirements on appropriate authorities).

Most of the data, from 2007 onwards, is available on GOV.UK, and has been provided via this webpage since 2015:

<https://www.gov.uk/government/publications/active-tse-surveillance-statistics>.

This data is updated monthly.

## Bovine Spongiform Encephalopathy (BSE) in cattle

Under our robust surveillance programme, approximately 100,000 BSE tests are undertaken annually. Bovine animals are tested for BSE if they are born in the UK or in an EU country other than Romania or Bulgaria and:

- the animal is aged over 48 months and showed **signs of sickness** when examined by a veterinarian before death
- the animal is aged over 48 months and has been sent for **emergency slaughter** (for example, casualty animals which do not appear to be unwell, but have broken a leg or suffered some other injury)
- the animal is aged over 48 months and is **fallen stock**, that is, their death was not due to being slaughtered for human consumption
- the animal is older than 30 months and killed for the farmer's private consumption: '**home kill**'.

In addition, our surveillance programme requires:

- BSE testing of bovine animals slaughtered for human consumption at abattoir if they were born in Romania, Bulgaria, or any non-EU country and they were older than 30 months and healthy at the time of slaughter
- BSE testing of bovine animals that are fallen stock, were sent for emergency slaughter or showed signs of sickness when examined by a veterinarian before death that were born in Romania, Bulgaria or any non-EU country and were older than 24 months at the time of death.

The data for the calendar year 2023 is in annex 1.

The data includes a small number of bovine animals that were aged below 48 months, as tests are sometimes performed before the age of the animal can be verified. There are also a small number of bovine animals of unknown age due to their birth pre-dating the introduction of passports or to the failure by keepers to record them. All these animals were **'fallen stock'** which do not enter the food chain.

During 2023, there was **1** confirmed case of atypical BSE in Cornwall in **1 cow** which was tested as fallen stock aged over 48 months. This animal, as fallen stock, was not destined for the human food chain and posed no risk to public health.

Atypical BSE is a naturally and sporadically occurring non-contagious disease, which is believed to occur in all cattle populations at a very low rate. It is distinct from classical BSE which is linked to contaminated feed.

The cohort and offspring aged under 24 months of this atypical BSE case were identified and placed under restriction. The offspring comprised of **2** animals and the surviving cohort comprised **1** animal. Cohort animals are those born in the same herd as the affected bovine animal within 12 months preceding or following the date of birth of that animal, and animals which at any time during the first year of their lives were reared together with the affected bovine animal during the first year of its life.

These animals were culled and samples were taken from the brain stem for testing as required by legislation. The carcasses were then destroyed. All samples subsequently tested negative for BSE. These animals are captured within the 2023 data under **'BSE culling'**.

## Scrapie in sheep and goats

We monitor the level of scrapie in the national sheep flock and the national goat herd with a programme of active surveillance in line with legislative requirements. This programme monitors the continued effectiveness of our scrapie controls. It consists of the annual testing for TSE of 20,000 healthy and fallen sheep aged over 18 months, of which at least 5,000 are healthy animals slaughtered for human consumption, and 500 fallen stock goats.

Holdings under scrapie control and eradication measures are also monitored under the Compulsory Scrapie Flock Scheme (CSFS) which applies where cases of classical or atypical scrapie are confirmed. Unlike classical scrapie which affects younger animals and is highly contagious, atypical scrapie usually affects individual animals older than 5 years and is believed to be spontaneous.

Under the CSFS there are strict testing requirements. Animals aged over 18 months going for slaughter must be sent to designated abattoirs, where they are sampled and tested for scrapie. Animals aged over 18 months which die or are killed on the farm must also be sampled and tested.

The data for calendar year 2023 is in annex 2 which sets out the numbers of sheep and goats tested under both our national surveillance programme and the CSFS.

The data shows a small number of confirmed cases of atypical scrapie along with the additional information required by the legislation for each individual case. These **4** cases were in **4** separate flocks and each of these flocks were placed under the restrictions required by the legislation.

There were no cases of classical scrapie.

## **Chronic Wasting Disease (CWD) in cervids**

Assimilated Regulation (EC) No 999/2001 also applies to CWD, but we are not required by the legislation to have an active surveillance programme. Like BSE and scrapie, the disease is notifiable, meaning that it must be reported to the competent authority on suspicion: tests will be carried out on any suspect cases. We are required to include information on the number of samples tested and confirmed cases in the annual report. In 2023 there was 1 suspect case in a deer, which was tested and confirmed negative. There have been no confirmed cases of CWD in the UK to date.

# Annex 1: BSE testing of cattle 2023

## i. England

BSE survey	Age class by month	Number of animals tested	Result of test
Signs of sickness at ante-mortem	24-35	1	negative
Signs of sickness at ante-mortem	36-47	6	negative
Signs of sickness at ante-mortem	48-59	45	negative
Signs of sickness at ante-mortem	60-71	56	negative
Signs of sickness at ante-mortem	72-83	57	negative
Signs of sickness at ante-mortem	84-95	42	negative
Signs of sickness at ante-mortem	96-107	25	negative
Signs of sickness at ante-mortem	108-119	12	negative
Signs of sickness at ante-mortem	120-131	16	negative
Signs of sickness at ante-mortem	132-143	5	negative
Signs of sickness at ante-mortem	144-155	8	negative
Signs of sickness at ante-mortem	>=156	13	negative
Emergency slaughter	24-35	3	negative

<b>BSE survey</b>	<b>Age class by month</b>	<b>Number of animals tested</b>	<b>Result of test</b>
Emergency slaughter	36-47	8	negative
Emergency slaughter	48-59	1490	negative
Emergency slaughter	60-71	1214	negative
Emergency slaughter	72-83	959	negative
Emergency slaughter	84-95	626	negative
Emergency slaughter	96-107	392	negative
Emergency slaughter	108-119	250	negative
Emergency slaughter	120-131	166	negative
Emergency slaughter	132-143	99	negative
Emergency slaughter	144-155	55	negative
BSE culling	<24	1	negative
BSE culling	24-35	1	negative
BSE culling	>=156	1	negative
Fallen stock	<24	1	negative
Fallen stock	24-35	240	negative
Fallen stock	36-47	757	negative



<b>BSE survey</b>	<b>Age class by month</b>	<b>Number of animals tested</b>	<b>Result of test</b>
Fallen stock	48-59	11214	negative
Fallen stock	60-71	11138	negative
Fallen stock	72-83	9772	negative
Fallen stock	84-95	8247	negative
Fallen stock	96-107	6119	negative
Fallen stock	108-119	4162	negative
Fallen stock	120-131	3194	negative
Fallen stock	132-143	2361	negative
Fallen stock	144-155	1815	negative
Fallen stock	>=156	4572	negative
Fallen stock	>=156	1	positive (atypical)
Fallen stock	unknown	428	negative

## ii. Wales

BSE survey	Age class by month	Number of animals tested	Result of test
Signs of sickness at ante-mortem	24-35	1	negative
Signs of sickness at ante-mortem	48-59	1	negative
Signs of sickness at ante-mortem	60-71	5	negative
Signs of sickness at ante-mortem	72-83	3	negative
Signs of sickness at ante-mortem	84-95	5	negative
Signs of sickness at ante-mortem	96-107	3	negative
Signs of sickness at ante-mortem	120-131	2	negative
Signs of sickness at ante-mortem	132-143	1	negative
Signs of sickness at ante-mortem	144-155	1	negative
Signs of sickness at ante-mortem	>=156	1	negative
Emergency slaughter	>=156	4	negative
Emergency slaughter	36-47	1	negative
Emergency slaughter	48-59	107	negative
Emergency slaughter	60-71	83	negative
Emergency slaughter	72-83	53	negative

<b>BSE survey</b>	<b>Age class by month</b>	<b>Number of animals tested</b>	<b>Result of test</b>
Emergency slaughter	84-95	46	negative
Emergency slaughter	96-107	32	negative
Emergency slaughter	108-119	13	negative
Emergency slaughter	120-131	6	negative
Emergency slaughter	132-143	8	negative
Emergency slaughter	144-155	6	negative
Fallen stock	<24	1	negative
Fallen stock	24-35	61	negative
Fallen stock	36-47	147	negative
Fallen stock	48-59	2582	negative
Fallen stock	60-71	2681	negative
Fallen stock	72-83	2286	negative
Fallen stock	84-95	1989	negative
Fallen stock	96-107	1615	negative
Fallen stock	108-119	1140	negative
Fallen stock	120-131	890	negative

<b>BSE survey</b>	<b>Age class by month</b>	<b>Number of animals tested</b>	<b>Result of test</b>
Fallen stock	132-143	632	negative
Fallen stock	144-155	475	negative
Fallen stock	>=156	1018	negative
Fallen stock	unknown	76	negative

### iii. Scotland

<b>BSE survey</b>	<b>Age class by month</b>	<b>Number of animals tested</b>	<b>Result of test</b>
Signs of sickness at ante-mortem	48-59	8	negative
Signs of sickness at ante-mortem	60-71	4	negative
Signs of sickness at ante-mortem	72-83	4	negative
Signs of sickness at ante-mortem	84-95	3	negative
Signs of sickness at ante-mortem	108-119	2	negative
Signs of sickness at ante-mortem	>=156	1	negative
Emergency slaughter	24-35	1	negative
Emergency slaughter	48-59	93	negative

<b>BSE survey</b>	<b>Age class by month</b>	<b>Number of animals tested</b>	<b>Result of test</b>
Emergency slaughter	60-71	71	negative
Emergency slaughter	72-83	45	negative
Emergency slaughter	84-95	32	negative
Emergency slaughter	96-107	19	negative
Emergency slaughter	108-119	9	negative
Emergency slaughter	120-131	11	negative
Emergency slaughter	132-143	6	negative
Emergency slaughter	144-155	1	negative
Emergency slaughter	>=156	9	negative
Fallen stock	>=156	1664	negative
Fallen stock	24-35	8	negative
Fallen stock	36-47	39	negative
Fallen stock	48-59	3043	negative
Fallen stock	60-71	2993	negative
Fallen stock	72-83	2580	negative
Fallen stock	84-95	2099	negative

BSE survey	Age class by month	Number of animals tested	Result of test
Fallen stock	96-107	1700	negative
Fallen stock	108-119	1296	negative
Fallen stock	120-131	1072	negative
Fallen stock	132-143	929	negative
Fallen stock	144-155	674	negative
Fallen stock	unknown	127	negative

#### iv. Unknown location<sup>1</sup>

BSE survey	Age class by month	Number of animals tested	Result of test
Fallen stock	72-83	2	negative
Fallen stock	84-95	1	negative
Fallen stock	>=156	1	negative
Emergency slaughter	unknown	29	negative
Emergency slaughter	84-95	1	negative

<sup>1</sup> We receive a small number of submissions with an unknown location for the death of the animal, which are usually from keepers with a short-term lease of agricultural land. The location of these animals can be determined if required, but it is not necessary for animals that test negative'.

# Annex 2: Scrapie – test results and related data 2023

Table 1

Scrapie Survey	Number of animals tested	Number of animals tested with an atypical result	Number of animals tested in which scrapie is not confirmed	Number of animals tested in which scrapie is confirmed
Sheep abattoir survey	7685	1	7684	0
Sheep fallen stock survey	11187	2	11185	0
Sheep suspect cases	2	1	1	0
Goat fallen stock survey	565	0	565	0
<b>Total sheep tested</b>	<b>18874</b>	<b>4</b>	<b>18870</b>	<b>0</b>
<b>Total goats tested</b>	<b>565</b>	<b>0</b>	<b>565</b>	<b>0</b>

**Table 2**

<b>Compulsory Scrapie Flock Scheme (sheep &amp; goats)</b>	<b>Number of animals tested</b>	<b>Number of animals tested with an atypical result</b>	<b>Number of animals tested in which scrapie is not confirmed</b>	<b>Number of animals tested in which scrapie is confirmed</b>
CSFS Sheep Fallen Stock Survey	317	0	317	0
CSFS Sheep Initial Cull Survey	0	0	0	0
CSFS Sheep Annual Cull Survey	21	0	21	0
CSFS Sheep Dead in Transit Survey	0	0	0	0
CSFS Goat Fallen Stock Survey	120	0	120	0
CSFS Goat Initial Cull Survey	0	0	0	0
CSFS Goat Annual Cull Survey	199	0	199	0
CSFS Goat Dead in Transit Survey	0	0	0	0
<b>Total sheep tested</b>	<b>338</b>	<b>0</b>	<b>338</b>	<b>0</b>
<b>Total CSFS goats tested between 01 January 2023 – 31 December 2023</b>	<b>319</b>	<b>0</b>	<b>319</b>	<b>0</b>



## Annex 2 (a): Scrapie – information on positive results

Reference	Date reported	Sex	Species	Breed	Date of Birth	Age in years	Location	Result Summary	Final Result
23/00001	13/02/2023	Male	Sheep	unknown	unknown	unknown	Essex	Biorad positive 13/02/2023    Genotype ALRR/ ALRR 28/02/2023    Modified Western Blot Positive 28/02/2023    Sheep MicroSatellite Identification MATCH 28/02/2023	Atypical Scrapie
23/00002	24/03/2023	Female	Sheep	unknown	unknown	unknown	Roxburghshire	Biorad positive 31/03/2023    Genotype AFRQ/ AFRQ 20/04/2023    IHC Obex Atypical 30/10/2023    Modified Western Blot positive 11/04/2023    Sheep MicroSatellite Identification MATCH 19/04/2023	Atypical Scrapie

Reference	Date reported	Sex	Species	Breed	Date of Birth	Age in years	Location	Result Summary	Final Result
23/00003	02/04/2023	Female	Sheep	unknown	unknown	unknown	Shropshire	Biorad positive 04/04/2023    Genotype ALRR/ALHQ 20/04/2023    IHC Cerebellum Atypical 17/04/2023    IHC Obex Atypical 17/04/2023    Modified Western Blot positive 17/04/2023	Atypical Scrapie
23/00011	12/12/2023	Female	Sheep	unknown	12/06/2016	7	Sutherland	Biorad positive 17/11/2023    Genotype ALHQ/AFRQ 17/11/2023    IHC Cerebellum Atypical 17/11/2023    IHC Obex Atypical 17/11/2023    Modified Western Blot positive 17/11/2023	Atypical Scrapie

# Annex 2 (b): Scrapie – flocks 2023

## Number of ovine and caprine flocks tested

Test group	Number of flocks tested
Goat CSFS annual cull	1
Goat CSFS fallen stock	1
Goat fallen stock survey	>224
Sheep abattoir survey	unknown*
Sheep CSFS annual cull	1
Sheep CSFS fallen stock	20
Sheep dead in transit	47
Sheep fallen stock survey	>4072

\* flock information not provided by abattoir submissions

> indicates a minimum number where there are significant numbers submitted without location recorded