

A close-up photograph of a cow's fur, showing a mix of dark brown and white patches. The texture is soft and fibrous. The lighting is somewhat dim, creating a moody atmosphere.

# BSE

Public Safety First

February 1998

Despite the formidable and unprecedented problems created by BSE, immense progress has been made in eradicating the disease and protecting public health, based on the latest scientific advice.

This leaflet shows how the UK is eradicating BSE and sums up what has been done to meet the pre-conditions agreed at the Florence European Council in June 1996 for the resumption of beef exports from the UK. The UK Government believes that the progress made justifies the gradual lifting of the export ban in line with the Florence Agreement.

The Government has proposed two schemes which would allow limited exports of UK beef under strictly controlled conditions. The two schemes are described on page 7.

- Reported cases of BSE in 1997 are 10% of the number reported at the peak of the epidemic in early 1993
- The incidence of BSE is declining by about 40% each year
- Independent experts predict that by 2001 there will only be a few cases each year

## Eradicating BSE

Measures to eradicate BSE were introduced in 1988 when the probable cause was identified as infected protein recycled in animal feed. The UK government has strengthened these measures whenever new scientific advice has shown the need to do so.

There are two main measures to eradicate BSE: the feed ban and the slaughter schemes.

### The feed ban

Introduced by law in July 1988, the feed ban stops potentially infectious protein entering animal feed and agricultural fertilisers. Continuous monitoring of feed samples ensures the ban is observed. Scientists advise that this measure alone will eradicate BSE from UK cattle.

### The slaughter schemes

Animals suspected of having BSE have been subject to compulsory notification and slaughter, with compensation, since 1988. All carcasses of suspect animals are incinerated.

Animals most likely to have been exposed to a risk of BSE, through their feed, are being slaughtered under the Selective Slaughter Scheme (see figure 4).



figure 1 – Number of BSE cases by year of clinical onset. The number of cases onset in 1997 was adjusted for confirmation delay by month for January to June and the monthly incidence for July to December was set equal to the adjusted number for June. An adjustment by month to the number of cases onset in 1996 increased the number from 7,417 to 7,441.

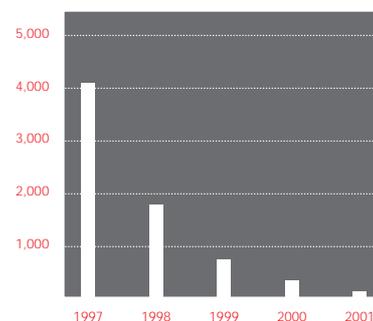


figure 2 – Predictions of cases by year for 1997 to 2001 with no selective cull and assuming the Ministry of Agriculture selective cull was fully implemented by January 1996.

Information courtesy of Nature magazine.



figure 3 – since May 1996 animals over 30 months old have been slaughtered in specially authorised abattoirs. Carcasses are slashed and stained yellow and either incinerated or rendered – the resulting bone meal (MBM) and tallow is safely stored until it can be destroyed.

### Safeguarding public health

The UK Government has introduced a number of measures to protect public health.

### Controls on Specified Risk Material

Controls keep potentially infectious material (Specified Risk Material) derived from cattle, and now sheep and goats, out of the food chain (see figure 5). Scientists advise that nvCJD is probably caused by exposure to BSE before the introduction in 1989 of controls on cattle offals.

### The Over Thirty Month Scheme

In March 1996 the UK Government banned the sale of meat for human consumption from cattle over thirty months old. The Over Thirty Month Scheme ensures the safe disposal of these animals.

### Beef on the bone ban

As a further precautionary measure, the UK Government now requires all meat from cattle over six months old to be de-boned before sale.

# 4 Meeting the Florence pre-conditions

The Florence Agreement set out five pre-conditions for the resumption of beef exports. Below we summarise what the UK has done to meet each pre-condition.

## 1 Implementation of a selective slaughter programme

By mid January 1998 the UK had slaughtered over 60,000 animals thought to be most at risk through exposure to the same solid feed as BSE cases. With very few exceptions, herd assessments have been carried out at all farms on which those BSE cases were born.

The operation will continue this year until all animals can be accounted for. This is inevitably time consuming given the complexities of tracing animals which have moved from the farm of birth through markets and herds over a number of years.

In Northern Ireland all animals in the cull which were born there have already been slaughtered.

Over 60,000 animals have been killed under the UK's Selective Slaughter Scheme.

## 2 Introduction of an animal identification and movement recording system with official recognition

Since 1 July 1996 all cattle born in or imported into Great Britain must by law have a cattle passport.

The passport records:

- the identity of the animal and its dam
- the date and holding of birth
- each movement (to another farm, market or slaughterhouse)

A record of all cattle passports is held on a computer database. By January 1998, 3,984,010 cattle passports had been issued. A further 649,390 calf passports cover movements direct to slaughterhouses under the Calf Processing Aid Scheme.

On 30 July 1997 the Government announced plans to introduce a computerised system to track all cattle movements in Great Britain. This system will be operational in 1998, well in advance of the EU's deadline of the end of 1999.

A computerised cattle tracing system has been in place in Northern Ireland for 10 years.

So far, over 4.5 million cattle and calf passports have been issued.

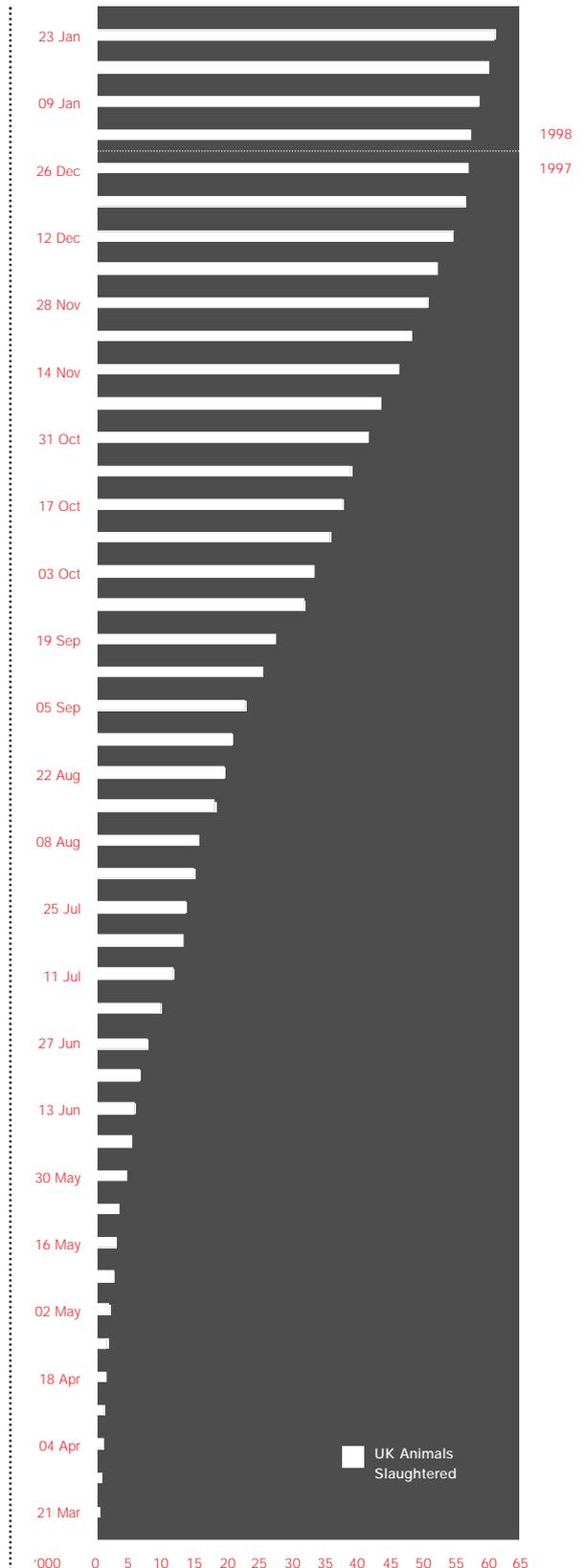


figure 4 – By mid January 1998 the UK had slaughtered over 60,000 animals thought to be most at risk through exposure to the same solid feed as BSE cases.

### 3 Legislation for the removal of meat and bone meal from feed mills and farms and subsequent cleansing of premises and equipment

UK law prohibits the feeding of mammalian meat and bone meal (MMBM) to any farm animal. Since 1 August 1996 the possession of MMBM (other than in certain tightly defined circumstances) has also been banned. This followed the launch of a Government Feed Recall Scheme on 10 June 1996 offering free collection of MMBM or feed containing MMBM from farms, feed merchants and feed mills. All the material collected has been safely disposed of in licensed landfill sites.

The Government's Veterinary Service monitors compliance with the feed ban through a national feed sampling programme. It is targeted at premises most at risk and now involves taking 20,000 samples a year. Of the 15,784 samples taken so far, only 51 (0.32%) have tested positive or inconclusive for mammalian protein. These have been/are subject to follow up investigations.

**The UK feed ban ensures that there is no risk of feed borne infection for any animal born after 1 August 1996.**

### 4 Implementation of the over 30 month rule including the destruction of the animal

The UK has banned the sale of beef for human consumption from cattle aged over 30 months since 29 March 1996. This ban went beyond the scientific advice at the time: that such beef should be de-boned.

Since May 1996 animals over 30 months old have been slaughtered in specially authorised abattoirs. Carcasses are slashed and stained yellow, as shown in figure 3, and either incinerated or rendered. The resulting meat and bone meal (MBM) and tallow is safely stored until it can be destroyed.

The Spongiform Encephalopathy Advisory Committee has advised that the methods of disposing of cattle carcasses are safe. The Government's Environment Agency risk assessments have confirmed this.

**By January 1998 over 2 million cattle had been slaughtered. Around 15,000 animals are slaughtered each week.**

## 5 Improved methods for removing specified risk material from carcasses

In Great Britain controls covering the brain, spinal cord and other specified cattle offal were introduced in 1989. These controls have been progressively extended and go beyond the requirements of EU rules.

In Great Britain the Meat Hygiene Service (MHS), a Government agency, monitors the removal, weighing, staining and destruction of specified risk material (SRM) in licensed premises. To ensure full compliance, the MHS has increased the number of inspectors by 450. The MHS performance is, in turn, monitored by the Government's Veterinary Service through unannounced spot checks.

In Northern Ireland the Government's Veterinary Service monitors SRM controls directly.

The full results of this monitoring programme, and the feed sampling programme, are published monthly in the MAFF BSE Enforcement Bulletin and on the Internet.

The inspectors have not found any spinal cord attached to carcasses leaving UK slaughterhouses since March 1996.

**UK controls covering specified risk material go beyond EU requirements.**

Date	% Satisfactory	No. of visits	Satisfactory
Sep-96	99.7	329	328
Oct-96	99.1	335	332
Nov-96	99.4	358	356
Dec-96	99.1	329	326
Jan-97	99.7	329	328
Feb-97	99.7	300	299
Mar-97	100.0	323	323
Apr-97	100.0	277	277
May-97	100.0	310	310
Jun-97	100.0	318	318
Jul-97	100.0	309	309
Aug-97	99.3	297	295
Sep-97	99.4	323	321
Oct-97	99.3	286	284
Nov-97	99.7	313	312
Dec-97	99.6	273	272

**figure 5** – The table above illustrates the very high level of compliance found in Great Britain. In every month since September 1996 more than 99% of visits have found the removal of SRM satisfactory. Unsatisfactory visits have involved minor shortcomings, such as inadequate records, which pose no risk to human health.

The Florence Agreement envisages the introduction of a series of export schemes covering specified types of animal or product. In line with the Agreement and given the progress made in meeting the five pre-conditions, the UK Government has proposed two schemes which are currently under consideration:

## Export Certified Herds Scheme

The European Commission presented a draft proposal to the Standing Veterinary Committee for discussion and an opinion. This scheme would permit the export of de-boned meat from animals:

- from Northern Ireland
- aged 6-30 months
- in or from herds which have not had a case of BSE for at least eight years
- that have their identity and movements fully recorded on a computer data base
- whose dams survived their birth by six months and have not developed BSE
- with slaughter and meat processing carried out in dedicated plants

The above criteria match the opinion of the Commission's Scientific Veterinary Committee. They also reflect comments made by the Commission following its visit to Northern Ireland to inspect the practical arrangements for the scheme.

## Date Based Export Scheme

The UK has also submitted a proposal for a date based export scheme. The strength of this scheme lies in the fact that animals born after 1 August 1996 have not been exposed to mammalian meat and bone meal (MMBM).

The proposed scheme has two parts:

- the export of de-boned beef from cattle born after 1 August 1996 and aged 6-30 months
- the compulsory slaughter of all offspring born to confirmed cases of BSE on or after 1 August 1996 (because the only known risk of BSE infection for animals born after 1 August 1996 is through maternal transmission)

The Scientific Steering Committee has endorsed the principle of the scheme and the UK is preparing its response.

## Controlling exports of beef once the ban is lifted

Controls on beef exports once the ban is lifted will be based closely on the system for controlling the re-export of beef and beef products prepared from imported meat. Full product tracing and strict veterinary supervision characterise these controls. Under the Florence Agreement, the EC Commission must inspect the controls before it fixes a date for the resumption of UK beef exports.

## Enforcing the beef export ban

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Exports of cattle and beef from animals slaughtered in the UK have been prohibited since March 1996. The ban was immediately enforced by withdrawing veterinary certification of all cattle and beef exports.

On 1 August 1996 new legislation was introduced to clarify and strengthen enforcement of the export ban by:

- explicitly prohibiting the export of UK cattle, beef and beef products
- creating powers to search, seize and detain goods
- introducing new penalties including up to two years' imprisonment

Random checks at ports have been improved and their frequency has more than doubled.

The effectiveness of these measures is monitored; changes will be made if necessary.

All allegations of illegal cattle and beef exports are investigated immediately and rigorously.

### Further information

If you would like more copies of this leaflet (PB3514) please contact:

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For more information on BSE, you can either call the **MAFF Helpline** on 0645 335577, callers outside the UK should dial +44 (0)171 270 3000 or visit the MAFF website at <http://www.maff.gov.uk>

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