



BSE and Beef **New Controls Explained**

The aim of this leaflet is to explain what is being done to control BSE and ensure that any risk from eating beef and beef products is extremely low. If you want further information, there are answers to some commonly-asked questions at the back.

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## **BSE in cattle, which is sometimes known as ‘mad cow disease’, has fallen to its lowest levels in the UK since record keeping began in 1988.**

The steep decline of BSE – from over 37,000 clinical cases in 1992 to 90 clinical cases in 2004 – is due to the success of measures introduced by the Government to control the disease and make beef and beef products safer for people to eat.

Now the Government has introduced a BSE Testing System to replace one of the controls that has banned cattle aged over 30 months from the food chain. This aims to ensure the continuing high level of protection of consumers in the UK. BSE testing of older cattle has been used successfully since 2001 in the rest of Europe.

This leaflet describes the measures that have been successful in bringing about this steep decline in BSE (these are called BSE Controls) and explains the reasons for the introduction of the testing system.



## How has BSE been brought under control?

BSE, or to give it its proper scientific name 'bovine spongiform encephalopathy', was first confirmed in cattle in 1986.

Since the late 1980s, the Government has introduced and progressively strengthened measures to reduce the risk we face from eating beef and beef products that might be infected with BSE. These measures are called BSE Controls.

There have been three main BSE Controls:

- Animal feed that contained animal protein thought to have spread BSE is banned. This is called **the Feed Ban**.
- The parts of an animal most likely to contain BSE are removed when an animal is slaughtered, and they do not go into our food. This is called the **Specified Risk Material Control** and removes almost all the risk (over 99%) that could be present if any animal has BSE.
- Until November 2005, cattle could not be sold for food if they were aged over 30 months, as BSE does not develop fully in cattle until they are older. This was called the **Over Thirty Months Rule**.

An additional control was also introduced banning the process of recovering meat mechanically from the bones of cattle.

The controls are based on the latest scientific knowledge and are designed to reduce the risk of BSE to an extremely low level, although the risk from BSE cannot be removed completely.





## The Feed Ban

Most experts agree that BSE was spread among cattle in animal feed that contained animal protein that was contaminated with BSE.

The meat and bone meal that used to be included in animal feed was produced by a process called rendering, through which otherwise unused parts of animal carcasses were turned into an ingredient used in some feed. This was common practice in the UK and many other countries from around 1920 until it was banned in the UK in 1988 (this was the first of a series of feed bans).

Since August 1996 there has been a reinforced ban in this country on feeding cattle – and other farm animals, such as sheep, pigs and chickens – with meat and bone meal derived from mammals. The Feed Ban will continue to operate and no farm animals will be allowed to eat meat and bone meal.

In 2001, the ban on feeding farm animals with meat and bone meal containing animal protein was extended to cover the whole of the European Union.

## The removal of Specified Risk Material

The requirement to remove Specified Risk Material is the main BSE control measure that protects our food. It removes almost all (99%) of the risk. Specified Risk Material includes the parts of an animal – such as brain and spinal cord – that are most likely to contain BSE if an animal is infected.

It means that, by law, such Specified Risk Material must be removed and destroyed when animals are slaughtered. This material is banned altogether from the food chain and this will continue.

Controls on Specified Risk Material also apply across the European Union.

## The ban on mechanically recovered meat

In the past, products such as low cost burgers, sausages, pies and mince included 'mechanically recovered meat'. This was meat left on the bone after the normal removal process and which was then stripped at high pressure by mechanical means.

In the mid-1990s, the Government banned the process of recovering meat mechanically from the backbones of cattle as meat obtained in this way was thought to carry a small risk of BSE from any infected animals. In 1998 this ban was extended to cover the backbones of other ruminants, and in August 2001 to all ruminant bones. This ban will also continue.



## The Over Thirty Months Rule

Experience has shown that any cattle that do become infected with BSE are unlikely to show clinical signs of the disease before they are four years of age.

This means it is unlikely that any animal under thirty months of age would contain significant BSE infectivity, even if it had the disease.

As a safeguard, a ban on cattle older than thirty months being sold as food in the UK was introduced in 1996. This control is called the Over Thirty Months Rule.

No cases of BSE have been found in the UK in cattle younger than 30 months since 1996.

As a result of the steep decline in BSE cases and the progress made in developing effective tests for the disease, the Government asked the Food Standards Agency in 2002 to review whether the Over Thirty Months Rule could be replaced by BSE testing of older cattle.



## The new BSE Testing System for older cattle

On the Food Standards Agency's advice, the Government agreed in December 2004 that it was disproportionate to the level of risk to continue with a ban on cattle aged over 30 months from entering the food chain. Instead they agreed to test all cattle born after July 1996 and aged over 30 months at the time of slaughter and allow only the negative ones to go into the food supply.

All cattle born before the reinforced Feed Ban was introduced in August 1996 will continue to be banned from being used as food.

Research shows that, by the most likely estimates, the risk from BSE testing of older cattle, instead of banning them completely, will result in less than one additional case of vCJD occurring in humans over the next 60 years. The worst-case scenario is that there could be 2.5 additional cases. (See page 15 for more on vCJD.)

Under the BSE Testing System, set to start in November 2005, cattle aged over 30 months that have tested negative for BSE will be able to be sold as food. Any cattle that do not test negative will be banned from being used as food and destroyed. Cattle aged under 30 months will continue to enter the food chain untested as they do now.

The other two main BSE Controls – the removal of specified risk material and the Feed Ban – will also continue to operate, as will the ban on the mechanical recovery of meat from ruminant bones.

The Food Standards Agency considers that the BSE Controls provide a very high level of public protection and that the risk of BSE infectivity entering the food chain will continue to be extremely low.



## How reliable is the new BSE Testing System?

Before the Government gave the final go-ahead to replace the Over Thirty Months Rule with BSE testing, the Food Standards Agency was asked to advise whether a reliable testing system for use throughout the UK had been devised. This system was tried out in a number of different slaughterhouses in various parts of the UK and scrutinised carefully by an Independent Advisory Group. However, no meat from cattle aged over 30 months was allowed into the food chain as a result of these trials.

Based on the outcome of these trials, the Independent Advisory Group developed and advised the Food Standards Agency Board of the details of a testing system. The Board accepted that advice, and this has now been agreed by the Government and put into practice.

A number of safeguards have also been introduced:

- An Implementation Review Group, led by the Food Standards Agency, has been established to check on the introduction of the testing system throughout its first year of operation. A consumer representative will also be part of this group.

- Additional vets have been appointed by the Meat Hygiene Service – an executive agency of the Food Standards Agency – especially to make sure the new testing system works properly. They must visit each meat plant undertaking testing on the first two days of the new system’s operation, and, following this, on a regular basis. Similar arrangements have been made by the Department of Agriculture and Rural Development in Northern Ireland.
- A new law has been introduced making it illegal to send cattle born before August 1996 to an abattoir for human consumption. As an additional safeguard, a careful check will be made of all cattle sent to slaughterhouses slaughtering cattle for food to ensure that no cattle of this age are accepted.
- If the Implementation Review Group has concerns about the testing system, the Food Standards Agency will, if necessary, advise the Government on the changes needed to address these.
- The findings of the Group will be made public on a regular basis.



## The Food Standards Agency

The Food Standards Agency is a UK-wide, independent Government agency that provides advice and information to the public and Government on food safety, nutrition and diet.

The Agency was created to protect the interests of consumers. Its guiding principles are to:

- Put the consumer first
- Be open and accessible
- Be an independent voice

The Agency's advice is based on the best scientific evidence available from independent expert advisory committees, and all its advice is made public.

Before giving recommendations to the Government on changes to the BSE Controls, the Food Standards Agency has taken advice from specialist advisory committees that deal with BSE, such as the Spongiform Encephalopathy Advisory Committee. The new BSE Testing System for older cattle was trialled and found to be effective by an Independent Advisory Group. Public meetings to discuss BSE testing were held by the Food Standards Agency in London, Edinburgh, Cardiff and Belfast.



## What is BSE?

Bovine spongiform encephalopathy (BSE) is the scientific name for 'mad cow disease'. BSE is a disease that affects cattle. The disease destroys the brain tissue of infected cattle, giving it a spongy appearance. BSE always leads to the death of infected cattle.

BSE is one of a group of diseases that affect a number of different mammals.

These diseases, known as transmissible spongiform encephalopathies (TSEs), or prion diseases, result from the build-up of abnormal proteins in the brain and nervous system. TSEs get their name from the spongy appearance in the infected brain, and the fact that they are transmissible via infected material.

BSE was first confirmed in cattle in 1986. However, despite much research, no one can say with certainty where BSE came from, although several theories exist.



## How dangerous is BSE to humans?

BSE belongs to a family of diseases, several of which can affect humans. The most commonly known disease in this group among humans is Creutzfeldt-Jakob Disease (CJD). This is a rare and fatal brain disease that usually occurs only in older people.

CJD is not a new disease among humans, but in 1996, scientists discovered a new strain of CJD that occurs predominantly in younger people. Researchers concluded that the most likely origin of this new disease, called variant CJD, or vCJD, was human exposure to BSE.

Like BSE in cattle, vCJD is always fatal in people. Between 1995 and July 2005, 150 people died from vCJD in the UK, and seven people were suspected of having vCJD.

## Where can I find out more?

More on the Food Standards Agency can be found at [www.food.gov.uk](http://www.food.gov.uk) and [www.eatwell.gov.uk](http://www.eatwell.gov.uk)

Department for Environment, Food and Rural Affairs website:  
[www.defra.gov.uk/animalh/bse/index.html](http://www.defra.gov.uk/animalh/bse/index.html)

European Union Food and Feed Safety website:  
[http://europa.eu.int/comm/food/food/biosafety/bse/index\\_en.htm](http://europa.eu.int/comm/food/food/biosafety/bse/index_en.htm)

Information on the Food Standards Agency's website:  
[www.food.gov.uk/bse](http://www.food.gov.uk/bse)

CJD Surveillance Unit Edinburgh: [www.cjd.ed.ac.uk](http://www.cjd.ed.ac.uk)

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