Bovine spongiform encephalopathy (BSE)

Bovine spongiform encephalopathy is also known as BSE or mad cow disease. It’s a brain disease that can infect cattle, sheep and goats. If this infected meat is eaten by humans it can result in serious illness and death.

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.

How BSE is controlled in the UK

Since the 1980s, there have been strict controls in place in the UK to protect people from BSE. These reduce the risk of eating beef or meat products that might be infected with BSE.

We monitor these controls and lets the public know if anything goes wrong. The control measures are revised from time to time based on the most up-to-date scientific knowledge.

No sheep in the UK have been found to have BSE. It has been shown under laboratory conditions that sheep can be infected with BSE. As a precautionary measure there are also safety measures in place to provide protection against BSE in meat from sheep.

The removal of specified risk material

Specified risk material (SRM) is the name given to the parts of the cattle most likely to carry BSE. Removing SRM from the food chain is the most important way to ensure food safety.

SRM must be removed in either the slaughterhouse or the cutting plant. It must be stained and disposed of and must not be used in food or animal feed. This provides protection from the risk of an animal infected with BSE being slaughtered before it shows symptoms of being ill.

Other controls that protect our food

Animal feed containing meat and bone meal is thought to have been responsible for the spread of BSE among cattle. Feeding meat and bone meal to any farm animals is now banned across Europe.

Cattle with BSE or suspected of having BSE are removed from the food chain. The offspring and cohorts of BSE cases are also slaughtered and disposed of.

Cohorts are defined as one of two options.

These options are:

- born in the same herd as the BSE case, up to a year before or after its birth
- reared with a BSE case at any time before both were up to a year old