FAQs on changes to the BSE testing age for beef cattle

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In the entire European Union, hardly any cattle now become ill due to BSE. Thus in Germany the last case of BSE was detected in the year 2009. Against the background of this positive epidemiological development, an EU regulation took effect at the turn of the year which will serve to relax the test system. As of January 2013, it is sufficient in 25 member states to test cattle for BSE by means of random samples. From March 2013, BSE tests can be dispensed with completely with cattle that were slaughtered while healthy, but the member states can impose their own regulations.

The Federal Institute for Risk Assessment (BfR) and the Friedrich-Loeffler-Institute (FLI) are of the opinion that all healthy cattle slaughtered aged older than eight years (96 months) should continue to be systematically tested in order to record cases of atypical BSE and to recognise a potential new epidemic as early as possible. In Germany, beef cattle over six years of age (72 months) are currently subject to mandatory testing in Germany.

On the occasion of new EU regulations on mandatory BSE testing, the BfR has compiled new FAQs on the subject. These are presented below.

What is BSE?
Bovine spongiform encephalopathy (BSE) is a disease affecting cattle which leads to changes in the brain and ultimately death of infected animals. It is assumed that the illness is caused by infectious proteins (prions).

Cattle infected with BSE show changes in behaviour such as nervousness, anxiety and jumpiness as well as movement disorders and coordination difficulties. In addition, they are oversensitive to touch, noise and light.

Since the 1990s, BSE in cattle has become the focus of public and scientific interest because of an epidemiological connection with the new variant of so-called Creutzfeldt-Jakob disease (vCJD). Creutzfeldt-Jakob disease is a very rare neurological disorder in humans which is incurable and leads to death.

What is atypical BSE?
Apart from the classic BSE form, sporadically cases of atypical BSE have been observed since 2004. A distinction is made between two different forms of atypical BSE (H-type and L-type BSE) which differ, both from each other and from classical BSE, in terms of their biological properties and the biological characteristics of the pathogenic protein.

The symptoms are the same as those of classical BSE. Finding out whether it is the atypical form is possible only by means of laboratory diagnostic methods.

Both forms have so far been predominantly diagnosed in cattle aged over eight years. Cases of atypical BSE have to date been detected in the EU, Canada, the USA and Japan. The sum total of all cases detected worldwide now stands at 64.

Due to epidemiological data (worldwide prevalence with very low frequency in older animals, no connection between individual cases), it is assumed that atypical BSE cases occur spontaneously. Therefore one might assume that individual cases of atypical BSE will
continue to occur in future. Overall, however, the level of knowledge of atypical BSE is still very limited.

**Do cases of BSE actually still occur in Germany?**
In the year 2000, an infection with BSE was for the first time detected in an animal born in Germany. Since then, 413 BSE cases have been reported, the last one in the year 2009.

**What measures are taken to protect consumers from BSE?**
The most important measure to protect the consumer from BSE is the removal and safe disposal of so-called specified risk material (see below) when slaughtering cattle. In addition, a ban has been imposed on using feed containing animal protein (“meat-and-bone meal”) to ruminants, and testing healthy slaughtered cattle over the age of six is mandatory.

**What is “specified risk material”?**
Tissues and organs which are known from infection experiments to contain BSE agents are referred to as "specified risk material".

This notably includes the skull with brain and eyes and the spinal cord of cattle aged over twelve month, the spinal column of cattle aged over 30 months and the tonsils, intestine and mesentery of cattle of all age groups.

**Are cattle in Germany regularly tested for BSE?**
All healthy slaughtered cattle are currently tested for BSE in Germany, if they are older than six years (72 months). In addition, all animals subject to emergency slaughter aged over 48 months as well as all clinically suspected animals of any age are tested for BSE.

**What are the benefits of rapid diagnostic BSE tests?**
With the help of rapid diagnostic BSE tests, pathologically modified prions can be detected in brain samples of slaughtered cattle. However, it only makes sense to use this testing procedure for animals in which the infection has progressed to a stage where sufficient BSE-agents are present for detection with these tests. Cases of atypical BSE too are reliably detected with the rapid BSE tests used.

**Why is the testing of cattle before slaughtering in other EU countries limited to random samples?**
As hardly any cases of BSE are now observed within the European Union, a new EU regulation provides for a relaxation of the mandatory BSE testing regime: since January 2013, it is sufficient in 25 Member States to test cattle for BSE by taking random samples. Moreover, from March 2013, it will be possible to abolish the entire mandatory BSE testing regime for healthy slaughtered animals. However, Member States are free to pass their own regulations.

**Why does Germany uphold compulsory BSE testing for beef cattle while at the same time raising the testing age from 72 to 96 months?**
In an EU regulation, the Member States are authorised to pass their own regulations on the mandatory BSE testing regime or to stop systematic testing of beef cattle entirely as of March 2013. In Germany, the Federal Government has decided to keep the requirement for mandatory testing of beef cattle.

However, the testing age of cattle will be raised from 72 to 96 months. This decision is based on a joint opinion of the Federal Institute for Risk Assessment (BfR) and the Friedrich-Loeffler-Institute (FLI). The BfR and FLI are of the opinion that all healthy slaughtered cattle
aged over eight years (96 months) should be systematically tested in order to be able to record cases of atypical BSE.

In the view of the two institutes, keeping the mandatory BSE testing regime for cattle over the age of eight in place will help to avoid the appearance of an unrecognised new (atypical) BSE epidemic. Raising the testing age does not cause an increased risk for consumers, as the animals in which BSE was detected became older and older over the years. For this reason, it can be assumed that they were all born prior to the BSE protection measures (see above) being put in place.

Is meat from younger cattle not tested for BSE nevertheless safe to eat?
So far, there is no evidence to suggest that the flesh of cattle affected by BSE can cause an infection. Additionally, the risk that the flesh of younger animals is contaminated with BSE agents is nearly negligible for the following reasons: on the one hand, because no BSE infections have been detected in the German cattle population since 2009; on the other hand, because as part of the slaughtering process, the specified risk material must still be removed. In the opinion of the BfR, therefore, BSE testing of healthy slaughtered beef cattle aged below 96 months can be abandoned.

Is beef from other EU countries safe?
The system for the protection of BSE ensures a high level of safety for consumers: in the entire EU, the rule continues to apply that the specified risk material must be removed and disposed of in a safe manner as part of the slaughtering process. That is the most important measure for the protection of consumers.