



## **EIGHTY-FOURTH MEETING OF THE SPONGIFORM ENCEPHALOPATHY ADVISORY COMMITTEE**

The Spongiform Encephalopathy Advisory Committee (SEAC) held its 84<sup>th</sup> meeting in London on 28<sup>th</sup> September 2004, when it discussed the following matters:

### **UPDATE ON BSE CASES**

SEAC was presented with figures showing the annual number of BSE cases in cattle in Great Britain (GB) since the 1980s and the reductions in the number of cases after control measures had been introduced. The figures were compared with data on BSE cases reported in other countries. In GB, the BSE epidemic peaked in 1992, when over 36 500 cases were confirmed but thereafter, the number of cases declined considerably. In GB, a total number of around 183 000 BSE cases had been recorded to date. The committee was informed that 84 cases have been reported in animals born after the introduction of the reinforced ban (in 1996). Further research is being conducted to investigate such cases. An estimate of future BSE cases in GB was also presented that suggested an annual decline from around 285 cases in 2004 to around one case in 2010.

### **UPDATE ON vCJD CASES**

SEAC was updated on the latest figures from the National CJD surveillance unit. Up until September 2004, a total of 149 vCJD cases have been confirmed in the UK, including five cases still alive. All clinical vCJD cases tested to date are of the same genotype at codon 129 of the PrP gene (methionine homozygous). Short-term analysis of the number of deaths from vCJD continues

to show statistically-significant evidence that the epidemic is no longer increasing exponentially and, at least in the short term, the epidemic may have peaked.

## **STATEMENT FROM THE SHEEP SUBGROUP**

The SEAC sheep subgroup recently considered the impact of a number of options to breed TSE resistance into the national sheep flock as part of a consultation on Defra's National Scrapie Plan. SEAC was presented with a statement from the subgroup summarising its conclusions. The subgroup concluded that the current strategy to breed scrapie resistance into the national flock remains appropriate but that it should be kept under review. In addition, the most scientifically appropriate option for breeding TSE resistance is a scheme close to the currently used Ram Genotyping Scheme if employed on a compulsory basis. SEAC endorsed the statement pending minor amendments to take into account a very recent consideration of two additional options by the subgroup.

## **FSA CONTINGENCY POLICY ON BSE AND SHEEP**

The FSA is reviewing its contingency policy should BSE ever be found naturally occurring in sheep. To assist with this consideration, the FSA commissioned two modelling studies to estimate the possible prevalence of BSE in sheep and to estimate the likely impact of different risk reduction strategies should BSE be found in sheep. SEAC was asked to advise on the underlying scientific assumptions and approach adopted in both studies, taking any uncertainties into account. SEAC noted the theoretical nature of the work but agreed with the general approach taken in both studies.

SEAC considered tests to distinguish BSE from scrapie had limitations but were becoming more robust. The committee awaits the results of the ongoing ring trial that may provide clarity on this issue.

SEAC concluded that the experimental studies to date showed no positive evidence for BSE in sheep. However, modelling the maximum number of possible cases based on these experimental data is limited by assumptions made in such analyses. The committee noted that because of the way some of the data used in

the modelling had been collected, the number of TSE cases that could be BSE may have been underestimated.

The committee acknowledged that modelling the possible impact of BSE in sheep if it entered the national flock was complex and difficult, and because of the very limited data available the models had necessarily relied heavily on many assumptions. In particular, the modelling had assumed that BSE and scrapie would behave similarly in all types of sheep, which is largely unknown. However, the committee did accept that the modelling indicated a high potential risk of human infection should BSE enter the national flock.

SEAC considered the impact of the risk reduction strategies presented and agreed that a strategy based on prion protein genotype would be the most effective.