



## Historic butchery practices in the UK

### Issue

1. In 2001, the Leicestershire Health Authority (LHA) published a report of the investigation into the North Leicestershire cluster of variant Creutzfeldt-Jakob disease (vCJD) cases. This report concluded that there was a strong association between the people who developed vCJD and the consumption of beef in the 1980s from local butchers who processed bovine heads and removed the brain.
2. Following a request from SEAC, the Food Standards Agency (FSA) commissioned DNV Consulting to carry out a study of historic butchery practices to determine to what extent the activities of potential concern identified in the LHA report were common practice in the UK during the peak of the BSE epidemic (1980 – 1995).
3. Mr Phillip Comer of DNV Consulting will present the results of this study to the Committee on 29<sup>th</sup> April 2004. The main findings of the study are summarised in the report, which is attached at [Annex 1](#) (1mb pdf).

### Background

4. There have been 143 cases of definite or probable variant vCJD in the UK as at 3rd November 2003. Cases have been widely spread throughout the UK, although there is evidence that people living in the North are about one and two third times more likely to have developed vCJD than those living in the South.
5. Geographically associated cases of vCJD are defined as two or more cases of probable or definite vCJD<sup>1</sup> with a geographical

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<sup>1</sup> Definite cases: this refers to the diagnostic status of cases. In definite cases the diagnosis will have been pathologically confirmed, in most cases by post mortem examination of brain tissue (rarely it may be possible to establish a definite diagnosis by brain biopsy while the patient is still alive).

Probable vCJD cases: are those who fulfil the 'probable' criteria set out on the CJD

association either through proximity of residence or through another link with the same location (occupational, educational or social/recreational). Five cases of vCJD have occurred in the North Leicestershire area. All of the cases lived within a 5km radius from 1981 to 1991, close to the village of Queniborough. Statistical analyses suggested this cluster of cases was very unlikely to have arisen by chance.

6. The Leicestershire Health Authority (LHA) carried out an investigation into this cluster of vCJD cases in 2001.<sup>2</sup> It was concluded that there was a strong association between the vCJD cases and the consumption of beef from local butchers. None of the cases were known to have consumed brain directly, leading to the hypothesis that people may have been exposed to infectivity through cross contamination of carcass meat with bovine brain.

### ***Previous SEAC Advice***

7. The Epidemiology sub-group considered the LHA report in 2001. This group reported back to SEAC in April 2001 and the committee endorsed their view that the Health Authority's principal hypothesis, i.e. that certain historic (and now illegal) local animal butchery practices may have given rise to vCJD, was a plausible explanation. In looking at the wider implications, the committee underlined the importance of obtaining details of recipes used by the food industry in the 1980s that incorporated those bovine products since been banned from the food chain (especially brain and spinal cord); and the need to investigate the possible role of the butchering practices identified in the Leicestershire investigation in other cases of vCJD.
8. In November 2002, the committee were presented with the findings of a study investigating historical uses of Mechanically Recovered Meat (MRM). Members agreed that the report was very useful and demonstrated the extent to which the population may have been exposed to potentially infected material through the consumption of economy burgers and minced meat. At this meeting, it was noted that FSA would commission a study of historic butchery practices in the UK, which would take account of the results of the MRM study.

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Surveillance website (<http://www.cjd.ed.ac.uk/PROTOCOL.HTML>) and are either still alive, or have died and await post mortem pathological confirmation. Those still alive will always be shown within the current year's figures.

<sup>2</sup> Final report of the Investigation into the North Leicestershire cluster of variant Creutzfeldt-Jakob Disease (vCJD). Leicestershire Health Authority, 2001.

## ***Objectives and Approach of the DNV Study***

9. The DNV study builds on the investigation by the LHA and is a repeat of an interview-based approach with those involved in abattoirs, butchers and the meat trade from 1980 - 1995, focusing on the early 1980s as the key period when knowledge of BSE was very limited. This was before the Specified Bovine Offal (SBO) legislation in 1989, banning the use of brain and spinal cord in food was put in place.
10. It was not possible to cover the whole of the United Kingdom in this type of study. The butchers/slaughter houses were selected to represent similar preconditions identified in the LHA report; however the six locations were selected to include areas of relatively high and low vCJD incidence, to include different local beef cattle breeds and areas of high and low BSE incidence. Initial contact in each of the selected areas was with local environmental health authorities, who would have licensed the local slaughterhouses in the 1980s. In each area a number of businesses or individuals involved in the meat trade during 1980 to 1995 were identified and invited to interview. These included abattoirs, butchers, traders, auctioneers, farmers and government bodies.
11. The main objectives of the study were to establish:
  - how many butchers slaughtered their own cattle  
The study did not include interviews with all butchers in an area operating between 1980 to 1995, but a small selection of those who slaughtered cattle on their own premises who were still operating as a business or who still held records.
  - if butchers did not slaughter cattle themselves, where their meat was sourced from
  - the use of whole animal as the meat source or only parts
  - the type and age of cattle being slaughtered
  - slaughtering practices
  - the handling of heads in slaughter houses and butchers' premises

## **Advice sought from the Committee**

Does the Committee consider the information presents any new insights into the route of infection of CJD?