



## **SPONGIFORM ENCEPHALOPATHY ADVISORY COMMITTEE**

Minutes of the 96<sup>th</sup> meeting held on 20<sup>th</sup> February 2007

Holiday Inn  
1 Kings Cross Road, London WC1 9HX

Members:	Professor C. Higgins (Chair) Mr. J. Bassett Professor N. Hooper Mr. P. Jinman (Deputy Chair) Ms. D. McCrea Professor G. Medley Professor M. Stanley Professor A. Williams
Assessors:	Dr. A. Gleadle (FSA)
Technical Experts:	Mr. P. Burke (Defra) Miss A. Conroy (FSA) Dr. S. Dixon (FSA) Professor N. Gill (HPA) Dr. I. Hill (FSA) Dr. D. Matthews (VLA)
SEAC Secretary:	Miss K. Richards
Secretariat:	Dr. T. Barlow Dr. D. Cutts Dr. P. Keep Dr. C. Ravirajan
Also in attendance	Mr. D. Carruthers (FSA) Dr. R. Kao (University of Oxford) Mr. W. Reynolds (Defra)

## **ITEM 1 – CHAIR’S INTRODUCTION**

1. The Chair welcomed everyone to the 96<sup>th</sup> meeting of SEAC. He noted that the committee was smaller than normal as a number of members were unable to attend and two members had recently come to the end of their terms of office and interviews for new members will be held shortly. In addition, a number of governmental officials could not attend as the meeting had unexpectedly coincided with a meeting of the Advisory Committee on Dangerous Pathogens Transmissible Spongiform Encephalopathy (TSE) Working Group. In view of this, a number of issues had been deferred to SEAC 97.
2. The SEAC Secretary explained that a short summary of the discussions would be published on the SEAC website next week. An exercise to recruit three new members with expertise in neurology, public health and epidemiology is underway with many promising applications. In light of a request to update regularly the committee on the numbers of variant Creutzfeldt-Jakob Disease (vCJD) cases, members were informed that as of 2<sup>nd</sup> February 2007 there had been 112 deaths from definite vCJD, 158 deaths from definite or probable vCJD and the total number of definite or probable cases both dead and alive is 165.
3. The next SEAC meeting is scheduled for Thursday 10<sup>th</sup> May 2007 at the Royal Horticultural Halls and Conference Centre, Westminster, London.
4. Apologies for absence had been received from Professors Brown, Lasmézas, Manson and Nicoll. These members had been invited to submit comments on today’s papers.
5. Members were reminded that they are obliged to declare any commercial or other interests they may have at the relevant agenda items and to inform the secretariat of any changes to the register of members’ interests.

## **ITEM 2 – APPROVAL OF MINUTES FROM SEAC 95 (SEAC 96/1)**

6. The minutes of the open session of SEAC 95 were agreed as a correct record, subject to the following amendment:
  - paragraph 48, change “...in 127 UK coroners’ jurisdictions.” to “...in 127 coroners’ jurisdictions in England and Wales.”

7. The Chair asked members to submit comments on the reserved business minutes of SEAC 95, by email.
8. Members were notified that video clips of the clinical signs of atypical scrapie, referred to in paragraph 19 of the SEAC 95 minutes, would be presented at SEAC 97, along with the report of the audit of a case of atypical scrapie in the research flock (see item 6).

### **ITEM 3 – CURRENT ISSUES**

9. SEAC was informed about the following issues:
  - Publication of the report from the Clinical Governance Advisory Group (CGAG), convened to advise the Department of Health (DH) on appropriate arrangements and care for individuals 'at risk from vCJD for public health purposes', had been delayed. This was to allow further assessment of the number of individuals considered to be at risk of vCJD. The report will be published once agreed by CGAG.
  - A fourth case of blood transfusion associated transmission of vCJD was announced by the Health Protection Agency (HPA) on 18<sup>th</sup> January 2007. The individual was diagnosed with vCJD about nine years after having received a blood transfusion from a donor, who later went on to develop vCJD. A transfusion from the same blood donor was also associated with one of the previously identified blood transfusion associated cases.
  - The United Kingdom (UK) Chief Medical Officers sent a letter, on 19 February 2007, to neurologists to remind them to remain vigilant and refer unusual neurological cases through the established national arrangements. SEAC had considered this important in view of the unknown human health implications of atypical scrapie and the possible altered clinical phenotype of vCJD in individuals of non-MM genotype.
  - In response to advice from SEAC and the Committee on Microbiological Safety of Blood Tissue and Organs, the Medicines and Healthcare products Regulatory Agency has asked the European Commission to include vCJD diagnostic assays in Annex II List A of the In Vitro Medical Diagnostic Devices Directive 98/79/EC. Once in place, this will mean that manufacturers must ensure that such tests conform with a common technical specification for safety, quality and

performance before they can be sold in the European Union (EU).

- The Department of Environment, Food and Rural Affairs (Defra) has completed a review of the National Scrapie Plan Ram Genotyping Scheme (RGS). The SEAC Sheep Subgroup's recent consideration of the science underpinning the NSP was part of this review. Ministers have accepted the key recommendation of the review that a fully funded RGS is no longer appropriate. A consultation will take place on options for the future of the RGS.
- Three instances of breaches to Bovine Spongiform Encephalopathy (BSE) controls have occurred since SEAC 95. In two instances, single Over Thirty Month (OTM) animals entered the food chain without being tested for BSE. In the third instance, due to an identification error, a cow believed to have been born before 1 August 1996 entered the food chain after testing negative for BSE. As there is no evidence that any of the animals had BSE and with specified risk material controls in place, the risk to human health from these incidents is negligible. Investigations into all three incidents are underway.

#### **ITEM 4 – BSE UPDATE (SEAC 96/5)**

10. Mr Patrick Burke (Defra) updated the committee on epidemiological data on BSE cases in the UK and other countries. The changing incidence of BSE cases in the UK since 1988 showed the effect of the control measures introduced. The epidemic peaked in 1992 with over 37 000 cases confirmed and had declined since with 114 cases confirmed in 2006. Recent cases were mostly detected by active surveillance and the majority were animals born before the reinforced feed ban in August 1996. The confirmation rate for suspected clinical BSE cases detected by passive surveillance has declined to approximately 10% in the UK. Over 730 000 cattle were tested by active surveillance in the UK in 2006 with 99 animals found positive for BSE. Only three out of more than 415 000 OTM cattle slaughtered for human consumption in the UK tested positive for BSE in 2006.
11. Mr Burke explained that, to date, 160 BSE cases born after the 1996 reinforced feed ban (BARB cases) had been identified, mostly by active surveillance. Data on the number of BARB cases by birth cohort showed a peak in 2003, a subsequent decline in 2004, a small increase in 2005, but a decline in 2006.

Epidemiological investigations suggested BARB cases may be the result of very low level contaminated feed that is either imported or the result of residual old feed in feed bins on farms. Backcalculation estimates on the prevalence of BSE show a decline in the number of BARB cases by birth cohort. The number of BARB cases, as a proportion of the cattle population, is similar to levels found in other EU countries.

12. Members asked about the incidence of BSE in other EU countries. Mr Burke replied that the incidence of BSE was declining in most EU countries. For the few member states where there had been a small increase in the reported incidence of BSE, this was likely to have been due to increased active surveillance for TSEs following their accession to the EU in 2004.
13. Members noted that if very low level contamination of feed was the cause of BARB cases, then very small amounts of infectious agent could cause infection and the tail of the BSE epidemic could continue for a number of years. Mr Burke noted that data from the Veterinary Laboratories Agency (VLA) cattle attack rate study showed that ingestion of 1mg of infected brain material can cause infection, however this is difficult to translate into an infectious quantity of contaminated feed. Members asked if measures could be taken to reduce residual contamination of feed on farm. Mr Burke responded that Defra had put in place measures to warn farmers of the potential hazard posed by residual old feed and contaminated feed bins. Dr Danny Matthews (VLA) noted that the 2001 EU wide feed ban should have an effect on contamination of imported feed that may be observed in further reduction in BARB cases soon.

#### **ITEM 5 – CONSIDERATION OF FUTURE DISCUSSION OF UNUSUAL CASES OF SPONGIFORM ENCEPHALOPATHY IN CATTLE (SEAC 96/2)**

14. The Chair explained that the purpose of this item was to consider the scope of a future discussion of unusual cases of BSE in cattle. Such cases had been termed ‘atypical BSE’ by some researchers, however, as had been agreed at SEAC 93, this was a misleading term and should be avoided. SEAC was asked to identify relevant data not highlighted in SEAC paper 96/2, key researchers that could be invited to present data and contribute to discussions and questions for the future discussion.
15. A member noted that most unusual BSE cases had been characterised on the basis of PrP<sup>res</sup> banding patterns on western

blot. Cases described as H-type gave a normal distribution of PrP<sup>res</sup> glycoforms with a non-glycosylated band of higher molecular weight than normally observed. Cases described as L-type gave an unusual distribution of PrP<sup>res</sup> glycoforms and a non-glycosylated band of lower molecular weight than normally observed. H-type cases had been identified in France and the Netherlands, L-type cases in Italy and both types had been found in Germany. Transmission experiments using bovinised mice had been conducted and, whilst the L-type was transmitted with a shorter incubation period compared with BSE, the transmissibility or incubation period of the H-type was unclear from the information available. L-type had also been transmitted to macaques with a shorter incubation period compared with BSE. Transmission studies with material from H- and L-type cases into cattle by intracerebral (ic) inoculation are underway but no data are available at present. Two unusual BSE cases had also been identified in Japan, one of L-type and the other with a low content of diglycosylated PrP<sup>res</sup> and a non-glycosylated band of lower than usual molecular weight. Data on unusual BSE cases reported in the United States of America (USA) is very limited. In summary, the information suggested that there appeared to be at least two strains giving rise to the unusual cases of BSE. The data raised a number of questions that could be considered at a future discussion:

- Are all the cases in Europe, USA and Japan of the same two strains or are there further strains?
  - What is the origin of these unusual forms of BSE and how are they related to BSE?
  - Are these unusual cases examples of sporadic or spontaneous BSE in cattle and if so, how can the same strains appear in a number of countries?
  - Was the BSE epidemic in the UK initiated by intra-species transmission from such a sporadic BSE case?
  - What is the tissue distribution of PrP<sup>Sc</sup> and infectivity in these animals?
  - Are all the cases of unusual BSE transmissible to mice?
  - Can these unusual BSE cases be transmitted to humanised mice?
  - Are these unusual BSEs related to cases of sporadic CJD in humans as there are similarities in glycoform profile?
16. The committee agreed that it would be important to discuss the available data on unusual BSE cases at the next SEAC meeting.

17. Members noted that the transmission of Bovine Amyloidotic Spongiform Encephalopathy to macaques indicated that the clinical signs differed from signs arising from transmission of BSE. This was important as it indicated it may be possible to identify and distinguish infections that occur naturally. It is also important to understand the tissue distribution of the agent giving rise to unusual cases of BSE. Dr Matthews noted that transmission studies had begun in cattle, however interpretation of these data would be complicated as the ic route of inoculation had been used. It is not known if studies using the oral route are underway. Members asked about information available from necropsy of unusual BSE cases. Dr Matthews explained that detailed post mortem examinations of the brains of the Italian unusual BSE cases had been conducted, however most of the other cases were characterised only by western blot analysis. The two USA cases had also been characterised by immunohistochemistry (IHC).
18. Members asked if it was known whether a relationship between the unusual BSE cases and their genotype had been found. Dr Matthews responded that there was very little information, although known polymorphisms had been identified in one USA case and one French case.
19. Members noted that no unusual BSE cases had been found in the UK and asked whether UK surveillance was sufficient to detect unusual BSE cases. Dr Matthews explained that UK and French surveillance was comparable and, although methods used to detect BSE differed between laboratories, methods used in the UK should be capable of detecting unusual BSE cases. Projects are underway to look for evidence of unusual cases of BSE in archived samples of historic BSE cases. Mr Burke noted that since 2003, around 570 BSE-positive animals had been screened by VLA using a discriminatory test with no unusual BSE cases identified. A member noted the older age of many of the unusual BSE cases and asked if old cattle would be tested in the UK. Mr Burke explained that all fallen stock over 24 months of age are tested in the UK. Mr Burke suggested that the committee might include consideration of the effect of current BSE controls on unusual BSE cases entering the food chain in the future discussion of unusual cases of BSE. Dr Matthews noted that data on cattle surveillance could be presented by age to highlight the proportion of older animals tested as part of the future discussion.
20. Members asked whether other animals in the same cohort as unusual BSE cases had been tested. Dr Matthews responded that

such studies may not have been conducted and, even if they had been, the likelihood of finding cohort cases may be very low.

21. The committee agreed that it would be important to hold as much of the future discussion of unusual BSE cases in open session as possible, although noting that some researchers may wish to present data from incomplete studies in a reserved business session. It was agreed that the following researchers should be invited to present data and take part in discussions, following provision of a list of key questions identified by SEAC:
  - Dr Mark Hall (National Veterinary Surveillance Laboratory, USA) and Dr Juergen Richt (National Animal Disease Centre, USA) to present data on USA cases.
  - Dr Thierry Baron (Unite Agents Transmissibles Non Conventionnels, France) to present data on French cases.
  - Dr Cristina Casalone (Centro di Referenza Nazionale per le Encefalopatie Animali, Italy) and Dr Fabrizio Tagliavini (Istituto Nazionale Neurologico, Italy) to present data on Italian cases.
  - Dr Anne Buschmann or Dr Martin Groschup (Friedrich-Loeffler-Institut, Germany) to present data on German cases.
22. In addition, Professor Lasmézas (SEAC member) would be invited to present her research data and Japanese researchers would be invited to provide written material on Japanese cases.
23. The Chair explained that a position statement for publication on the SEAC website would be prepared based on discussions at the next meeting. Although there is likely to be much that is unknown, it would be important to consider the possible public health implications of these cases and identify knowledge gaps.

#### **ITEM 6 – BSE IN SHEEP CONTINGENCY PLANNING (SEAC 96/3)**

24. The Chair explained that the FSA asked SEAC to consider an analysis of the epidemiological implications should BSE be found in sheep, to inform the development of a contingency plan should BSE ever be found in the UK flock. He noted that the SEAC Sheep Subgroup had recently concluded that the most likely scenario is that BSE is not present in the UK sheep flock and, even if it was, it would be at a very low prevalence.
25. Dr Alison Gleadle (FSA) explained that the FSA is reviewing its advice to Government regarding the risk from BSE in sheep. Currently, if a single case was found, FSA would recommend

intensive targeted surveillance to determine whether the case was isolated or what the prevalence might be. Measures to protect consumers would be graduated according to the number of cases found. Key issues remain to be resolved such as the best way to determine the prevalence of BSE in sheep entering the food chain, if it is found, and how to determine the possible linkage between multiple cases. SEAC advice would inform consideration of the contingency plan by the FSA Board.

26. Dr Rowland Kao (University of Oxford) presented an epidemiological consideration of these issues. He explained that as exposure of sheep to BSE in feed is now negligible and *in utero* transmission could not sustain an epidemic, horizontal transmission is the route of transmission of most concern. However, in the absence of data, the likelihood of horizontal transmission occurring and therefore the reproduction rate of BSE to drive an epidemic are difficult to determine. However, as natural transmission of BSE between sheep had never been observed, the reproduction rate is likely to be below one and not capable of self-sustaining an epidemic. Nevertheless, small numbers of cases could still arise for many generations, provided horizontal transmission occurs.
27. Dr Kao explained that, based on existing surveillance data, the maximum estimate of the possible prevalence of BSE in sheep is 0.002%. This suggests that 150 000 abattoir survey tissue samples would be required to find at least one BSE positive sheep with 95% confidence. Extrapolation of data from scrapie surveillance suggests survey of fallen stock is approximately three times more sensitive than abattoir surveillance to detect BSE. In the absence of other epidemiological investigations it would not be possible to determine whether a single case was due to horizontal transmission. However, should four or more cases be found, horizontal transmission becomes a more likely route. If multiple cases are found in one flock, transmission could have occurred via feed, *in utero* or horizontally. However, it would be very difficult to determine if cases found in different flocks were unrelated as sheep movements between farms are extensive and relatively rapid. This means that the possibility cannot be ruled out that transmission occurred between sheep on the same holding which were subsequently dispersed to geographically distant locations.
28. A member noted that the sheep and cattle industries are very different and these differences influence the BSE risk. Lambs are generally slaughtered within their first year and therefore would not develop the disease prior to slaughter. The exposure of sheep to

contaminated feed was very much lower than cattle and occurred at a different time. Therefore, a sheep epidemic may not have peaked at the same time as the cattle epidemic. It is possible that BARB cases of sheep may arise. Dr Kao explained that these issues had been taken into account in the modelling of BSE epidemic in sheep that informed his analysis.

29. A member noted that an increasing number of sheep are kept as pets or on hobby farms. These animals are usually considerably older than those entering the food chain, so may have a greater chance of developing the disease.
30. Members asked why the paper had suggested surveillance at abattoirs was not directly representative of risk to humans from consumption of sheep meat. Dr Matthews explained that sampling at abattoirs is as random as possible. However, as sampling is restricted to abattoirs culling adult sheep, it is not representative of abattoirs killing lambs. In addition, there is no control over the geographical origin of sheep arriving at abattoirs. VLA is currently investigating the extent to which both abattoir and fallen stock surveys are truly representative of the UK sheep population. Early evidence suggests there is some geographical bias in both the abattoir and fallen stock surveys, which is due to the geographical source of the sheep submitted to each survey.
31. A member agreed that it would be difficult to determine whether one case of BSE in sheep was sporadic, or caused by horizontal transmission. Further surveillance could inform this issue and it would be important to target this surveillance. Traceable sheep movements would aid in targeting such surveillance. Dr Kao explained that flock tags allowed the flock of origin to be identified. However, due to the movements of sheep, the number of flocks of contact with a case or cases could be very large and therefore difficult to identify. A member noted that the movements of pedigree sheep would be more easily traced. Members suggested an exercise could be conducted to determine how easily sheep could be traced. Dr Matthews noted that targeted surveillance may require the slaughter of very large numbers of sheep to allow post mortem testing. An alternative would be rectal biopsies to screen and discriminate between BSE and scrapie, potentially removing the need to slaughter entire flocks.
32. Dr Matthews noted that there is no evidence for horizontal transmission in an experiment to create an endemically infected flock at the VLA.

33. In summary, the Chair noted that the sheep industry is very different in nature from the cattle industry. Movements of sheep around the UK are extensive and complex. Therefore, in the unlikely event that a case of BSE in sheep is found, it could be difficult to trace all the flocks with which the case had been in contact, making it difficult to target surveillance on the source flock. In addition, if several cases of BSE in sheep were found, it would be difficult to determine whether they were connected, even if they were geographically distant. Although it is unlikely that BSE is present in the UK sheep flock, it is important to develop a contingency plan should it ever be found. A pragmatic approach to surveillance could be taken to target, as far as is possible, the flocks which came into contact with an infected animal and the flock of origin and to take decisions about risk minimisation, if one or more cases of BSE in sheep are found. It is important that the contingency plan is simple, clear and unambiguous allowing decisions to be enacted quickly and is clearly understood by the industry.

#### **ITEM 7 – ATYPICAL SCRAPIE CASE AUDIT UPDATE (SEAC 96/4)**

34. The Chair explained that, at SEAC 95, the committee was informed about a case of atypical scrapie in a sheep flock used for research purposes. This flock was considered to be free of TSEs as the founder animals of the flock were from New Zealand, a country considered free of TSEs.
35. Mr Will Reynolds (Defra) updated members on the progress of a Defra commissioned independent audit by the UK Accreditation Service (UKAS) of procedures and biosecurity measures at the research site. UKAS had completed the audit and produced a draft report on 7<sup>th</sup> January 2007. On review of the draft audit, Defra and VLA requested clarification on a number of issues and correction of factual errors. UKAS is currently considering the issues raised. It is envisaged that a final report will be available for discussion at SEAC 97.
36. Dr Matthews updated SEAC on investigations to determine the origin of the case and highlighted the complexity. The priority had been to trace the eventual destination and outcome of sheep imported into the TSE free flock. On arrival from New Zealand, sheep were given an identification number (ID) and included in research projects. Dams in lamb were sent for inclusion in VLA projects or to other institutes. After weaning, the dam was often culled with tissues not retained and the lamb used for research. Younger sheep were used by VLA for research. Sheep used for

research were given a project ID, diagnostic ID and tissue archive ID. Thus the creation of a database to link the destination of imported sheep and the fate of samples taken from them, had been complex and time consuming. A total of 2003 sheep had been imported from New Zealand in 1998 and 2001. All sheep where tissues are available at VLA are being tested. In addition, research institutes have been provided with details of sheep supplied to them and asked to supply tissues from these animals or animals bred from them for testing at VLA. To date, two out of six institutes had made brain samples available for testing. At some, animals received were either still alive or exposed to scrapie or BSE, and consequently inappropriate for examination.

37. Dr Matthews summarised information on the age and genotype of the imported sheep or those bred from them and the extent of the TSE testing and results to date. The power of these investigations to detect atypical scrapie at a prevalence of between one and three per cent is low. Of the 1082 samples examined so far, only the index case was positive for atypical scrapie. Many sheep were under four years old when culled and therefore likely to be too young to detect atypical scrapie infection.
38. Members asked about surveillance for atypical scrapie in New Zealand. Dr Matthews indicated that, historically the surveillance would not have detected atypical scrapie, however the methods introduced as a result of the VLA investigations can detect atypical scrapie. A number of sheep from the flocks of origin of the biological parents and surrogate dam of the case had been tested and found negative. Decisions about further testing would be made on the basis of the results of the audit.
39. The Chair noted that there is no evidence of any serious biosecurity issues on the holding, however minor biosecurity issues could not be excluded. There is no evidence that the infection had originated in New Zealand, but this could not be excluded. Dr Matthews explained that there had been a number of minor biosecurity issues such as access by birds and small rodents, however the risk of spreading TSEs by these routes needed to be considered in the light of the low numbers of sheep in the geographical area of the site. One explanation would be that the case arose spontaneously, however this would be difficult to establish.
40. Members asked about the feeding of the flock. Dr Matthews explained that the feed was obtained from specific sources. Grass and straw was certified to have been grown in fields which had

been free of livestock for at least 25 years. Other bulk ingredients were imported from TSE-free countries, however audit of ingredients to demonstrate a lack of contamination was difficult.

41. The Chair acknowledged the care in which these investigations and the audit are being performed.

#### **ITEM 8 – UPDATE ON SUBCLINICAL vCJD PREVALENCE STUDIES**

42. Professor Noel Gill (HPA) explained there are three strands to the HPA's work to estimate the prevalence of subclinical vCJD: the National Anonymous Tonsil Archive (NATA), the Post Mortem Tissue Archive Working Group and an investigation of the feasibility of using prototype blood assays to screen donated blood, anonymously.
43. Professor Gill explained that NATA is currently collecting about 400 tonsil pairs per week and, at the end of January 2007, 41 000 tonsils has been collected. Tonsil testing had begun with about 1 000 tests completed to date. Two biochemical assays are being used on the recommendation of the Large scale Tissue Testing Advisory Group, an independent expert group convened by the HPA to advise on the issues related to the testing of NATA samples. It is anticipated that the rate of testing could be increased to between 350 and 700 tests per day over the next few months. Fully reactive or partially reactive samples would be independently tested in a blinded manner using western blot and IHC and codon 129 genotype analysis undertaken. Positive and negative controls were included in both the initial screening and confirmatory testing procedures. It was anticipated that results from tests on 11 000 archived tonsils from older age groups will be available by June 2007. The HPA had begun a tender exercise to explore the possibility of large scale IHC to analyse all the samples by this method.
44. Professor Gill explained that these initial results would be analysed firstly by the Large scale Tissue Testing Advisory Group so that the technical aspects of the testing could be discussed and agreement made on any difficult to interpret results. The SEAC Epidemiology Subgroup would meet on 5<sup>th</sup> June 2007 to comment on the data. On the basis of these considerations a confidential report would be sent by the HPA to DH.
45. A member asked whether there would be any follow up of individuals, if positives samples were found. Professor Gill explained that based on expert advice the study had collected

tonsils anonymously, therefore such follow up was not possible. This approach had been approved by the Multi-centre Research Ethics Committee that had reviewed the study.

46. Professor Gill explained that the Post Mortem Tissue Archive Working Group had completed its deliberations and a report from the Group is in preparation recommending the urgent instigation of a large scale archive of tissues collected from coroners' autopsies. It is envisaged that the report will be submitted to DH in March 2007 and DH would subsequently discuss the recommendations with the Department of Constitutional Affairs. If met with approval, discussions would then begin with the Coroners' Society.
47. The Chair asked whether results from NATA may impact on commissioning a post mortem tissue archive. Professor Gill noted that the post mortem archive was important irrespective of the results from NATA but disconcerting results from NATA may provide additional impetus for the post mortem tissue archive. Members noted that the age group of individuals from which samples for NATA and a post mortem archive are collected are different therefore, the approaches are complementary.
48. Members asked whether a letter from the SEAC Chair to Ministers, to emphasise the importance of the post mortem tissue archive, would be helpful. Professor Gill suggested that once the report from the Post Mortem Tissue Archive Working Group had been finalised, the Chair of the Group and the SEAC Chair should discuss the best approach to take forward the recommendation for a post mortem tissue archive.
49. Professor Gill explained that the HPA together with the National Blood Service was investigating the possibility of using prototype blood assays to screen donated blood samples, anonymously. It is recognised that the assays had not yet been validated but this approach may rapidly provide insight on the prevalence of subclinical vCJD. The Committee on the Microbiological Safety of Blood Tissues and Organs recently expressed its support for exploration of this approach. Manufacturers with well developed blood assays had been invited to tender applications to analyse between 50 000 and 60 000 blood samples. As part of the tender, manufacturers would be required to apply their test to a blinded panel of spiked plasma samples so that the performance of the assays could be assessed. By the end of May 2007, information on the cost of such a study and the performance of assays would be considered by the Large scale Tissue Testing Advisory Group

and a decision made on whether it would be possible to interpret the results from this approach.

50. Members noted it may be difficult to interpret the results from assays that have been only partially evaluated using spiked samples. It would be preferable to evaluate the performance of the assays using blood from vCJD cases. Professor Gill agreed and explained that, depending on the outcome of the tender exercise and the availability of blood from vCJD cases, further evaluation of the assays may be required before a decision could be made to proceed with this approach.
51. Members asked what quantity of blood is available from vCJD cases. Professor Gill explained he was unaware of the quantity available, however an advisory group convened by Dr Philip Minor (National Institute of Biological Standards and Control) was being convened to manage an archive of tissues from vCJD cases
52. Members asked whether more than one assay would be used. Professor Gill explained this may be a recommendation of the Large-scale Tissue Testing Advisory Group depending on the performance of the assays. Assays based on different analytical principles would allow confirmation of reactive results. Blood samples would be archived to allow them to be reanalysed should significant advances in assay performance be made in the future.
53. The Chair welcomed the progress being made by the HPA on the three strands of work.

## **ITEM 9 – ANY OTHER BUSINESS**

54. The Chair noted that a paper had been provided to update the committee on an ongoing study on the susceptibility of red deer to BSE. To date, BSE had transmitted to four ic challenged deer, however no orally challenged deer had succumbed to the disease.
55. Mr Burke noted that a survey of TSEs in deer had very recently started. Dr Matthews explained that VLA had obtained cervidised mice for use as bioassays to conduct further investigations, should deer test positive in the survey.
56. The Chair thanked all those that had presented information to the committee and all those that attended the meeting.