6. Protecting human health

Introduction

We now turn to that part of the BSE story that has direct relevance to human health. There are many aspects to this part of the story. The main part of this chapter will follow a chronological sequence. However, we propose to introduce at the outset the CJD Surveillance Unit, which was to play a key role in the latter stages of the human health story; and to discuss at the outset as a discrete topic the slaughter and destruction of animals showing signs of BSE and the compensation paid to the owners of those animals.

The most obvious pathway by which BSE might be transmitted from cattle to humans was by the food chain. It was that pathway which caused concern to the public. And it was the public’s concern about that pathway which was of concern to the Government. The Government was anxious to do all that it believed to be necessary to protect human health. But having taken that action, it was anxious to reassure members of the public that their health was not at risk. MAFF had a dual role. It had to make sure that meat which left a slaughterhouse was safe to eat. That was its prime concern. But it also had to have regard to the interests of the farming industry. There was a continuous concern on the part of MAFF officials and Ministers that the agricultural industry would be damaged by reactions to BSE on the part of the public that were irrational. This concern did not lead them to conceal information from the public. It did, however, lead them to attempt to ensure that information was presented in a manner that would not cause alarm. This sometimes involved delaying disclosure of information. It involved repeated statements that there was no evidence that BSE was transmissible to humans. It involved attempts to present to the public in the most compelling way the message that it was safe to eat beef.

This part of our narrative will follow the BSE story of which the public were aware: the events which provoked apprehension on their part and the statements that were made to them about the risk posed by BSE. It will examine the policy decisions that the Government had to take in relation to potential dangers posed by BSE to the human food chain. It will look in particular at public pronouncements and government action in the final months leading up to 20 March 1996.

We shall deal later, as separate topics, with aspects of the BSE story of which the general public were unaware:

- Action taken in relation to human and veterinary medicines.
- Action taken in relation to cosmetics.
- International trade.

Finally we shall consider the experience of those young victims who were struck down by vCJD and of their families, in order to see what lessons can be learned about dealing with this terrible disease.
CJD surveillance

**Surveillance recommended by the Southwood Working Party and the Tyrrell Committee**

499 Although the Southwood Working Party thought that it was most unlikely that BSE would have any implications for human health, they considered how BSE might appear, and be recognisable, if it did transmit to humans.

500 The Southwood Working Party noted in their Report that it was a reasonable assumption that, were BSE to be transmitted to humans, the clinical disorder would closely resemble CJD. They suggested that consideration be given to whether specialist branches of the medical profession, such as neurologists, should be made aware of the emergence of BSE so that they could report any atypical cases or changing patterns in the incidence of CJD. They also suggested that epidemiologists should be advised to watch for any such changing patterns.

501 CJD surveillance was also considered by the Tyrrell Committee. The *Tyrrell Report* gave the highest priority to the monitoring of all UK cases of CJD over the following two decades.

**The CJD Surveillance Unit established**

502 In December 1989 Dr Robert Will, then a consultant neurologist, applied to the Department of Health for a research grant for a project on CJD surveillance. Between 1979 and 1982, Dr Will had worked with Professor Bryan Matthews on various studies relating to the surveillance and analysis of CJD cases in England and Wales. Dr Will’s proposal was accepted and the CJD surveillance project began on 1 May 1990 at the Western General Hospital in Edinburgh. It covered the whole of the UK and developed links with the surveillance networks of other countries.

503 The main objectives of the CJD Surveillance Unit (CJDSU) study were to identify any change in the epidemiological characteristics of CJD and to assess the extent to which any such changes were linked to the occurrence of BSE. The CJDSU was expected to document and publish any changes in the clinical or other characteristics of CJD, or in the epidemiology of the disease, and conduct investigations into the cause of these changes. The CJDSU summarised its progress and findings in a series of annual reports. These annual reports were supplemented by Dr Will informing SEAC and DH of developments.

**How the surveillance system worked**

504 The CJDSU needed to establish a system for the surveillance of CJD that would be able to detect any changes in epidemiology or clinical characteristics, as a result of the emergence of BSE. The main factors investigated included the number of cases of CJD, geographical distribution of cases and occupational incidence.
Primarily, this surveillance was achieved by seeking and obtaining direct referral of any suspect cases of CJD from neurologists. These professionals were also asked to report all cases of subacute dementing illnesses or progressive cerebellar dysfunction in specific occupational groups (including farmers and slaughtermen). However, as a precaution, all death certificates mentioning CJD were also obtained and assessed.

A standard questionnaire was used to obtain data relevant to diagnosis and ascertainment of possible risk factors. The questionnaire used by the CJDSU was based on the previous one developed by Dr Will for his work with Professor Matthews. It included sections on patients’ initial symptoms, past medical history, family history, social history (residential, occupation, diet), exposure to animals, clinical history and results of diagnostic investigation. Minor changes were made to it before it was used in 1991 and subsequent alterations were made throughout the period 1991–95, as knowledge of CJD developed.

Unlike BSE, CJD was not made a notifiable disease. The possibility of making CJD a notifiable disease was not supported by either the Chief Medical Officer or Dr Will. Dr Will considered that in order to make CJD a notifiable disease, specific diagnostic criteria would have to be established. Some cases might then be missed as there might be a reluctance to notify cases that did not fulfil the criteria absolutely. Dr Will’s view was supported by the European Union Surveillance Group in 1994. Recent data from this Group have lent some further support to Dr Will’s view. The introduction of notification in Slovakia resulted in a decrease in the number of referrals.

The Public Health Laboratory Service (PHLS) did not become involved in CJD surveillance until after 20 March 1996. The PHLS is a public body with responsibility for providing a microbiological and epidemiological service to health authorities and local authorities for the diagnosis, control and prevention of infection and communicable diseases. It operates in England and Wales only, but has close working links with the parallel arrangements in Scotland and Northern Ireland.

PHLS officials repeatedly raised concerns with DH about the exclusion of their service from CJD surveillance. Since the PHLS’s expertise was in communicable diseases, DH officials were concerned that PHLS involvement in the CJD monitoring process might indicate a belief that CJD could be spread from person to person. However, several other reasons were also given to the PHLS by DH for the decision. These included the possibility of unnecessary duplication of work and concern about PHLS priorities.

The decision to place the responsibility for surveillance with a small research team of dedicated medical scientists headed by a clinical neurologist with extensive experience in CJD was entirely correct. In 1989 the PHLS did not have expertise in CJD and, most importantly, there was (and still is) no established laboratory test for either CJD screening or for diagnosis in suspect cases. We commend the sterling work of the CJDSU team, who so promptly detected the emergence of vCJD and so efficiently established the clinical and pathological characteristics of the disease.
While we have formed the view that the PHLS could have contributed to various aspects of the task assigned to the CIDSU, assistance from the PHLS would not have enabled identification of vCJD at any earlier date. We do not criticise those who concluded that the task of monitoring CJD should be left to the Surveillance Unit set up for that purpose.

Slaughter and compensation

511 The slaughter and compensation scheme was designed to ensure that animals sick with BSE were destroyed so that there was no way in which they could transmit the disease to humans or to animals. It was a vitally important measure. We have been concerned to investigate allegations that some farmers sent animals showing early signs of BSE to the slaughterhouse in deliberate breach of the Regulations, and that the reason that they did so was because the level of compensation set by MAFF was inadequate.

512 We have seen above the circumstances in which the Government decided to introduce compulsory slaughter of animals showing signs of BSE and the destruction of their carcasses. It received advice that it should do this from the Southwood Working Party on 21 June 1988. Under the Animal Health Act 1981 compensation would have to be paid for compulsory slaughter on grounds of human or animal health. Ministers determined the level of compensation payable but had to have the agreement of the Treasury. Exploratory discussions with the farming industry indicated that payment of 50 per cent of market value might be considered acceptable, provided that 100 per cent was paid in respect of any animal which, after slaughter, was found not to have been suffering from the disease.

513 On 29 June Mr MacGregor wrote to Mr Major, the Chief Secretary to the Treasury, seeking approval for the payment of compensation at 50 per cent of market value. He estimated that on the basis of 60 cases a month this would cost about £200,000 to £250,000 a year. Mr Major agreed to this on 6 July, emphasising that he only did so because of the need to protect human health. Two Orders were drafted by 22 July, and were made on 28 July and brought into force on 8 August, abridging the three weeks that normally elapse before Orders subject to negative resolution procedure come into force. It can be seen that no time was lost in implementing the recommendation of the Southwood Working Party.

514 The formula for determining compensation was complicated. Broadly, but not precisely:

- When the slaughtered animal proved to have BSE, the lesser of:
  50 per cent of the value of that animal (in good health); or
  62½ per cent of the value of an average animal was payable.

- When the slaughtered animal proved not to have BSE the lesser of:
  100 per cent of the value of that animal; or
  125 per cent of the value of an average animal was payable.

64 The Bovine Spongiform Encephalopathy (Amendment) Order 1988 and the Bovine Spongiform Encephalopathy Compensation Order 1988
When an owner declared to MAFF that an animal was suspected of having BSE, but the animal died or was put down before a MAFF veterinarian confirmed that it appeared to have the disease, no compensation fell to be paid under the Order. On the recommendation of Mr Kevin Taylor and Mr Meldrum, it was agreed that normal compensation be paid on an *ex gratia* basis in those circumstances, provided that the animal was shown to have been suffering from BSE. When the animal did not have BSE, £50 was paid. This arrangement seems to us fair and we commend it.

Although industry soundings made by MAFF officials had suggested that the level of compensation would be acceptable, it in fact provoked a sustained barrage of attack:

- 8 July 1988: the National Farmers’ Union (NFU) in a press release expressed the view that 100 per cent compensation should be paid for all slaughtered cattle.
- 2 September 1988: Mr Gordon Gresty, the County Trading Standards Officer of North Yorkshire County Council, expressed concern that compensation was only 50 per cent of market value. This might deter farmers from notifying suspect cases.
- 27 September 1988: the Milk and Dairy Produce Committee of the NFU stressed that compensation should be 100 per cent of market value.
- 23 January 1989: the Farmers’ Union of Wales expressed ‘complete dissatisfaction’ with the compensation arrangements, suggesting that the low level of compensation might encourage less scrupulous farmers to dispose of animals showing signs of BSE on the open market.
- 17 February 1989: the first of a series of Parliamentary Questions from the Opposition suggesting that compensation should be raised to 100 per cent.
- 5 May 1989: Mr Peter Walker, Secretary of State for Wales, wrote to Mr MacGregor passing on concerns of his Agriculture Advisory Panel that the level of compensation was leading to evasion of reporting. He suggested reviewing the position.
- 14 June 1989: the National Consumer Council wrote to Mr MacGregor suggesting that, with compensation at 50 per cent, there was ‘every incentive for farmers to send a cow for slaughter at the earliest sign of disease . . . the compensation arrangements must be reviewed’.
- 14 June 1989: the NFU wrote asking for a review of the level of compensation which, in their view, should be 100 per cent.

To all of these submissions MAFF made the same reply. Compensation at 50 per cent of the market value was fair. That compensation was payable for animals suffering from a terminal illness. The cattle were valued for the purposes of compensation, not as terminally ill, but as if they were unaffected with disease. Furthermore there was no evidence of any farmers attempting to evade the law.

This response reflected the advice being given to Mr MacGregor by his officials.
In July 1989 ministerial changes brought about a change in attitude in respect of compensation levels. On 6 September 1989 Mr David Curry, one of the new Parliamentary Secretaries, put an aide-mémoire to Mr Gummer, the new Minister, expressing the view that 50 per cent compensation was inadequate, and observing that the possibility of a farmer slipping a diseased animal into the food chain could not be absolutely denied. Officials responded recommending against increasing the level of compensation. Mr Lowson pointed out that only 52 suspect cases had been detected at abattoirs in the first six months of the year, of which by no means all would have resulted from deliberate deception. Mr Curry was not persuaded, but accepted that there was little chance of changing the position in the light of financial constraints.

Pressure for an increase in compensation then intensified:

- 4 December 1989: Mr R Cooper, a Director of Sainsburys, wrote saying that his company felt that ‘full compensation’ should be given for any BSE-infected cattle rather than 50 per cent in order to give the farming community every incentive to isolate diseased cattle.
- 4 January 1990: The Times reported that ‘farmers are attempting to pass off diseased cattle as healthy because the Ministry of Agriculture will only compensate them for 50 per cent of the value of an infected beast once it is destroyed’.
- The Consumers’ Committee of the Meat and Livestock Commission (MLC) expressed the view that compensation should be increased.
- 15 January 1990: a meeting of Dorset farmers expressed concern that failure to pay full compensation was giving the wrong message to consumers and could damage meat consumption.
- 25 January 1990: the President of the NFU wrote to Mr Gummer suggesting that ‘raising the compensation to a more realistic level would be the most effective way of reassuring the public that there is no temptation for any farmer deliberately to send to market an animal with incipient BSE’.

Up to this point Ministers had continued to advance the same reasons as before for rejecting calls for higher compensation. Mr Gummer now decided that it would be politic to increase compensation. In a meeting with Mrs Thatcher on 30 January 1990, he suggested that compensation for the slaughter of diseased animals should be increased to 100 per cent for two reasons. First, losses were increasing, and some farmers were having a hard time. Second, full compensation would demonstrate that the Government was doing everything possible to keep BSE-infected cattle out of the food chain. The Prime Minister felt that the second was the better case and agreed that Mr Gummer should work up a proposal for increasing the rate of compensation, in consultation with the Treasury, which could then be put to ministerial colleagues.

On 7 February 1990, after discussing the matter with his colleagues, Mr Gummer wrote to Mr Norman Lamont, Chief Secretary to the Treasury, proposing an increase in compensation. He stated that he did not believe that farmers were sending BSE suspects to slaughter to any great extent, but that the possibility that they might do so must be growing. The principal case that he made for the increase was that this would allay public concern.
A submission to Mr Lamont from a Treasury official in respect of Mr Gummer’s proposal observed:

This is essentially a political matter, and on this basis you may wish to agree. The Prime Minister is thought to be sympathetic to Mr Gummer.

On 9 February 1990 Mr Lamont wrote to Mr Gummer reluctantly agreeing to his proposal.

On 13 February 1990 Mr Gummer announced the change in policy on compensation to the Annual General Meeting of the NFU. The change that he announced was brought into force the following day. The new level of compensation for confirmed BSE cases was the lesser of 100 per cent of the animal’s sound market value, or 100 per cent of the average cattle value.

Was compensation too low?

We have carefully considered the level of compensation originally paid to farmers for the slaughter of BSE suspects. It seems to us that the compensation bore a reasonable relationship to the loss caused by the slaughter, and on that basis was fair. We would emphasise that the loss in question was not the loss consequent upon having a cow affected, or suspected of being affected, with BSE. The loss was that experienced as a result of the deprivation of such a cow. To offer 50 per cent of the value of a healthy cow does not seem unreasonable for an animal showing signs of a terminal disease.

Nor would we have expected the level of compensation to have resulted in widespread evasion of the duty to notify. We would hope that most farmers would have been sufficiently principled not to seek to put into the food chain an animal that might endanger human life. Furthermore, to send a sick animal off to the market would be a chancy business, for the stress would be likely to make the symptoms more apparent.

The evidence that we received suggests that there was not significant evasion of the duty to notify during the period that compensation for infected animals remained at 50 per cent. During December and January MAFF veterinary staff made nearly 300 random visits to over 180 slaughterhouses. Of 1,663 animals sent for slaughter that were inspected, only one suspect case was identified.

Leaders within the farming industry, who gave evidence to us, expressed a firm belief that there was no, or negligible, failure to report suspect cases. Farmers gave evidence to the same effect, as did veterinarians.

The 1990 Agriculture Committee in its Report commented:

The introduction of full compensation produced no very dramatic increase in the number of BSE cases being reported but, in view of the general perception that there may be under-reporting of such diseases where farmers are not fully compensated, it might have been prudent, for reasons of public reassurance, to have introduced it earlier.

65 By the Bovine Spongiform Encephalopathy Compensation Order 1990
We agree with the Agriculture Committee that the justification for raising compensation was the desirability of providing reassurance to the public that cattle affected by BSE were not being slaughtered for food, rather than a need to provide a better financial inducement to farmers to obey the law. Mr Gummer’s decision was, essentially, a political decision. We have no criticism to make either of that decision or of its timing.

**Ante-mortem inspection**

We have referred to random slaughterhouse inspections in December 1989 and January 1990. These were carried out at the suggestion of Mr Meldrum, who believed it was desirable to check that farmers were not sending off for slaughter cattle that showed signs of BSE. Mr Gummer agreed with Mr Meldrum’s proposal. Initially these inspections were carried out by State Veterinary Service (SVS) staff, but from 5 February 1990 this function was transferred to Local Veterinary Inspectors (LVIs). In 1990 LVIs inspected over 31,000 animals at slaughterhouses, among which they identified just 29 suspects, of which only 14 were confirmed. This certainly indicates that after compensation for BSE casualties was raised to 100 per cent, there were at most only a few deliberate attempts to send suspect animals for human consumption. We consider that ante-mortem inspections at domestic slaughterhouses were desirable as a check that the Regulations were being complied with, and we commend Mr Meldrum for promoting them.

**Compensation changed again**

On 1 April 1994 a new formula for calculating compensation was introduced. The change related to the method of calculating the market price element of the formula. This was adjusted downwards to reflect the fact that a large proportion of the cows developing BSE were older animals at the end of their working life. The motive for this change was to save money – it was calculated that it would reduce compensation payable by approximately £5 million in 1994/95. We have no criticism to make of this change or of the reason for it.

**Unanticipated burdens**

When the slaughter and compensation scheme was introduced, it was anticipated that it would apply to about 60 cattle a month. At the height of the BSE epidemic 8,000 suspects were notified in a single month. The task of diagnosing whether or not the suspects were infected with BSE was enormous. It was achieved by performing histopathology on a single section of the bovine brain (the obex section) and sharing the task of analysis between a number of Veterinary Investigation Centres. We commend the Veterinary Investigation Service for the efficiency with which this task was performed.

The other unforeseen consequence of the slaughter and compensation policy was the horrific problem of disposing of the carcasses of thousands of slaughtered cattle. This was a major element in the waste disposal problem to which BSE gave rise. We shall revert to the problem of waste disposal later in this volume.

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66 By the Bovine Spongiform Encephalopathy Compensation Order 1994
Introduction of the ban on Specified Bovine Offal (SBO) in human food

536 We have seen that the Southwood Working Party drew a sharp distinction between the possible risk to those who ate food derived from a cow with clinical signs of BSE and the risk from eating food derived from a cow incubating the disease, but not yet showing clinical signs (a ‘subclinical’). Clinically ill cattle had to be destroyed. The tissues of a subclinical were not regarded by the Working Party as likely to be sufficiently infective to pose a threat – except perhaps to babies.\(^{67}\)

537 With hindsight, we can see just how dangerous it can be to eat some of the tissues of a subclinical, at least for cattle, where no species barrier is involved. On 8 August 1988 compulsory slaughter and destruction of all cattle showing signs of BSE was introduced. Some 40,000 cattle born since that date have contracted BSE and lived to develop the clinical signs. A multiple of that figure will have been infected but slaughtered before clinical signs developed. The vast majority of those cases are likely to have been infected as a result of eating feed contaminated by very small quantities of infective tissues of subclinicals. These had been through the rendering process. We have seen above how this material got into cattle feed.

538 Since 13 November 1989, the tissues of subclinicals most likely to carry infectivity should not have been fed to humans. On that day a ban on using them for human food was introduced (‘the human SBO ban’). The introduction of that ban at a time when most considered it highly unlikely that BSE could be transmitted to humans was one of the most far-sighted measures introduced in response to BSE – or it would have been had it been introduced as a result of foresight. As we shall see, however, the process that led to its introduction was haphazard rather than the result of rigorous risk evaluation. Mr MacGregor, who was responsible for the measure that Mr Meldrum described to us as ‘inspirational’, was at pains to emphasise to us that scientific considerations were not the primary factor which motivated him. Did it matter that the process was haphazard? We think that it did. First, it meant that the process was protracted. Second, it contributed to a failure to emphasise the importance of the measure, which detracted from the rigour of its implementation. In this chapter we shall describe how the policy decision to introduce the human SBO ban came to be taken, the reasons that were given for that decision and the manner in which it was translated into statutory Regulations.

Government response to the Southwood Report

539 Good government does not blindly follow the advice of scientific experts. Before doing so, it must evaluate the advice to make sure that it appears sound. In the case of the Southwood Report this was not easy. The Working Party had not expressed their reasons for concluding:

- that all clinically sick animals should be destroyed;
- that the risk that BSE posed to humans was remote;
- that manufacturers of baby food should exclude certain bovine offal; and

\(^{67}\) See paragraph 264 above for the baby food recommendation
• that no measures were justified to prevent others from eating offal from subclinical.

540 Nor had the Working Party made it plain that they were attempting to apply the ALARP principle.

541 Dr Hilary Pickles had the lead for DH in relation to BSE. She had been DH secretary to the Southwood Working Party and had drafted some of the most important parts of their Report. She wrote to Sir Donald Acheson on 6 February 1989 saying that the Report should be with him in a day or two. She commented:

In my view DH can be very pleased with the way the report has turned out. Sir Richard and his team are to be congratulated.

542 Dr Pickles did, however, inform Sir Donald of one concern that was not reflected in the Report. She was worried about the safety of bovine-based vaccines. Sir Donald minuted Dr E L Harris, the Deputy CMO, to ask him to look into this. Sir Donald told us that he also asked Dr Harris to conduct a complete review of the Southwood Report. Dr Harris has died, so we could not ask him about this, but our analysis of the evidence set out in vol. 6: Human Health, 1989–96 has satisfied us that Sir Donald’s recollection is at fault here. He should have ensured that the Report was reviewed by his Department, but he did not do so. No doubt he placed confidence in the views of Dr Pickles. She was someone who inspired confidence. But because of her involvement she was not in a position to review the Report.

543 Sir Donald forwarded a copy of the Southwood Report to the Secretary of State for Health, Mr Kenneth Clarke, on 9 February. He commented:

I regard it as a thorough study of the subject with sound and balanced conclusions.

He also expressed the view that, with one possible exception:

Every reasonable step has been taken to minimise any theoretical risk of transmission by destruction of affected cattle.

Sir Donald said nothing about the baby food recommendation.

544 When Mr Lawrence, MAFF’s secretary to the Working Party, presented the Report to MAFF Ministers, he identified in a covering note a number of areas of interest to MAFF. One of these was the baby food recommendation. He sent a copy of his note, together with the Report, to ‘interested Divisions within the Department’. Mr MacGregor raised the question of baby food at a meeting with Sir Richard Southwood a few days later. Sir Richard commented that the point in the Report in relation to baby food was not a specific recommendation, but a counsel of ‘extreme prudence’.

545 The baby food recommendation was, however, causing concern to MAFF officials, in particular to Dr Mark Woolfe of the Food Science Division, who considered that identification of babies as a high-risk category did not appear to have been ‘well thought out’, and to Mrs Attridge, the head of Emergencies, Food

64 This was a reference to Dr Pickles’s concern about vaccines
Quality and Pest Control Group. Mrs Attridge was concerned because her responsibilities included the composition of food, and cow’s liver and kidney were a valuable source of nutrition for babies. She was concerned that the baby food recommendation was based not on consideration of all the relevant science, but on ‘poorly substantiated speculation’. Although Mrs Attridge’s concern was that the baby food recommendation might result, without good reason, in the removal from babies of valuable nutrition, she commented in minutes to Mr Cruickshank, the Under Secretary in charge of the Animal Health Group, that MAFF would be asked why action should be taken on baby food but not on other food.

546 At a Cabinet meeting on 23 February to discuss the response to the Southwood Report, there was lively debate about the baby food recommendation. Mr Clarke, supported by Mr MacGregor, urged that the Report should be published and the baby food recommendation accepted. Other Ministers were concerned that publication of the recommendation would lead to a baby food scare. The decision was taken that the Report should be published after Mr MacGregor and Mr Clarke had prepared, with the help of the CMO, a clear and accurate statement of the Government’s response to the baby food recommendation.

547 After the Cabinet meeting Sir Richard Southwood was contacted by Sir Donald Acheson. Sir Richard said that the baby food recommendation should only be treated as applying to brain, spinal cord, spleen, intestine and thymus, and not to heart, liver and kidney. This took the heat out of the situation. None of the former types of offal was included in manufactured baby food. The recommendation would not be likely to give rise to a boycott of baby food.

548 On 27 February 1989 the Southwood Report was published. In a written announcement, Mr MacGregor explained that none of the types of offal, which were the subject of the baby food recommendation, were used in the manufacture of baby food, but that as a precautionary measure he intended to make it illegal for anyone to sell baby food containing such products in the future.

549 No one in either DH or MAFF gave thought to the question that Mrs Attridge had warned would be raised. If these types of offal could not safely be fed to babies, why was it safe to feed them to children and adults? This important question was one that any thorough departmental review of the Southwood Report should have addressed. Another, linked, question that needed to be addressed was why the Working Party were so concerned about animals showing clinical signs of BSE, but not concerned, at least so far as safety of food was concerned, with the subclinicals.

550 We have already rejected Sir Donald Acheson’s evidence that a full review of the Report was carried out by Dr Harris. Mr Clarke told us that in his Department there had been a very great deal of copious review, correspondence and discussion about the Report, which would have included the questions raised above, although he could not now remember the details of these. He also referred to an ‘amazing quantity of exchanges’ going on between his Department and Mr MacGregor’s. We did not accept this evidence. As Secretary of State for Health, Mr Clarke needed to be in a position to answer the question ‘If offal is not safe for babies, why is it safe for adults?’ He should have ensured that his Department reviewed the Report and provided an answer – if there was one. He did not.
At Prime Minister’s Questions on 28 February, Mr John Evans, from the Opposition benches, asked Mrs Thatcher:

If, as appears likely to the Secretary of State for Health, BSE is a threat to humanity, why not ban the use of this offal for all human consumption?
If according to the Minister of Agriculture, it is not a danger, why was it banned for babies?

She replied:

We set up a committee of experts under Professor Southwood. We published the report in full. We referred it to the Chief Medical Officer of Health and we accepted the recommendations of both, precisely. There is no point whatsoever in setting up a committee of experts, in having a Chief Medical Officer of Health, in receiving their advice and then not accepting it. We would rather accept their advice than that of the hon. Gentleman.

Her Secretary of State for Health would not have been in a position to give a more informative reply.

What of MAFF? Dr Woolfe and Mrs Attridge had directed attention to the questions raised by the baby food recommendation, and are to be commended for this. But after the Cabinet meeting the questions were not pursued. We have concluded that there were a number of officials who should have made sure that the outstanding questions were answered. First of all, we think that Mrs Attridge herself, being concerned for composition of food, should have pursued the question of ‘why should we take action on baby food and not on hamburgers’, which was one that she had raised earlier. We consider that Mr Cruickshank should have taken steps to find out why the Southwood Working Party had drawn a distinction between babies and others, and between clinical and subclinical animals. We think that Mr Meldrum should have pursued these questions. The former distinction involved consideration of analogies with matters within the expertise of the veterinarians, such as the apparent susceptibility of calves to BSE. The latter was quite plainly a matter of veterinarian expertise.

Mr Andrews, the Permanent Secretary, had received a copy of one of the minutes in which Mrs Attridge raised the question of why action should be taken on baby food and not other food. He should have raised with Mr MacGregor the need to have an answer to this question. Mr MacGregor himself had been alerted to Mrs Attridge’s concerns and should have seen that the question of ‘why babies and not adults’ was pursued.

In short, there was at MAFF, as at DH, a team failure to subject the Southwood Report to a proper review in order to evaluate whether the unexplained differences in approach to the food risks posed by BSE had explanations that appeared to be sound.
The decision to introduce the human SBO ban

555 In the months that followed the publication of the Southwood Report, a number of influences combined to drive MAFF towards the decision to introduce a ban on using for human food those types of offal that were most likely to carry BSE infectivity.

556 In the first place there was the public reaction to the Report. This started with a broadcast on the day the Report was published from Dr Helen Grant, a consultant neuropathologist at Charing Cross Hospital in London, who commented on the risk posed by cattle brains that were going into the human food chain. In an article in The Guardian on 2 March 1989, she suggested that the Government was concentrating on baby food ‘to divert the public from thinking about other foods and thus to imply that they are safe, which they are not’.

557 In May three articles appeared in The Times, suggesting that sausages and meat pies were a risk to health and that the Government should ban the use in food of potentially infected organs. On 24 May the Woman’s Farming Union issued a press release calling for a ban on the inclusion of brain and spinal cord in products for human consumption. This theme was taken up the next day by delegates when Mr MacGregor attended the Conservative Women’s Conference. On the same day the Bacon and Meat Manufacturers’ Association advised its members to exclude bovine pancreas, brain, intestine, spinal cord and spleen from their products. The Meat and Livestock Commission (MLC), which was being advised by Dr Kimberlin (whom we have already met as a witness to the Southwood Working Party and a member of the Tyrrell Committee and SEAC), wrote to Mr MacGregor urging him to introduce a general ban on the use of bovine offal for human consumption for the sake of public perception.

558 The Parliamentary Secretary at MAFF, Mr Donald Thompson, had started his working life in his father’s butchery business. He told us that he had all along been worried about the brains of subclinical animals entering the human food chain. In March he made the suggestion that cull cows might be excluded from the human food chain. This received short shrift from MAFF officials, but Mr Thompson returned to the charge, seeking advice on removing brains and certain other types of offal of cull cows from the human food chain, a measure that he subsequently supported. We commend him for this.

559 From the middle of 1988 the pet food industry had begun to address the possible infectivity of bovine raw materials incorporated in pet food. In July 1988 Pedigree Master Foods commissioned Dr Kimberlin to advise on whether their raw materials might carry the BSE agent. What he had to tell them they considered to have wider significance and they offered to share the information with MAFF. On 16 May 1989 Pedigree Pet Foods invited Mr Meldrum and other MAFF officials to meet Dr Kimberlin. Dr Kimberlin gave Mr Meldrum details of the advice that he had given to Pedigree, including the categorisation of offal into four categories of risk. The highest was brain and spinal cord and the next consisted of ileum, lymph nodes, proximal colon, spleen and tonsil. Mr Meldrum told us that it was clear to him that Dr Kimberlin thought it a good idea to keep the more infective offal out of...
the human food chain. He left the meeting converted to this viewpoint. Dr Kimberlin’s analysis had added a huge amount to his knowledge. We wish to commend Pedigree for their initiative in seeing that this information was provided to MAFF.

560 Meanwhile MAFF officials had been preparing draft Regulations and a consultative paper in respect of the proposed ban on offal in baby food. Mr Andrews warned Mr MacGregor that this would lead to pressure to extend the ban to all human food. Mr MacGregor was already under pressure in Parliament from Mr Ron Davies, the Opposition spokesman on Agriculture, to do just this. Mr MacGregor then met with Mr Meldrum. Mr Meldrum told him of what he had learned from Dr Kimberlin. This did not persuade Mr MacGregor that the Southwood Working Party’s assessment of risk was unsound. He told us that what it did was to provide him with ‘a scientific underpinning for the selection of tissues if Ministers were to adopt a policy to further reduce the remote risk of transmission of BSE to humans’. He told us, ‘I had some concern about this. Most of the scientists were telling me that this concern was unjustified, but there was just beginning to emerge some body of scientific opinion that there may be something in it, so it had the merit of dealing with that risk, if there was a risk.’

561 Within days Mr MacGregor had decided to go ahead with a ban. He told us that his reasons for this decision were:

- He wished to reassure the public.
- It was easier to introduce a general ban than a baby food ban.
- It would deal with any clinical animals that might slip through the net.
- It would deal with any risk from tissues from subclinical animals.

562 There was one practical difficulty. It was desirable to get Sir Richard Southwood’s approval to this course. This called for diplomacy as MAFF proposed to go beyond the measures that his Working Party had advised.

563 On 6 June Mr MacGregor had a meeting with his officials, to which Dr Jeremy Metters of DH was invited, in order to prepare for a meeting with Sir Richard Southwood the following day. Sir Donald Acheson had got wind of what was afoot and was unhappy about it, fearing that it might raise concerns about the safety of vaccines. He briefed Dr Metters to resist the move, at least for the time being. Dr Metters was Senior Principal Medical Officer in DH who had recently become involved in BSE matters. In August he became Deputy CMO. Dr Metters raised the concern about the vaccines at the meeting, but reported that this ‘cut little ice’ with MAFF officials. Mr MacGregor did not refer at the meeting to Dr Kimberlin’s analysis of the infectivity of tissues in subclinical animals. He left those present with the impression that his motive for the ban was simply a wish to allay the public concern which had developed.

564 On the next day the meeting reconvened with Sir Richard Southwood. Dr Pickles was also present. When told of the proposed ban, Sir Richard made the point that the scientific evidence had not changed, but accepted the ‘political necessity for action’. Mrs Attridge then made a suggestion about presentation. As she reported later:
i. Professor Southwood maintained his position that there was no scientific evidence to support the belief that offal presented a human health hazard (DOH Dr Metters did not dissent).

ii. The Minister maintained his view that presentationally something had to be done to allay public concern.

iii. The CVO pointed out that the easiest way to ensure any ban was operated was to remove offal (brains, spinal cord, spleen, tonsils, thymus) that were to be covered in the baby food regulations at the slaughterhouse.

iv. I suggested that the way to proceed was to say that the Minister considered the easier and more enforceable way to implement the Southwood recommendation on baby foods was to remove the offal at slaughterhouses and there it would be dyed and used for fertiliser and that the Minister would thereby not be appearing to contradict the scientific evidence in the Southwood report by taking more comprehensive action than recommended and there would be no need to proceed with consultations under the Food Act.

565 To those unaware of the potential infectivity of subclinical animals, Mrs Attridge’s suggestion on presentation must have seemed attractive. If there was no scientific justification for the ban, it would do no harm to suggest that its introduction was no more than an administratively convenient way of introducing the ban on baby food. The vice of this presentation was, however, that it suggested that the ban was unnecessary. It would not encourage those who had to implement the ban to take it seriously. Unfortunately, Mr MacGregor agreed to Mrs Attridge’s suggestion as to how the ban should be presented.

566 The presentation of the ban suggested by Mrs Attridge was widely disseminated. When Mr Lowson was preparing a briefing for incoming Ministers in July after a reshuffle, he included it as the reason for the decision to introduce the SBO ban. We were concerned about this, for he did not mention what he thought to be the true reason, namely to allay public anxiety as to the risk from subclinical animals. But given the pressure of time within which such briefings have to be prepared, and their ephemeral nature, we think it would be wrong to criticise Mr Lowson’s draftsmanship. Mr Gummer, Mr Maclean and Mr Curry all told us that Ministers do not place great weight on such briefings, but Mr Gummer subsequently passed on the presentation. At a meeting with UKASTA in October 1989, and again before the Agriculture Committee in 1990, he emphasised that the ban went beyond what the Southwood Working Party had advised was necessary, but was introduced as a practical way of giving effect to their baby food recommendation. Mr Lawrence included the presentation as the reason for the ban in the submission to Mr Gummer that he prepared in November 1989 seeking approval of the terms of the draft Regulations. This submission was widely circulated within MAFF, DH and the Territorial Departments.

567 In his press release announcing the ban, Mr MacGregor referred to the Government’s undertaking to implement the Southwood baby food recommendation. He then added:
In working out the details, I have concluded that a better way of dealing with this would be to ensure that the relevant types of bovine offals should be rejected at the slaughterhouses for all cattle so that they cannot be used for human consumption in any way. . . . This approach also deals with a separate problem, namely ensuring that if there is any risk that there are cattle incubating the disease but not showing clinical symptoms which are not being slaughtered and destroyed, their offals do not enter the food chain either.

568 This at least referred to the subclinical animals, but in terms that suggested that there was no more than a risk that some of these might go for slaughter. In fact this was inevitably happening on a substantial scale.

569 How far the presentation, which played down the importance of the human SBO ban, influenced people’s attitudes we shall never know. We had evidence from many sources, however, of a perception that the ban was not really necessary as a public health measure. We do not criticise Mrs Attridge for her suggestion, made in ignorance of the science that underpinned the ban, nor those who repeated what Mr MacGregor had agreed should be the public presentation of the reason for the ban. Mr MacGregor is to be commended for introducing a ban which was to prove such a vital element in guarding against the risk that BSE posed to humans. However, he should not have agreed to a presentation which played down the importance of the ban as a protection for human health.

570 One person who thought that the human SBO ban was an unnecessary precaution was Dr Pickles. She remained of the view that the Southwood Working Party had recommended all that science justified. She suggested that MAFF should be left to introduce the ban on its own. Sir Donald Acheson had by now decided, however, that DH should support the ban. This attitude was shared by Mr Clarke, although his understanding was that MAFF was motivated by a desire to restore consumer confidence rather than by any scientific consideration. Mrs Thatcher approved the ban. She informed us that she did not believe that she would have accepted the need for the ban solely for public reassurance.

Preparation of the Regulations

571 The ban was announced on 13 June 1989. Five months were to pass before it was brought into force. The Agriculture Committee criticised this delay. We have considered why it occurred and concluded that it would not be fair to criticise either MAFF or DH for not moving faster. The ban was introduced under the Food Act 1984 and made use of procedures and mechanisms for dealing with unfit meat that were already in place under the Meat (Sterilisation and Staining) Regulations 1982 (MSSR). This made good sense, but it carried with it a statutory obligation to consult. Regulations requiring the removal of tissues from apparently healthy animals on the ground that a small minority would be incubating a disease that carried a remote possibility of transmission to humans were novel. They were quite complex. They carried serious economic consequences for some. We think that consultation was desirable. What took longer than anticipated was the task of identifying which offal should be subject to the ban. This was not due to any lack of diligence, but to the complexity of some of the technical issues that arose. It

72 We have described the Regulations at paras 386–7 above
would have been better to have introduced a ban on those tissues which were known to be high risk and added to them later by amendment, but that is to use hindsight.

572 From the outset it was the intention that the ban should apply to brain, spinal cord, tonsils, spleen, thymus and intestines, which were recognised as high-risk tissues. The principal issues as to the ambit of the ban were whether:

- it should include tripe and rennet;
- it should include mesenteric fat;
- it should include intestines which had been processed to make casings for sausages and other meat products;
- it should apply to tissues of calves under the age of six months.

573 Resolving those issues required research, consultation with the industries involved and discussion between MAFF and DH. All of this took time.

574 Mr Bradley, who had been placed in charge of BSE research work at the CVL, carried out the research. So far as the first three issues were concerned, his task was to ascertain the extent to which lymphoid tissue would remain after the industrial processes that were involved. He set about this task with characteristic diligence.

575 Discussion between MAFF and DH involved Mr Meldrum on the one hand and Dr Pickles and Dr Metters on the other. Mr Meldrum’s approach was one of reluctance, without good reason, to countenance extending the ban to the detriment of established sectors of the food industry. This was a proper approach provided that he did not permit concern for the food industry to prejudice the safeguarding of public health. We were conscious of accusations that MAFF had done precisely that, so we scrutinised this part of the story with particular care. We concluded that Mr Meldrum adopted a conscientious and objective approach to his task.

576 Neither Dr Pickles nor Dr Metters believed that there was any justification for the human SBO ban. They saw it as an exercise carried out by MAFF in order to improve public confidence in the safety of beef. We were concerned to see whether this perception led to any lack of rigour on their part in considering what should and what should not be included in the ban. We concluded that it did not. Dr Pickles told us that if Ministers, for all sorts of good reasons, wished to do something that was not strictly necessary, she would support them. Her aim was to ensure that all the bits of offal that might be of concern were removed from the food chain.

577 Mr Gummer was appointed Minister of Agriculture in July, in the course of the preparation of the SBO Regulations. He gave Mr Maclean, one of the new Parliamentary Secretaries, special responsibility for food safety. We are satisfied that Mr Gummer and Mr Maclean gave careful consideration to the terms of the human SBO Regulations. They did not rubber-stamp their officials’ proposals, but sought and considered the reasons behind the inclusion or exclusion of various types of offal from the ban.

578 Notwithstanding the diligence that was applied to most aspects of the preparation of the SBO ban, it was inevitable that borderline decisions would be influenced by the general belief that the ban was being imposed as a measure of
extreme prudence which went beyond the recommendations of the expert scientists. While those involved made no conscious application of the ALARP principle, the exercise that they were engaged in entailed weighing perceptions of risk on the one hand against the economic consequences of banning particular tissues on the other.

579 We turn to record briefly the decisions that were reached as to the ambit of the ban.

**Brain, spinal cord, thymus, spleen and tonsils**

580 These ‘high risk’ tissues were intended to be covered by the ban from the outset. Dr Kimberlin, whose advice was sought by MAFF on the ambit of the ban, advised that the proposed ban on these tissues was well founded.

**Tripe and rennet**

581 Rennet was extracted from the abomasum, the fourth stomach of the cow, and was used for making cheese. One form of tripe was also made from the abomasum. Concern about these products arose from the fact that the abomasum contained significantly more lymphoid tissue than the other stomachs. In relation to lymphoid tissue Mr Bradley proposed a pragmatic test. Lymphoid tissue would be banned only when macroscopically visible, that is, to the naked eye. On this approach, the abomasum and its products did not fall within the ban. This approach was approved by Dr Kimberlin and accepted by Dr Pickles and Dr Metters. Very careful consideration was given to this issue, which involved a question of nice judgement as to where the borderline should be drawn. The decision not to include tripe and rennet in the ban was endorsed by Mr Maclean and Mr Gummer.

**Mesenteric fat**

582 This was fat that was originally attached to the intestine and which contained lymphoid tissue. It was excluded from the ban on the basis that, in the course of processing, the protein containing the BSE agent would fractionate with the solids rather than with the fat. Similar reasoning had led to the conclusion that tallow need not be subject to the SBO ban. Ministers initially queried the exclusion of mesenteric fat from the ban, but on being given this explanation were satisfied with it.

**Casings**

583 MAFF officials initially believed that the cleaning of intestines, which were used as sausage casings, would remove all but an insignificant quantity of lymphoid tissue and proposed that casings should be excepted from the ban. Dr Pickles challenged this assumption, whereupon the CVL confirmed that the processing of sausage casings removed lymphoid tissue. This conflicted with information that DH had obtained from a medicinal company in relation to the manufacture of sutures from intestines. Mr Bradley carried out further research, which revealed that lymphoid tissue remained in casings after processing. Mr Meldrum reported this, but suggested that casings could be excluded from the ban because they were only used on black and white puddings, were cooked and were usually discarded at the
table. Sir Richard Southwood and Dr Tyrrell were then consulted, and both indicated acceptance of Mr Meldrum’s reasoning. Dr Metters expressed continuing reservations, but added that DH was content for MAFF to proceed as it thought fit. Mr Meldrum then had second thoughts. He advised Ministers not to exempt casings and wrote to Dr Metters explaining: ‘I believe it is most important that we have a fully agreed position on this most important area.’ Ministers accepted Mr Meldrum’s advice.

**Calves under 6 months of age**

584 There were a number of reasons why Mr Meldrum was anxious to exclude offal from calves aged less than six months from the human SBO ban:

- It was not slaughterhouse practice to split the carcass of calves, so a requirement to remove spinal cord would raise practical problems.
- Feed compounders were threatening to boycott SBO-derived MBM. An exemption from the ban in respect of calves might discourage them from this step.
- A ban on SBO from calves would add to the waste disposal problem.
- A ban on SBO from calves might provoke export restrictions. The UK had a large trade in the export of veal calves.

585 There were two arguments that could be advanced to justify an exception from the ban in respect of the offal of calves:

- Calves would have been born after the ruminant feed ban came into operation and therefore should not have been infected from feed. The weakness of this argument was that it was possible – and Mr Meldrum thought it was likely – that calves would be infected with BSE as a result of maternal transmission.
- Analogy with scrapie research suggested that infectivity would not reach the brain or spinal cord of cattle in the first six months of life. This was a cogent argument for exempting brain and spinal cord of calves from the ban. Dr Kimberlin was, however, concerned that the lymphoreticular system (LRS), and in particular the spleen and thymus, might be infective at any age.

586 Dr Metters indicated that DH could not agree to an exemption in relation to calves in the absence of scientific advice justifying this.

587 Mr Meldrum made enquiries of the trade and was informed that spleen and thymus did not enter the human food chain. He passed this information to Dr Kimberlin and to Dr Metters, adding that very few calves were slaughtered in the United Kingdom each year. Dr Kimberlin then reconsidered the issue and indicated that he would be content with an exemption in respect of calves. Sir Richard Southwood and Dr Tyrrell were both consulted, and accepted that Mr Meldrum had demonstrated valid reasons for an exemption in respect of calves. Finally Dr Metters indicated DH agreement to this, adding that the position would have to be reviewed if maternal transmission were established. Ministers accepted advice that offal from calves should be excluded from the ban.
The facts that we have outlined above caused us concern. While only 25,000 calves were slaughtered each year in the UK, 250,000 were exported to the Continent to be slaughtered for veal. Furthermore, thymus, or ‘ris de veau’, was a prized delicacy on the Continent. In such circumstances, to have sought to disguise the risk posed by thymus by exempting calves from the ban, with the motive of protecting our export market, would have been scandalous. We explored our concerns with the witnesses. Dr Kimberlin assured us that his advice had not been influenced by export considerations. He also said that he was not overly concerned about the thymus because scrapie research indicated that thymus was lower risk than other LRS tissues.

Sir Derek Andrews summarised the factors which had satisfied him that the exemption in respect of calves was justified:

- The SBO ban was a measure of extreme prudence.
- The risk of transmission to humans was considered remote.
- Calves had not been fed MBM.
- Scrapie research indicated that calves under 6 months would not contain the agent.

The evidence we received satisfied us that those involved in the decision to exempt offal from calves from the ban were not improperly motivated by a concern to preserve exports and that the exception could be justified on an objective appraisal of such facts as were known at the time.

**Mechanically recovered meat (MRM)**

We now come to a topic which we have identified as a serious flaw in MAFF’s precautions to prevent SBO from entering the human food chain. Once all meat had been removed from the carcass, it was often the practice to subject the bare bones to the process of mechanical recovery of meat. High pressure was applied to the bones to separate from them anything that was still adhering. The resultant slurry was used in a range of meat products for human consumption, including lower grade sausages, burgers and pies. The major source of bovine MRM was the spinal column.

Spinal cord, together with the brain, was identified as the tissue which contained the highest titre of BSE infection. It had long been the usual practice in slaughterhouses for bovine spinal cord to be removed and sent for rendering as part of the meat-dressing process. That is not to say that it used to be cleanly removed. We received evidence that before the human SBO ban it was common for sizeable sections of spinal cord to be left in the spinal column. In that event it would be sucked out as a constituent of MRM.

Once spinal cord was prescribed as an SBO, standards of removal of the spinal cord in slaughterhouses improved. In 1995, however, it was discovered that slaughterhouses were, on occasion, leaving small portions of spinal cord attached to or trapped within the spinal column. We are satisfied that that was a state of affairs which had persisted ever since the human SBO ban was introduced. Portions of spinal cord will have gone into MRM.
594 When the human SBO Regulations were being formulated, peripheral nervous tissue was believed not to be high risk. Since 1996 experiments have shown one respect in which that belief was fallacious. The autonomic nervous system is linked to the central nervous system at junction boxes, consisting of clusters of nerve cells, alongside each vertebral body. These are known as dorsal root ganglia. This tissue has now been shown to develop high infectivity between 32 and 40 months after a cow is infected with BSE. Dorsal root ganglia will also have been sucked out by the MRM process.

595 On more than one occasion, consideration was given to the question of whether it was satisfactory to continue the practice of extracting MRM from the spinal column of cattle. Not until late 1995 was it decided that this practice should be banned. The first occasion on which the question arose was when the SBO Regulations were being prepared.

596 In June 1989 a minute circulated within MAFF recording that a slaughterhouse had given up producing MRM from cattle bones because it could not guarantee that all central nervous system (CNS) tissue would be removed from the backbone. This did not stimulate any detailed consideration. Views were expressed that the quantity of CNS material involved was unlikely to be significant. Mr Bradley responded with a warning that the vertebral column might be contaminated with spinal cord and commented, ‘Clearly spinal cord must be removed before processing to produce MRM should this be allowed to continue.’

597 The consultation process in relation to the human SBO ban provided further warning of the danger that spinal column would be contaminated with residues of spinal cord. Some of those consulted responded that total removal of the spinal cord was impractical. One pointed out that ‘the residual bone treated hydraulically to produce re-claimed meat [would] include spinal cord pieces’.

598 A meeting was held in MAFF on 27 September 1989 to consider the responses to the consultation letter. It was chaired by Mr Cruickshank and attended by, among others, Mr Kevin Taylor, Mr David Taylor, Mr Lowson, Mr Lawrence, Mr Maslin, Mr Wilesmith, Mr Duncan Fry and representatives from the Territorial Departments. Dr Pickles had been given short notice of the meeting and was unable to be present. There was no representation from DH. No witness had any recollection of what transpired in relation to MRM at this meeting. MAFF’s note of the meeting recorded:

> The proposed ban on specified offals was in itself a measure of extreme prudence, going beyond what Southwood recommended. Though some tissue would be contained in MRM it would be minimal and not present a significant risk. No action should be taken on MRM.

599 Mr Ron Martin, Deputy CVO at the Department of Agriculture for Northern Ireland (DANI), also made a note of the meeting, which recorded the discussion of MRM as follows:

> The possible danger raised by several of those consulted was recognised and during discussion there was an expression of the illogicality of what was being done and, in particular, how easy it would be to have to concede the

73 See the illustration in Chapter 5 of vol. 16: Reference Material
It was agreed not to raise it.

The issue of MRM was a complex one. In the following year, as we shall see, MAFF prepared a paper on it for consideration by SEAC. The amount of work that went into that paper is illustrative of what was required if the matter was to be properly considered in 1989. To make a reasoned decision about MRM, it was necessary to assess:

- the amount of spinal cord that might be left attached to the spinal column and recovered as MRM; and
- the minimum quantity of spinal cord that might be capable of carrying an infective dose for humans.

Those present at the meeting were not in a position to provide definitive answers to those questions, but they were in a position to identify that such questions needed to be addressed. They did not identify them. Part of the problem appears to have been that no one took on personal responsibility for addressing the question of whether MRM posed a risk to human health. Responsibility for producing the human SBO Regulations had been shared. MAFF’s Meat Hygiene Division had agreed to be responsible for the mechanics of drawing up the Regulations, but considered that the Animal Health Division had retained responsibility for policy. It was the Animal Health Division that had charge of the consultation exercise.

Mr Cruickshank said that he relied on the veterinary judgement that MRM was acceptable. Mr Kevin Taylor said that he had no responsibility for matters relating to human as opposed to animal health. Mr Lowson said that his divisional responsibilities were limited to animal health. He also said that the Meat Hygiene Division had taken the lead in preparing the Regulations. Mr Lowson said he had to rely on Mr David Taylor, the SVO dealing with meat hygiene issues. Mr Keith Baker, for whom Mr David Taylor was deputising, told us that it was not for his section to advise on the implications of infective dose for the safety of MRM.

We found this evidence confusing and unsatisfactory, bearing in mind that all present on 27 September were participating in an exercise that had only one object – the protection of human health.

The decision on MRM depended critically on a combination of knowledge of the processes of carcass-splitting and removal of the spinal cord; knowledge of the processes of extracting MRM; knowledge of standards of operation, inspection and monitoring of abattoirs; and an understanding of what was known, and what was not known, about infective dose in relation to TSEs.

No one before or after the meeting of 27 September set about collecting this information and presenting it in a form that would enable an informed policy decision to be taken. There appears to have been a general assumption that, if any spinal cord were to get into MRM it would do so in quantities too small to represent a threat. Some failed to appreciate the extent to which spinal cord might get into MRM. Some seem likely to have made unwarranted assumptions about the minimum effective dose.
606 Consideration of the proposed SBO Regulations was a team exercise and the failure to give rigorous analysis to MRM was a team failure. We believe that this failure is explained in large part, and mitigated, by the general belief that the SBO ban was a measure of extreme caution that went beyond the recommendations of the scientists. In the circumstances it is easy to understand the reaction that if there was a failure on occasion to remove a little bit of spinal cord, it was unlikely to matter. This does not, however, excuse the failure to carry out the rigorous risk evaluation that was required in order to reach a sound decision on policy.

607 The problem posed by MRM should not have been dismissed at the meeting on 27 September 1989. It should at least have been identified as calling for further consideration. However, no witnesses could remember any relevant detail as to the information or views contributed on this subject at that meeting. It would not, in these circumstances, be fair to criticise any individual for the conclusion that was reached. Nor would it be fair to criticise those who placed reliance on that conclusion. We are simply not in a position where it would be fair to allocate blame to any individual for the failure to give rigorous analysis to MRM in 1989.

608 Dr Metters and Dr Pickles of DH received copies of MAFF’s note of the meeting on 27 September. They had no knowledge of the nature of MRM. They read the statement that the amount of nervous tissue that it would contain would be minimal, and were content with that.

609 Those who relied upon the outcome of the meeting included Mr Lawrence. He advised Mr Gummer that any nervous tissue in MRM would be minimal and that the ban should not extend to MRM. Ministers questioned this advice. Mr Maclean asked how they could be sure that all abattoirs removed the spinal cord cleanly before MRM production took place. Mr Meldrum reassured Ministers that the risk from MRM was no greater than that in other cases where an exclusion from the ban had been agreed. Mr Meldrum told us that he was not concerned about spinal cord. He believed that any fragments would be removed at the dressing stage. He had concerns about peripheral nervous tissue, but Dr Kimberlin had provided reassurance about this. Mr Meldrum also relied on the conclusions reached at the meeting on 27 September.

610 On this occasion the chance to identify the danger posed by MRM was lost. What would have transpired had that danger been identified? We do not think it likely that it would have led officials to advise, or Ministers to decide, that the practice of extracting MRM from the spinal column of cattle should be banned. Mr Cruickshank told us that officials were conscious that the ban went beyond what the scientists had advised was necessary for the protection of public health, and were apprehensive that action that appeared disproportionate would provoke a judicial review. Had the danger of MRM been recognised, we think that this would have led MAFF to emphasise to slaughterhouse operators and local authorities that it was essential to remove spinal cord in its entirety and to monitor the extent that this was achieved once the ban was in force.

611 In the event, when the ban was introduced, no guidance was given to slaughterhouse operators or to the local authorities who had to enforce it. Nor were any instructions given to the veterinarians in the VFS, whose job it was to monitor the enforcement of the Regulations, that it was important to check that all spinal cord was being removed from carcasses.
BSE and human health in 1990

1990 was an eventful year in the BSE story. It saw a number of practical problems raised in relation to the implementation of the human SBO ban and the manner in which government addressed these. It saw restrictions placed on the export of beef by the EU, and their implications for the United Kingdom. It saw the natural transmission of BSE to cats, the alarm that this caused, and the response of government to that alarm. It saw the extension of scientific knowledge about BSE, with experimental transmission to mice, to cattle and subsequently to a pig. These latter events led to the introduction of the animal SBO ban, which we have described in the previous chapter. In this chapter we shall be looking at events that had relevance to the implications of BSE for human health.

In 1990 Mr Gummer completed his first year as Minister of Agriculture, Fisheries and Food. He had brought with him a new broom. He sought to draw a clear distinction, within the Ministry, between looking after the interests of the industry and looking after the interests of the consumer. The former he entrusted to Mr Curry; the latter to Mr Maclean. As Minister for Food Safety, Mr Maclean presided over the newly formed Food Safety Directorate. He also chaired a new Consumer Panel. Mr Gummer made it plain that his Ministry would be following a policy of openness of information about food safety. He also announced that the results of all research into BSE would be made public.

The same year saw the setting up of SEAC. Mr Gummer was a firm believer in taking the advice of experts and then following that advice. As soon as SEAC was set up he began to seek its advice on a wide variety of topics.

Implementation, enforcement and monitoring of the human SBO ban

In the previous chapter we looked at what happened to SBO once it had been removed from the carcass. This assumed importance in relation to animal health. There was never any apprehension that, once removed, SBO would find its way into the human food chain. So far as human health was concerned, the important thing was that the SBO should be cleanly removed from the carcass without contaminating the meat.

We have already commented on the poor standards of hygiene prevalent in UK slaughterhouses and the fact that the manner and rigour of enforcement of the Regulations varied from one local authority to the next. Happily these standards were not generally reflected in the diligence with which the Meat Inspectors set about their task of ensuring that SBO, and in particular spinal cord, was removed from the carcass. This was not, however, an easy task. The operation involved sawing the carcass in half down the backbone with a power saw, thus exposing the spinal cord, and then removing the cord. It was inevitable that in the process the spinal cord would sometimes get damaged and that portions of it would remain trapped or hidden within the vertebrae. It would have needed the most meticulous skill and care on the part of the Meat Inspectors to make sure that no carcass that received the health stamp contained any remnants of spinal cord. Skill and care to that degree was not shown during the period with which we are concerned.

See Chapter 3, para. 389 above
Meat Inspectors were often rushed, and holding up a production line for inspection was not popular. No one emphasised that removing all the spinal cord could be a matter of life and death, and it was not so regarded. As a result the occasional portion of spinal cord would pass through, undetected, with the health-stamped carcass, and be destined in many cases to be extracted as MRM.

617 We have described earlier the monitoring role of the VFS in respect of compliance with a large number of Regulations applicable in a slaughterhouse. The removal of spinal cord from the carcass was only one of many of the statutory requirements that they had to monitor. They were not instructed to give this particular attention. On the contrary, insofar as they received instructions, these focused on the disposal of the SBO after removal from the carcass, and we had evidence that this aspect of the SBO Regulations was the one with which they were more concerned.

618 In these circumstances we can understand why it is that, prior to 1995, there is only one recorded occasion on which a member of the VFS identified health-stamped meat that contained spinal cord. Only during the national surveillance in 1995, when unannounced inspections were carried out and when VOs were instructed to pay particular attention to the removal of spinal cord, did the fact that there were shortcomings in this respect come to light.

**Bovine brains**

619 One slaughterhouse problem that did quickly become apparent after the SBO ban was introduced related to bovine brains. Before the SBO ban the head meat would normally be removed at a slaughterhouse or head-boning plant, after which the head would be sent off with the brain inside to be rendered. Under the SBO Regulations a head with brains inside had to be treated as SBO. A practice started almost immediately of splitting the skull and removing the brain, so that the head could then be despatched, free of regulation, as BSE-free material. This practice created an obvious contamination hazard in the slaughterhouse.

620 No sooner had the ban come into force than Environmental Health Officers (EHOs) began to raise with MAFF concerns about the risk of contamination as a result of head-splitting and brain removal. There were a number of different techniques for splitting the skull and one method of removing brain that avoided this was by blasting the brain out of the base of the skull with a high pressure jet of water or air. The Institution of Environmental Health Officers expressed concern that all methods involved the risk of contaminating the head meat and urged that the practice of removing the brain be forbidden. A Liberal Democrat MP, Mr Matthew Taylor, took up this cause. MAFF officials took the view that any contamination was likely to be too small to worry about. Mr Hutchins, an SVO in the Meat Hygiene Veterinary Section, carried out a survey. He advised that there was no reason to prohibit the open-skull method of brain removal, although he had reservations about the high-pressure method. Mr Gummer was not persuaded, and promised Mr Taylor that he would ask an outside expert to consider the matter.

621 The chosen expert, Mr A M Johnston, expressed reservations about all the methods of brain removal and advised that, whenever possible, head meat should be removed before any cut was made in the skull. Both Mr Maclean and Mr Gummer
expressed continued concerns about brain removal. Officials reassured them that
draft guidelines on the techniques of brain removal were being prepared which
would reduce contamination to a minimum. The problem was minuscule. The
financial consequences of restrictions would be considerable. None should be
imposed. Ministers were minded to accept this advice, but there followed a further
spate of protests about the practice from many quarters. On 21 May 1989, pressed
about the practice in a parliamentary debate, Mr Gummer stated that it would be
referred for consideration by SEAC.

622 SEAC considered draft guidelines prepared by the Meat Hygiene Division at
their meeting on 13 June and gave them short shrift. They advised that it was not
consistent with common sense to permit the removal of the brain before the head
meat was harvested. Mr Gummer directed that guidelines be issued reflecting this
advice. Mr Meldrum sent them out the following day. They directed that bovine
head meat had to be recovered from the intact skull before the brain was removed.

623 On 10 July 1990 the Agriculture Committee published its report on BSE. One
recommendation was that MAFF’s guidelines on head-splitting should be enshrined
in legislation at an early opportunity. Ministers accepted this recommendation.
On 12 March 1992 Regulations were introduced which:

i. prohibited the removal of head meat after the skull had been opened or
brain removed; and

ii. prohibited the removal of brain in a slaughterhouse or boning plant
except in a special area at no time used for food for human consumption.

624 No reasoned application of the ALARP principle was carried out by MAFF.
MAFF officials assumed that contamination would be too minuscule to matter.
Ministers were justified in their reservations about this, and did well to call for
independent advice. SEAC was not an appropriate body to consider technical
questions of head-splitting techniques. It was, however, well qualified to express a
view as to whether risks of contamination from such practices were acceptable.
SEAC did not attempt any quantification of the amount of contamination liable to
result from brain removal. Nor did it weigh in the balance the financial
consequences of the various options. The Committee applied a robust common
sense in assuming that contamination was liable to be significant and advising
accordingly. The outcome was satisfactory. The same cannot be said of SEAC’s
next venture into the world of the slaughterhouse.

Slaughterhouse practices and mechanically recovered meat

625 We have referred to concerns expressed about the removal of spinal cord and
MRM in the course of consultation about the proposed SBO Regulations. These
continued after the Regulations were brought into force. Mr Corbally of the
Institution of Environmental Health Officers expressed the concern of its members
about this. On 18 April 1990 he wrote to Mr Keith Baker:75

Do you consider that the continued use of mechanically recovered meat from
bovines is acceptable? . . . MRM could contain significant quantities of
spinal cord nervous tissue.

75 Assistant CVO, Meat Hygiene
On 21 May Dr John Godfrey of the Consumers in the European Community Group, at a meeting with Mr Meldrum and Mr Maclean, questioned whether dorsal root ganglia might not be as infectious as spinal cord. Two weeks later, Mr Meldrum wrote to Mrs Attridge expressing concern that MRM might be significantly contaminated. He told us that it was peripheral nervous tissue that had given rise to his concern.

Calls for the banning of the practice of recovering MRM from the spinal column of cattle came from:

- the Consumers’ Association; and
- the MLC Consumer Committee.

Concerns about the practice were expressed to the Agriculture Committee from a number of quarters. Of particular note was a submission from Dr Gerald Forbes, Director of the Environmental Health (Scotland) Unit, who wrote of MRM:

Can any guarantee be given that parts of the central nervous system of cattle do not enter this product? I would suggest that this is not possible and whether or not the practice of producing mechanically recovered meat can be considered safe is very much open to doubt.

As we have seen, Mr Gummer decided in May that slaughterhouse practices should be referred to SEAC. MAFF set about preparing a paper that would provide SEAC with the information that it would need to consider these. The drafting of this paper was a major undertaking involving input from the Meat Hygiene Division, the Food Standards Division, the Food Science Division, Mr Meldrum and officials in the Animal Health Division. The final draft was not produced until October. The paper gave SEAC the following information about slaughterhouse practices:

- The spinal cord will inevitably receive some damage during carcass-splitting.
- Inevitably some nervous tissue can remain and some contamination of the vertebrae with CNS tissue can occur as a result of:
  a. small pieces of spinal cord inadvertently remaining in the spinal column
  b. contamination from carcass-splitting
  c. the failure to remove nerves from between the vertebrae.

Those responsible for preparing the paper had reached the conclusion that some action was called for. Originally they had been prepared to place before SEAC a series of alternative options:

a. issue guidance to the trade on minimising contamination;

b. request local authorities to ensure spinal cord had been removed;

c. ban the extraction of MRM from the bovine vertebrae;

d. ban manufacture of MRM from bovine carcasses.
Of these, option (c) was to be advanced as the preferred option, coupled with a recommendation that certain specified research be carried out to ascertain the extent of the contamination of MRM that was occurring.

631 In the event it was decided not to refer to these options, but simply to ask SEAC to advise:

\[
\ldots \text{whether any action or guidance is required in relation to slaughterhouse practices, and whether any new R&D is needed.}
\]

632 What then occurred was this. SEAC members decided that they would visit a slaughterhouse and see for themselves the procedures involved. Most of them did so and were given a ‘Rolls-Royce’ demonstration of carcass-splitting and removal of spinal cord. Those who saw this concluded that spinal cord could be extracted from the carcass without difficulty. At SEAC’s next meeting, slaughterhouse practices was one item of an over-charged agenda. SEAC dealt with that item by advising, in the case of some members on the basis of what they had seen, that so long as the rules were properly observed and proper supervision was maintained, there was no need to recommend further measures on grounds of food safety. MAFF officials and Ministers treated this as reassurance that all was well, and no further consideration was given to MRM for some years to come.

633 It does not seem that there was any discussion at the meeting about MRM. Dr Tyrrell suggested to us:

\[
\text{I suspect that what happened was that we reckoned there was not really a problem with MRM if the vertebral column was being cleanly cut and dissected.}
\]

634 The events that we have summarised demonstrate a serious breakdown of communication. MAFF officials knew, as their paper expressly stated, that a degree of contamination of the spinal column with spinal cord was inevitable. Some members of SEAC, Dr Tyrrell among them, proceeded on the basis that clean removal of spinal cord was easy and thus something that could be achieved in practice. It was on the basis of that assumption that they advised that there was no need for any action. MAFF officials, however, understood that SEAC was indicating that the degree of contamination described in the paper as ‘inevitable’ was no cause for concern.

635 We do not consider that this sorry story is a matter for individual criticism. There are, however, lessons to be learned from it. What went wrong?

- SEAC had too much on its plate. The agenda did not allow sufficient time for a detailed discussion of MAFF’s paper on slaughterhouse practices.
- The advice sought from SEAC was not targeted. SEAC’s expertise lay not in slaughterhouse practices but in the potential consequences of consumption of spinal cord. As we shall see, the Committee had been considering infectious dose for the purpose of advising the CMO. It based its advice not on this consideration, but on its conclusion about slaughterhouse practices. SEAC should have been asked expressly whether the contamination described in MAFF’s paper was cause for concern.
• SEAC was not informed of the options which MAFF officials had identified. We consider that it would have been helpful if SEAC had been told about these.

• SEAC was unaware of the concerns that had been expressed about the removal of spinal cord and the safety of MRM.

636 Had SEAC been aware of all these matters, we think it likely that it would have endorsed the suggestion that further research be carried out in order to quantify the amount of spinal cord material getting into MRM. This might have led to SEAC endorsing the further option of recommending a ban on the extraction of MRM from the bovine vertebrae. There can be no certainty that it would have done so.

637 Had MAFF officials been left to advise Ministers unaided by SEAC, we think it likely that they would have recommended option c) of those they had identified, as set out in paragraph 630 above. If not, they would surely have recommended options a) and b). It was unfortunate – and possibly tragic – that the intervention of SEAC should, as a result of a breakdown of communications, have left MAFF officials and Ministers falsely reassured about the safety of MRM.

Europe and lymphoid tissue

638 The slaughter and compensation policy and the human SBO ban protected consumers of beef products in both the United Kingdom and countries to which these were exported. The European Commission decided, however, to take additional measures to protect Continental purchasers of British beef. These included a requirement\(^{76}\) made in June 1990 that the UK should certify all boneless beef for export to other Member States as being ‘fresh meat from which during the cutting process obvious nervous and lymphatic tissue has been removed’.

639 MAFF carried out a survey to discover the extent to which the cutting procedures employed in UK plants satisfied this requirement. It was discovered that the procedures varied widely from those plants which removed virtually all lymph nodes to those which removed very few. Alarmingly, ‘healthy’ lymph nodes which had been removed were used in meat products for human consumption or rendered for either human food or animal feed.

640 Consideration was given to legislating to add lymph nodes to the list of SBO. There were, however, intractable problems with such a course. Not all lymph nodes could be prescribed, for they were to be found throughout the carcass. It would not be practicable to have Regulations which prescribed ‘obvious lymphatic tissue’, for this would lack certainty. Furthermore, lymph nodes were often not removed until meat was being dressed in the butcher’s shop, and it would be difficult to devise Regulations that would cover that situation.

641 In the event it was decided to issue guidelines, designed both to enable the UK to comply with the EC Decision and to set a common standard for beef, whether it was to be consumed in the United Kingdom or exported.

\(^{76}\) Introduced by European Commission Decision 90/261/EC
On 16 June guidelines were issued which provided that:

All lymphatic and nervous tissue that is exposed during normal cutting operations must be trimmed off, so that such material is not visible on the cut surfaces of the meat.

Lymphatic and nervous tissue that is removed must not be used in meat preparations or products that are intended for human consumption.77

We consider that the response to the Commission Decision was reasonable. It had, however, one consequence which we do not believe was appreciated. Because lymphoid tissue was not brought within the definition of SBO, it continued to be available for rendering for animal feed after the animal SBO ban was introduced.

Alarms and reassurances

We now turn to a quite different topic, one of great interest to our Inquiry – the communication of risk to the public. By 1990 BSE had been transmitted to a number of different species – for the most part experimentally. Transmission naturally, through feed, had occurred in a number of exotic species in zoos. The range of species in which transmission had occurred was wider than that observed with scrapie. These transmissions were, to put it neutrally, consistent with the possibility that BSE was transmissible to humans. Few put it neutrally, however. The media, focusing on the comments of some independent scientists, were quick to draw the conclusion that instances of cross-species transmission demonstrated that humans were at risk. Government officials were at pains to emphasise that experimental conditions were not reproduced in nature and that no implications as to human risks could be drawn from transmission to animals. Reassurances were given about the safety of beef. The Meat and Livestock Commission (MLC) regarded its principal role as the support of the meat and livestock industry. The MLC was particularly assiduous in seeking to counter the suggestion that it might be dangerous to eat beef. Regrettably this enthusiasm led on occasion to statements which were not scientifically correct.

In January, The Independent quoted scientists at the NPU acknowledging a ‘remote possibility’ that BSE might move from cows to people, and the comment from one of them that nothing would induce him to eat sweetbreads, spleen or brain. ‘A human would have to eat an impossible amount of pure cow brain at the height of infection’ to reach an equivalent dose to that needed to infect a cow, riposted Mr Colin Maclean, Technical Director of the MLC. He should have resisted this absurd exaggeration.

By this time Professor R M Barlow at the Royal Veterinary College had succeeded in effecting oral transmission of BSE to mice, and preliminary results of experiments at the CVL had demonstrated that inoculation of cattle with BSE-infected material had transmitted the disease. MAFF delayed making public the results of the mouse experiment until 1 February 1990 for presentational reasons. They considered it essential for the results of both sets of experiments to be announced at the same time. MAFF’s press release received consideration by Mr Andrews and by Mr Gummer. It included this comment:

77 YB90/6.14/3.3
The BSE results therefore provide further evidence that BSE behaves like scrapie, a disease which has been in the sheep population for over two centuries without any evidence whatsoever of being a risk to human health.

Thus the first oral transmission of BSE to another species was presented as reassuring. Not everyone found it so. An official who visited the NPU in January reported:

The researchers I spoke to are obviously very troubled about the ability of this disease to jump species. If it can be passed from cattle to mice, then what about humans?  

The press contrasted MAFF’s statement with views expressed by Dr Helen Grant, Consultant Neuropathologist:

My gut feeling is that some genetically susceptible people may have become infected with material by eating meat products.

From March 1990 the media began to give prominence to the views of Professor Richard Lacey, a Professor of Clinical Microbiology at Leeds University. *Today* reported him as predicting:

In the years to come our hospitals will be filled with thousands of people going slowly and painfully mad before dying.

In April Humberside County Council banned beef from school meals. Other local authorities were to follow their example. Then came the cat.

### The cat

On 6 May 1990 officials at MAFF and DH reported to their Ministers that Bristol University had diagnosed a ‘scrapie-like’ spongiform encephalopathy in a domestic cat. Here was a bombshell. The public was likely to conclude that the cat had caught BSE from eating contaminated beef. And if this could happen to a cat, why should not human beings suffer the same fate? Yet it was far too soon to jump to any such conclusion. It was possible that there had always been the occasional case of feline spongiform encephalopathy (FSE) which had gone unrecognised. Nonetheless, if a cat had caught BSE from food, it was cause for concern. CJD had been transmitted experimentally to a cat by inoculation, but attempts to transmit scrapie had not succeeded. Here was an indication that BSE might be more virulent than scrapie.

On 10 May Mr Gummer and Mr David Maclean, the Parliamentary Secretary, met with officials to discuss how to make public the news of the cat. A note of the meeting prepared by Mr Gummer’s Principal Private Secretary recorded that Mr Meldrum ‘confirmed the Minister’s assumption that there was no likely connection between this case and BSE’. We have already noted (paragraph 363) that there was no basis for this degree of reassurance and Mr Meldrum should have been more cautious.
Mr Meldrum found himself under pressure from the media to comment on the implications of the cat. He emphasised that this was the first known case of FSE and that there was no known connection with other animal encephalopathies, but that investigations into the case were continuing. The risk to humans was no greater than before the diagnosis; the cat was no cause for concern.

We think that Mr Meldrum played down the potential significance of the cat more than an objective appraisal would have justified. But he no doubt had in mind the part played by the media in previous ‘food scares’, such as salmonella in eggs and listeria, and was seeking to counter extreme statements about the implication of the cat which went much further than justified on what was then known. In the circumstances we do not think it would be fair to criticise him for his defensive public stance.

Intense media coverage followed. *The Sun* published an article stating that BSE could be the biggest threat to human health since the Black Death plague. British beef was reported to have been banned in Russia and in schools up and down the country. Professor Lacey called for the slaughter of every herd with a case of BSE.

Again the MLC leapt into the breach with too much vigour. Mr Colin Maclean was responsible for the text of a video to be distributed to local authorities which on one reading erroneously suggested that it would be necessary to eat an impossible amount of brain and spinal cord in order to be at risk. In a press release he stated that ‘even if no further action had been taken following the outbreak of the disease there was considered to be no risk to consumers from eating beef’. We do not believe that Mr Maclean intended to mislead, but both these statements were capable of doing so. We think that he should have been more careful.

Of more importance were the official statements. MAFF issued two press releases on 15 May, for the terms of which Mr Gummer was himself responsible. These were directed to the safety of beef. Mr Gummer made unequivocal statements that it was safe to eat beef, but he made it plain that he did so on the basis that the slaughter and compensation policy and the SBO ban provided protection for the consumer against any remote risk which might otherwise exist. This qualification was vital and, in the light of it, we would not criticise these press releases.

The following day, BBC Newsnight featured television footage of Mr Gummer attempting to feed his four-year-old daughter Cordelia a beefburger. We understand that Mr Gummer had been challenged by a newspaper to demonstrate his confidence in beef in this way. Mr Gummer was faced with choosing between two unattractive alternatives. It may seem with hindsight that, caught in a ‘no win’ situation, he chose the wrong option, but it is not a matter for which he ought to be criticised.

Sir Donald Acheson was pressed by MAFF to add his reassurance that it was safe to eat beef. His press officer told him that, having regard to the media pressure, it was essential that he should make a statement. He managed to discuss the terms of his statement with three members of SEAC – Dr Tyrrell, Dr Will and Dr Kimberlin. He then issued the following press release on 16 May:
I have taken advice from the leading scientific and medical experts in this field. I have checked with them again today. They have consistently advised me in the past that there is no scientific justification for not eating British beef and this continues to be their advice. I therefore have no hesitation in saying that beef can be eaten safely by everyone, both adults and children, including patients in hospital.

Later, in a television interview, he stated that ‘there is no risk associated with eating British beef’.

Sir Donald told us that when he learned of the cat he ‘remained deeply concerned about the possible implications of a further ‘transpecies “jump” of BSE’. He told us that his statement about the safety of beef was made, as were Mr Gummer’s, ‘on the confident assumption that the SBO ban was already fully implemented’.

In contrast to the press statements made by Mr Gummer, Sir Donald’s statement did not explain that his confidence in the safety of beef was premised on the removal of all SBO. It gave no indication of any concern about the cat. It was, we feel, a statement that was likely to convey the message not merely that ‘beef is safe’, but that ‘BSE is no risk to human health’.

We do not consider that, as Chief Medical Officer, Sir Donald should have restricted his public statement in the way that he did. The development of a spongiform encephalopathy in a cat had raised a concern that BSE might be transmissible in a way that scrapie was not. Sir Donald was in no position to allay that concern. He avoided addressing it by limiting his statement to the safety of beef. He did not explain that he considered beef safe only because the parts of the cow that might be infective were being removed from the food chain. His statement was likely to give false reassurance about the possibility that BSE might be transmissible to humans and we think that he should have appreciated this. The possibility that BSE might have been transmitted to a cat was cause for concern and needed to be investigated by the scientists. He should have explained that he believed that beef was safe to eat because of the precautionary steps that had been taken to guard against the possibility that BSE might be transmissible in food.

Sir Donald’s unqualified statement that it was safe to eat beef was to set a pattern. Public concerns about the dangers arising from BSE were met by statements limited to giving assurance that it was safe to eat beef. Members of the public tended to equate those statements with assurances that BSE posed no risk to humans. It was natural that they should do so. It is no wonder that when, on 20 March 1996, the Government announced that there was probably a link between BSE and vCJD, many felt that they had been deceived.

The Agriculture Committee

On 16 May 1990 the public concern generated by the cat led the Agriculture Committee of the House of Commons to institute an inquiry into BSE. Over a period of just over a month an impressive body of evidence, both oral and written, was received. The Committee reported on 18 July. The Committee observed that while scientists believed that there were too many unknowns to say anything about
the disease with absolute certainty, no evidence had been forthcoming that it did pose a risk to human health. It concluded:

The Government has already acted to cut off the presumed source of the disease in cattle and has banned the sale of all specified cattle offals for human consumption. We believe these measures should reassure people that eating beef is safe.

If the ban on the sale of specified cattle offals for human consumption is properly policed in slaughterhouses, full public confidence can be maintained.

**SEAC considers the safety of beef**

663 At the request of Sir Donald Acheson, SEAC held an emergency meeting on 17 May 1990 to consider the implications of the cat. Sir Donald had hoped that SEAC would produce a letter endorsing the statement that he had made about the safety of beef. At their meeting the Committee members found themselves unable to agree on the terms of this. Not until 24 July were they able to give final agreement to the terms of a letter to the CMO and an accompanying annex dealing with the safety of beef.

664 There were unsatisfactory features both about the manner in which these documents were prepared and about the terms in which they set out SEAC’s advice. The letter set out briefly the reasons for SEAC’s conclusion that:

In our judgement any risk as a result of eating beef or beef products is minute. Thus we believe that there is no scientific justification for not eating British beef and that it can be eaten by everyone.

The annex spelt out in greater detail the reasons for that conclusion.

665 The origin of the annex was a paper that Dr Pickles had prepared to brief the CMO before his appearance before the Agriculture Committee. She explained to him:

The arguments are those that have or should have been discussed by the Tyrrell Committee [ie, SEAC].

666 It was subsequently adopted by SEAC as the basis for their advice to the CMO. The draft annex was, however, circulated widely by Dr Pickles and Mr Lowson within DH and MAFF, so that officials could suggest amendments to the draft. Mr Thomas Murray79 of DH expressed concern that ‘the Annex will give us considerable presentational problems and do little/nothing to reassure the public about the safety of British beef’. In MAFF it was forwarded to Mr Gummer and Mr Maclean for approval, but only after a process which had led Mr Lowson to note that ‘the most inflammatory pieces of drafting in earlier versions have now been edited out’.

79 Head of Section, Environmental Health and Food Safety Division
We were unhappy about this editorial process. It seemed to us that there might well be a conflict between officials’ desire that the annex should not contain inflammatory matter and the desirability that the annex should fairly and objectively summarise SEAC’s views on risk.

Dr Tyrrell accepted that, had there been time, it would have been preferable for the Committee to have formulated its own view, but defended what had occurred because SEAC was under time constraints. We do not believe that the editorial process resulted in any distortion of SEAC’s views, but remain of the opinion that it would have been preferable if the Committee had been left to do its own editing of the draft annex.

We turn to the substance of SEAC’s advice. The passages that gave us concern were those that dealt with dose. The question of the amount of infective material that might suffice to transmit the disease was of practical importance when considering the precautions that needed to be taken against transmission, whether to other animals or to humans. SEAC commented more than once that ‘very large doses’ were needed for oral transmission. The Committee members explained to us that they were speaking of the titre of infectivity, not the quantity of physical material that held the dose. Once this was explained, we could follow SEAC’s reasoning. Nonetheless, we felt that the language that they had used tended to suggest that they were speaking of the amount of infective material. Here is an example:

... the incubation period in mice was longer after large oral doses of BSE-infected cattle brain than after much smaller parenteral injections – in these, as in other animal experiments, large doses appear to be needed for successful disease transmission.

SEAC submitted to us that the letter and its annex were prepared for the CMO and would have been likely to circulate among readers who were familiar with the concept of dose. We accept that point and have concluded that it would not be right to criticise SEAC for the language used. We believe, however, that the annex was circulated within MAFF and fear that it may have given rise to misunderstanding. The evidence shows that in 1990, and indeed for some years thereafter, there was a perception on the part of many within government that a substantial quantity of infective material would be required orally to transmit BSE to a cow and that the same would be true of transmission from cow to human, if indeed such transmission was possible. It is at least possible that SEAC’s annex contributed to this belief.

A look ahead

In the period up to 1990, MAFF had taken the lead in addressing the possibility that BSE posed a risk to the safety of human food. Although Dr Metters and Dr Pickles had played a diligent role, albeit a secondary one, in considering which tissues should be included in the human SBO ban, they had done so in the belief that the ban was not scientifically justified.

The attitude of Dr Metters at this time was demonstrated by a response that he sent in October 1990 in answer to a suggestion by Mr Murray that DH should ensure that a continuous flow of appropriate BSE information should be sent to Directors
of Public Health, Consultants in Communicable Disease Control and Environmental Health Officers. Dr Metters wrote that he was concerned that such activity might raise the implication that:

. . . somehow the disease poses a risk to human health. Every effort has thus far been made to underline the Government’s position, based on advice from the Southwood and Tyrrell Committees that the disease is not a risk to humans. That principle lies behind this Department’s low-key approach to publicity.

Dr Metters should not have given this response, which seems to us to convey quite the wrong message.

673 In the years ahead DH continued to play a subordinate role in addressing the food risks relating to BSE – so much so that, in the final days before 20 March 1996, it did not occur to Mr Hogg and Mrs Browning that Health Ministers should even be consulted about appropriate measures to enhance the protection of human health.

674 The first case of FSE was not merely of concern to the general public. It was of concern to SEAC. The Committee was unable to draw conclusions without knowing whether the cat had contracted the disease from BSE. It advised that there was an urgent need for research. In due course, as the number of cases of FSE grew, it became accepted that they had probably caught the disease from eating bovine offal infected with BSE. Mr Meldrum commented in evidence to us that no specific observations or recommendations were ever made on the effect of FSE on the risk to humans. In this he is correct. We had evidence from a number of scientists that transmission of BSE to cats was an event which altered their belief that BSE posed no greater risk to humans than scrapie. The public were never told that scientists’ appraisal of that risk had changed. On each occasion that public concerns were raised about BSE, they were met with the same refrains – ‘There is no evidence that BSE is transmissible to humans’; ‘It is safe to eat beef’. Risk communication in relation to BSE was flawed.

The false peace – 1 January 1991 to 31 March 1995

675 In this section we take the story on to 1 April 1995, when the national Meat Hygiene Service (MHS) took over the enforcement of slaughterhouse Regulations from the local authorities. This was a watershed event in the BSE story. It led to discovery of the scale of the inadequacies of the implementation and enforcement of the animal SBO ban. This we have described in Chapter 5. It led to the discovery of shortcomings in the clean removal from the carcass of all spinal cord. This we shall consider in the next section. This section covers a period of relative inactivity in the BSE story.\textsuperscript{80}

676 We shall begin with a short description of the hygiene standards in slaughterhouses that led to the setting up of the MHS. We shall also describe shortcomings in the regulatory structure which the MHS inherited. These are of

\textsuperscript{80} Changes in the MAFF and DH teams during this period included the following: Mrs Gillian Shephard succeeded Mr Gummer as Minister of Agriculture, Fisheries and Food on 27 March 1993 and she, in her turn, was succeeded by Mr William Waldegrave on 20 July 1994. Mr Richard Packer succeeded Sir Derek Andrews as Permanent Secretary at MAFF on 17 February 1993. In DH Mr Waldegrave was succeeded as Secretary of State in 1992 by Mrs Virginia Bottomley, and Dr Kenneth Calman took over from Sir Donald Acheson as CMO in September 1991
relevance in helping to understand why there were failures in implementing and enforcing the obligations to remove spinal cord. They also explain the much more serious inadequacies in the handling of SBO once it had been removed, which we have looked at earlier in this volume. We shall, in addition, describe briefly the political process which led to the setting up of the MHS.

677 Next we shall look at the evidence relating to monitoring of the human SBO Regulations up to April 1995, and at some further consideration that was given to MRM. We shall note an important amendment to those Regulations.

678 During this period knowledge about BSE advanced as results began to be received from the research projects that had been undertaken. We shall consider the extent to which this knowledge was communicated to the public. Events which caused concern to the public, and to government, were the incidence of two cases of CJD in dairy farmers and the first case of a teenager to suffer from this disease. We shall look at the media reaction to these events and the official response.

Slaughterhouse standards

679 In an era of deregulation, a convincing case had to be made out for the introduction of the centralised MHS. Standards of hygiene in British slaughterhouses provided that case. Mr Gummer gave this vignette to the House of Commons Agriculture Committee in October 1992:


680 The previous year Mr Gummer had reported to the Prime Minister that 60 per cent of red meat slaughterhouses did not meet European standards. Many plants recorded as satisfactory were only just acceptable. On the introduction of the Single European Market on 1 January 1993, 544 British slaughterhouses sought a temporary derogation from compliance with European hygiene requirements. When EU Veterinary Inspectors carried out surveillance of these establishments in 1994, they found that 68.5 per cent were of concern or of grave concern.

681 MAFF officials initially had little knowledge of how local authorities set about complying with their obligations to enforce Regulations in slaughterhouses. In 1992 Mr Lawrence was appointed to lead an MHS Project Team to investigate this. He discovered an unsatisfactory state of affairs. There were instances of animosity between plant management and Inspectors, and between Official Veterinary Surgeons who oversaw enforcement, usually under contract, and the Inspectors and EHOs on the staff of the Environmental Health Departments of the local authorities. In many cases there was an unclear management chain and lack of teamwork.
In January 1992, Mrs Jane Brown, Head of Meat Hygiene Division, forwarded a paper to the Cabinet Office as a basis for discussion by officials of the proposal to create a national Meat Hygiene Service. This recorded:

The State Veterinary Service, who monitor standards, have no real control over LAs. The Official Veterinary Surgeon . . . has little real management control over the meat inspectors in the plant . . . standards of enforcement are uneven across the country.

A review in 1992–93 of hygiene standards in a sample of slaughterhouses confirmed this picture and commented: ‘In many cases, the Local Authority appeared disinterested.’ Many witnesses gave evidence to us to similar effect.

We asked MAFF officials whether evidence of poor hygiene standards in slaughterhouses did not raise concerns about the standard of enforcement of the duty to remove spinal cord from the carcass. Each replied that it did not. Some commented that they had imagined that this was a simple operation. Others said that removal of unfit meat from the carcass was so important that they believed Meat Inspectors gave priority to strict enforcement of that obligation.

We were at first inclined to believe that poor standards of general hygiene would inevitably go hand in hand with poor standards of compliance with the SBO Regulations. So far as concerned the formalities of disposal of SBO once it had been removed from the carcass, we were proved right. Standards of removal of spinal cord do not, however, appear to have reflected the poor standards prevailing elsewhere in the slaughterhouse. After the MHS took over, inspections disclosed that failure to remove all spinal cord before meat was health-stamped had probably been occurring on average in four cases out of a thousand. Although this level of failure was not satisfactory, it suggests that in general the operation of removing the spinal cord was carried out efficiently and effectively. The occasional failure to remove all the spinal cord had been described in MAFF’s paper to SEAC in 1990 as inevitable. Under the structure in place before the MHS took over we believe that it was. After the MHS was in place, by adding resources and monitoring a campaign aimed at ensuring 100 per cent removal of spinal cord, MAFF and the MHS appear to have come close to achieving this goal.

**History of the setting up of the Meat Hygiene Service**

In July 1991 Mr Gummer wrote to Mr Waldegrave, who was at that time Secretary of State for Health, to propose the setting up of what was to become the MHS. Mr Waldegrave replied that he was ‘content’ with the proposal. In November the proposal was placed before the Prime Minister, who wished to know the reaction of the Treasury. Mr Mellor, Chief Secretary to the Treasury, at first had reservations, but those were dispelled and Mr Major announced on 9 March 1992 that a new Meat Hygiene Service was to be set up.

The decision proved controversial. When the Conservative Party was returned to office after the General Election with a greatly reduced majority, there was back-bench opposition from its own MPs to the need for additional hygiene measures. Many, including the meat industry, major retailers and some journalists, considered
that MAFF was going too far in pandering to what they saw as European over-regulation.

688 When Mrs Shephard succeeded Mr Gummer, she took a fresh look at the proposal for the MHS. Although she had initial misgivings, she was persuaded by her officials that it was an essential measure. She ran into opposition, however, from Mr John Redwood, who had been appointed Secretary of State for Wales. In October 1993 Mr Michael Portillo, who had been appointed Chief Secretary to the Treasury, also suggested that she should look again at the proposal. Mrs Shephard stood firm, supported by Mr Ian Lang, Secretary of State for Scotland. The following month Mr Redwood and Mr Portillo indicated their acceptance of the project.

689 In 1994 the work of establishing the MHS proceeded. Mr Johnston McNeill was appointed Chief Executive. The new Agency was to inherit the staff in the case of 176 of the local authorities; their existing terms and conditions differed and had to be renegotiated in each instance. In July 1994 Mr Waldegrave succeeded Mrs Shephard as Minister of Agriculture. Once again he satisfied himself of the merits of the scheme. The MHS replaced the local authorities on 1 April 1995.

690 The establishment of the MHS was not a measure taken in response to the emergence of BSE. Accordingly it has not fallen within our terms of reference to consider why so long elapsed between the decision to introduce the Service and the implementation of that decision. The establishment of the MHS had a beneficial impact on the implementation of both the human and the animal SBO ban. It is unfortunate that this was so long delayed.

**Monitoring compliance with the SBO Regulations**

691 In Chapter 5 we saw how monitoring of the SBO Regulations in slaughterhouses was intensified between 1991 and 1995. This was, however, in response to concerns about the animal SBO ban. The instructions received by the Veterinary Field Service (VFS) required it to concentrate on the handling of SBO after removal from the carcass. The focus of attention was the gut room, not the ‘clean’ side of the slaughterhouse. The only specific question on the SVS pro forma covering slaughterhouse visits that related to human health asked whether removal of bovine brains involved contamination risk. There was no mention of spinal cord.

692 Records of slaughterhouse visits have been lost for large parts of the period between 1991 and 1995. In 1990 there had been one report of a failure to remove spinal cord from the carcass. That is the only such report of which we are aware. Apart from a few early reports about brain removal, there was nothing to suggest that slaughterhouse operations involved any risk to human health.

693 We have already discussed why it was that the VFS did not discover the deficiencies in compliance with the Regulations in the gut room until after the MHS had taken over. The same reasons apply in relation to the removal of spinal cord. We believe that the principal reason was the difference in rigour of the inspections before and after the MHS took over.
Mr Christopher Clarke, who had served as a Meat Hygiene Inspector, told us that it was typical for MAFF Veterinary Officers on their periodic inspections to arrive mid-morning and depart a few hours later, after discussion with the management of the plant and the principal Environmental Health Officer. Such a visit was unlikely to detect the occasional failure to remove a segment of spinal cord, particularly if the focus of the visit was what was taking place in the gut room.

It may well be that there was, on occasion, a lack of diligence on the part of the Veterinary Officer making the monitoring visit. It was regrettable that the need to give specific instructions to monitor the removal of spinal cord was not identified when the Regulations were being introduced and particularly unfortunate that, when SEAC was asked to look at slaughterhouse practices, its response was understood to signify that these were not cause for concern. We have no criticism to make of Mr Hutchins, Mr Simmons or their superiors in relation to this aspect of the monitoring duties of the SVS.

**MRM on the agenda again**

On 8 April 1994 Mr Meldrum called a meeting of MAFF officials to review arrangements for disposal of SBO. Although the primary concern seems to have been enforcement of the animal SBO ban, Mr Meldrum suggested that ‘one way to increase security would be to prohibit the use of spinal column for MRM’. Impetus was given to this suggestion when, in July, the European Commission’s Scientific Veterinary Committee recommended that vertebrae from cattle killed in the UK should no longer be used for the production of MRM. This recommendation was not pursued, but MAFF prepared a paper on MRM for SEAC to consider at its meeting on 30 August 1994. The Committee was asked to advise on the use of spinal column for the production of MRM. Not for the first time SEAC had a heavy agenda, and this item was deferred, to be restored in June the following year.

**The distal ileum of calves**

One experiment carried out by the CVL involved feeding calves with BSE-infected brain and then slaughtering an animal every four months (after the first two months had passed) and testing 44 tissues for infectivity by injecting them into the brains of susceptible mice. In June 1994 a positive result was obtained from the distal ileum (small intestine) of a calf slaughtered only six months into the experiment. This was an event of some significance. Hitherto only brain and spinal cord of BSE victims had been found to be infective. Furthermore, tissues from calves of less than six months of age had been excluded from the SBO ban. MAFF Ministers and officials were informed of the result and Mrs Bottomley, the Secretary of State for Health, was informed the same day.

It was agreed between the two Departments that SEAC’s advice should be obtained before this experimental result was made public. An ‘exceptional meeting’ was called on 25 June 1994. SEAC expressed the view that any risk to humans from food derived from calves was minuscule, but added that it was not possible to give a definitive answer:

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81 The pathogenesis experiment
There is a theoretical risk and Government could respond by a limited SBO ban for calves to exclude the intestines.

699 Over the weekend Mr Meldrum and MAFF officials held lengthy meetings with Dr Calman, the CMO. Dr Calman said that he would be advising Ministers that the distal ileum and thymus of calves should be proscribed as SBO. Those present agreed with his conclusion. Officials met with MAFF Ministers the next day. The point was made that the proposed ban would have a serious effect on the export of calves and have a knock-on effect on the price of beef. Mrs Shephard responded that where public health was concerned, trade was the least important consideration. She later met with Dr Calman to discuss the terms of the ban.

700 MAFF at once sent letters to operators of all slaughterhouses, telling them of the proposed extension of the SBO ban and asking them to give effect to it on a voluntary basis, pending amendment of the Regulations.

701 How the news of the experiment result and the action to be taken should be made public was the subject of discussion in the Cabinet. A draft press release prepared by the CMO was considered. It included a statement that the risk to human health was considered to be ‘minuscule’. In discussion it was suggested that this should be deleted, so that the statement would indicate that there was no risk at all. Mr Major, in summing up, said that Mrs Shephard should proceed with the announcement as planned.

702 A lengthy press release was issued on 30 June, accurately describing the course of events, and setting out SEAC’s advice in full.

703 This decision was a model of how government ought to handle such an issue.

- SEAC’s advice was sought as to the implications of the finding in the pathogenesis experiment.
- SEAC limited its advice to the effect this result had on the question of risk of transmission to humans and did not recommend the appropriate policy decision.
- MAFF and DH worked closely together in considering the appropriate response.
- The issue was discussed with Mrs Shephard at a meeting at which the CMO expressed his advice in favour of an extension to the SBO ban.
- The effect that such an extension would have on trade was considered.
- The Minister and the Parliamentary Secretary were in agreement that ‘protecting the public health was the first of MAFF’s aims’. The CMO’s advice would be followed, notwithstanding the potential for serious impact on trade.
- The practical implications were considered.
- The results of the experiment and the Government’s response were announced without delay.
• There was swift consultation and prompt action. Slaughterhouses, local authorities and bodies consulted were individually informed of the extension of the Regulations.

**Advances in knowledge of BSE**

704 Between 1991 and 1995 a lot more was learned about BSE. Advances in knowledge up to about September 1994 were summarised in a Report produced by SEAC in September 1994 and published in February the following year. The following we find particularly significant:

- By September 1994, 57 cats had been confirmed as having contracted FSE, presumptively from feed containing the BSE agent.
- The following animals had contracted spongiform encephalopathies (SEs), in most cases presumptively from feed containing the BSE agent:
  - Nyala
  - Gemsbok
  - Arabian oryx
  - Greater kudu
  - Eland
  - Moufflon
  - Puma
  - Cheetah
  - Scimitar-horned oryx.

705 Strain-typing showed that, in contrast to scrapie, which had a number of different strains, cases of BSE from different parts of the United Kingdom and in different years were indistinguishable from each other but distinct from all previously studied laboratory strains of scrapie.

706 In addition to the natural transmissions set out above, on 14 February 1992 BSE was found to have been successfully transmitted to a marmoset by cerebral inoculation. This was the first transmission to a primate. A meeting of SEAC was immediately called to consider the implications of this. SEAC concluded that as marmosets had in the past been infected with SEs, including scrapie, using similar methods, the results were not surprising and had no implications for the safeguards already in place for human and animal health.

707 We have emphasised those last words, for they were significant. SEAC’s ‘public advices’ on risk tended to focus on the question of whether the
precautionary safeguards in place were adequate to protect the public. They did not comment on the effect that events had on the assessment of the risk that BSE might be transmissible to humans. Thus the impression was given that that risk never changed. There is no better illustration of this than the following passage of oral evidence given to us by Mr Gummer:

\[\ldots\] during the period of time in which I was Minister and my junior Ministers were with me, that science was tested all the time, but it did not change. The advice was and continued to be that the risk to human beings was remote . . .\(^3\)

708 To the casual reader of SEAC’s 1994 Report, nothing had changed. Thus, under the heading of risk assessment, SEAC wrote:

Our conclusion therefore is that, as the Southwood Working Party determined, taking all the available evidence together, the risk to man from BSE is remote.

709 The careful reader, however, might have noted this passage which followed:

In conclusion, therefore, our scientific assessment is that the risk to man and other species from BSE is remote because the control measures now in place are adequate to eliminate or reduce any risk to a negligible level. We do however point out that any species exposed already and before any bans were effective could be incubating disease, and therefore continuous monitoring is very important until any possible incubation period has been exceeded.

710 SEAC only evaluated the risk as still remote because precautionary measures, and in particular the human SBO ban, had been put in place. The Southwood Working Party, however, had not taken that view – at least in relation to human food, where they considered the risk remote even without an SBO ban.

711 The advances in knowledge by September 1994 significantly altered the scientific evaluation of the risk that BSE might be transmissible to humans. Professor John Collinge\(^4\) told us:

Certainly the appearance in domestic and captive wild cats was a very important development. It demonstrated that you could no longer really plausibly argue that BSE was just scrapie in cows with all the same properties. This agent, wherever it had originated from, had quite different biological properties to scrapie as manifested by the extended host range of affected species, including things like nyala and kudu as well as the cats that had not been affected by scrapie before, so far as we were aware.

712 Dr Tyrrell confirmed that the transmission of BSE to cats and wild cats had shifted his perception of the risk of transmissibility ‘a bit’. Dr Kimberlin said that his reaction to the cat was:

\[^3\] T94 pp. 75–6
\[^4\] Professor of Molecular Neurogenetics at St Mary’s Hospital, London; a member of SEAC since December 1995
Thank God we have got the SBO ban because if it should so happen that the species barrier between cattle and humans is no higher than between cattle and cats . . . then we would have a problem.

713 We do not criticise SEAC for what was a detailed and careful analysis of the existing data. Nonetheless we think it a pity that its Report did not spell out more clearly and simply the fact that perception of risk had changed since Southwood. Had the Committee done so, its Report might have attracted some attention and resulted in the public being better informed about risk. As it was, the Report appears to have attracted no press coverage.

Knowledge about dose

714 One important experimental result did not receive comment in SEAC’s 1994 Report. The NPU had succeeded in transmitting BSE to sheep using an oral dose of no more than ½ gram of BSE-infected brain. What is more, the sheep infected were of a breed not susceptible to scrapie. The interim result of this experiment was known in November 1990 and published in the *Veterinary Record* in October 1993. The significance of this experiment seems to have been totally overlooked by MAFF officials, and indeed by SEAC. We have not been able to discover why this was.

715 The CVL had, in January 1992, initiated an ‘attack rate’ experiment under which they had fed different quantities of BSE brain to cattle. The smallest quantity was 1 gram and, in September 1994, MAFF officials learned that this had transmitted the disease. There was general surprise and concern that such a small quantity had proved infective. This result demonstrated the importance of avoiding:

- contamination of MBM designed for animal feed with SBO in the course of rendering; and
- contamination of cattle feed with pig and poultry feed containing that contaminated MBM in the feedmills.

716 Had the significance of the NPU experiment been drawn to the attention of MAFF officials in November 1990, the extent of the danger of cross-contamination might have been appreciated four years earlier.

Two dairy farmers die from CJD

717 In May 1990, in accordance with a recommendation of the Southwood Working Party, the CJD Surveillance Unit (CJDSU) had been set up under Dr Robert Will. Its main objective was to identify any change in the epidemiological characteristics of CJD cases and to assess the extent to which they were linked to the occurrence of BSE. The CJDSU summarised its progress and findings in a series of annual reports, and Dr Will submitted articles about these to *The Lancet*. Dr Will was a member of SEAC, and findings of the CJDSU were reported to SEAC when they met.

85 Consultant Neurologist at the Department of Clinical Neurosciences, Western General Hospital, Edinburgh. Volume 8 gives a fuller description of the establishment and work of the CJDSU.
There was a more immediate link with DH through Dr Ailsa Wight who, in September 1991, took over from Dr Pickles the responsibility for provision within DH of medical advice in relation to BSE and CJD and was DH’s observer on SEAC. Thus DH and, through DH, MAFF usually received confidential information about victims of CJD well before news of them became public. There was ample time to decide upon the appropriate official response to such news.

On 6 March 1993 *The Lancet* published an article by Dr Will on the first recorded case of CJD in a dairy farmer. He had died the previous October. He had had BSE in his herd. The article concluded that the case was most likely to have been a chance finding and that ‘a causal link with BSE is at most conjectural’. The media naturally developed the conjecture that there might be a link between this case and BSE. Professor Lacey did not think that there was. Interviewed on the radio, he gave his opinion that the case had occurred too soon to have been contracted from BSE.

The media interest led Mr Gummer to discuss a press release with Dr Calman, who agreed that it was necessary to reassure the public. On 11 March the CMO issued a public statement. This repeated the assurance about the safety of beef given by his predecessor, Sir Donald Acheson, in 1990 that we have criticised above. 86

We found it open to precisely the same criticism. Dr Calman was seeking to address fears that a farmer had somehow caught BSE from his cattle. Responding to such fears by emphasising that it was safe to eat beef naturally carried the inference that transmission of the disease from cow to human was impossible. That Dr Calman’s statement was in fact misinterpreted in this way is demonstrated by *The Mirror*’s report that:

Chief Medical Officer Dr Kenneth Calman had insisted that BSE could not cause a related brain disease in humans.

Dr Calman should have been careful not to make a statement in terms that suggested such a belief, for he considered that there was a real potential for BSE to move from cows to humans.

On 23 March Mr Lowson commented in a minute for Mr Gummer’s attention:

It was not easy to get the CMO to make a statement in response to recent press speculation about a possible link between BSE and human disease.

The reason why MAFF wished the CMO to make a statement was, no doubt, because of the damage that public concern about BSE might cause to the beef industry. The evidence suggests that Dr Calman had reservations about complying with MAFF’s request for assistance. Having decided to comply with that request and make a public statement, he should have taken great care to ensure that his statement fairly reflected his appraisal of the risk posed by BSE.

On 12 August 1993 *The Daily Mail* recorded the death from CJD, earlier in the month, of a second dairy farmer, who had had BSE in his herd. The CJDSU had been monitoring this case, and had concluded that there was nothing to suggest that it was other than a case of sporadic CJD. A DH spokesman was quoted by

86 See para. 657 and following
The Daily Mail as saying that two cases might occur in dairy farmers by chance and that it was not possible to reach any conclusions about a link between BSE and CJD.

**Vicky Rimmer**

726 Vicky Rimmer fell ill early in the summer of 1993 at the age of 15. She had a neurodegenerative disease which the medical specialists were unable to identify. In mid-September she went blind and fell into a coma. She remained in a coma until she died on 21 November 1997, over four years later. The CJDSU now attributes her death to CJD, but her illness did not have the characteristics of the cases now classified as vCJD. In January 1994 the CJDSU was unsure whether her illness was CJD.

727 It was in January 1994 that the press first started to write about Vicky Rimmer, quoting her grandmother’s belief that Vicky had been infected as a result of eating beef infected with ‘mad cow disease’. Dr Stephen Dealler and Professor Lacey were reported to have concluded that this was the first case of BSE infecting a member of the human race through food.

728 In response to intense media coverage, Dr Calman released a statement on 26 January. This stated that:

- no one knew what illness the patient was suffering from; and
- on the basis of the work done so far, there was no evidence whatever that BSE caused CJD and, similarly, not the slightest evidence that eating beef or hamburgers caused CJD.

729 We consider that it was reasonable for Dr Calman to make a public statement to counter media reports which suggested that the link between Vicky Rimmer’s disease and eating beefburgers was established. The terms in which he did so were somewhat more emphatic than was desirable, but not to the extent that it would be right to criticise him for his choice of language.

730 Dr Dealler’s and Professor Lacey’s conclusion that Vicky Rimmer had caught BSE through food was speculative. In the next chapter we shall see the first of the cases that have been identified by the CJDSU as cases of vCJD linked to BSE.

**Chinks in the armour – April–December 1995**

731 In this section we shall consider, from the viewpoint of public health, the revelations that followed the takeover by the MHS of enforcement of Regulations in slaughterhouses. We shall consider how government responded to what was discovered. We shall look at growing concerns caused by further cases of CJD in farmers and in young people and we shall look at official statements and media comment in relation to the risk posed by BSE to humans. We shall cover the period up to the end of the year. 87

87 Ministerial changes in MAFF and DH during this period included the following: Mr Douglas Hogg succeeded Mr William Waldegrave as Minister of Agriculture, Fisheries and Food on 5 July 1995. Mr Stephen Dorrell succeeded Mrs Bottomley as Secretary of State for Health in July 1995
732 The MHS took over on 1 April 1995 with Mr Johnston McNeill as Chief Executive and Mr Philip Corrigan as Head of Operations. Mr Corrigan was succeeded in August 1995 by Mr Peter Soul. The MHS commissioned a survey of standards at slaughterhouses from Eville & Jones, a firm of private veterinarians which provided Official Veterinary Surgeon (OVS) inspection services. Deficiencies summarised in its report which existed at the time of takeover on 1 April 1995, included widespread lack of awareness of SBO legislative requirements and instances of incomplete removal of spinal cord. The report noted significant improvements over the five months between April and August 1995. When Dr Cawthorne at MAFF learned of this report, he asked himself why these deficiencies had not been drawn to the attention of the SVS or the Meat Hygiene Division. We think that the explanation must have been poor OVS/local authority/VFS liaison.

733 The MHS also organised an internal survey of slaughterhouse standards by its own Hygiene Advice Teams. These teams encountered occasional failures fully to remove tonsils, thymus and spinal cord, but felt able to report that SBO removal in the slaughterhall was carried out in accordance with the legislation.

734 VFS staff were instructed to visit slaughterhouses once every two months and carry out a thorough inspection in company with MHS staff. They were instructed to examine, in particular, methods used to separate SBO from material intended for human consumption as well as staining and disposal of SBO. As we have seen, when looking at animal health, inadequacies in the handling of SBO led to the institution of a period of national surveillance.

735 In May 1995 Mr Meldrum gave instructions that Meat Hygiene Inspectors (MHIs) should be told to take particular note of the operation of removing the spinal cord from the vertebrae. This led to an Information Note being circulated to all MHIs and OVSs instructing them to ensure the complete removal of spinal cord from the vertebral column. In July the question was raised as to whether a Meat Hygiene Inspector could refuse to apply the health stamp on the ground that not all spinal cord had been removed. MAFF lawyers replied in the affirmative. We think it significant that this should be in doubt over five years after the SBO Regulations were introduced.

736 The July report on the results of the first round of national surveillance found widespread deficiencies in the handling of SBO, but made no mention of deficiencies in removing SBO from the carcass. In a submission to Mr Hogg, Mr Packer noted that the implications of the failures in the controls were for animal health, not for human health. Mr Meldrum confirmed that there was no public health problem because there was no question of SBO entering the human food chain.

737 By the time of the second round of national surveillance, the importance of ensuring the complete removal of spinal cord had been specifically drawn to the attention of the VFS in accordance with Mr Meldrum’s instructions. On the second round of inspection, three instances were discovered of failure to remove SBO from the carcass. When this was reported to Mrs Browning, the Parliamentary Secretary, and to Mr Hogg, both were perturbed. Mr Richard Carden88 suggested that enforcement should be tightened up and prosecutions launched where companies repeatedly infringed the Regulations. Mr Hogg agreed that this should be done.

88 The Grade 2 head of MAFF’s Food Safety Directorate
738 The surveillance results were reported to DH. Mr Meldrum assured Dr Metters that specific and detailed instructions had since been issued by the MHS to their staff on the checks necessary to ensure compliance with the legislation. Dr Calman received copies of this correspondence and resolved to look carefully at the next round of surveillance in order to see whether or not the deficiencies that had been discovered were isolated incidents.

739 On 23 October Mr Meldrum wrote to Dr Calman informing him that SVS staff had found a further four cases of health-stamped carcasses with portions of spinal cord attached. He described these results as ‘disappointing’, but added:

It is inevitable that instances of the type referred to will continue to be reported albeit at low frequencies since no system operated by humans can deliver at 100 per cent efficiency all the time.

740 Two days later Dr Calman met Mr Packer to ‘express disquiet about the position on BSE’. Dr Calman said that he ‘could not be so unequivocal as he had been in the past’ about the safety of beef. In a confidential file note he recorded:

The issue remains, however, that the uncertainty has increased, rather than decreased. Urgent action is required to reassure the public that all steps are, and have been, taken to minimise any possible risk.89

741 When Mr Hogg learned of Dr Calman’s concerns, he called a council of war of his junior Ministers and senior officials. We have already recorded, when looking at animal health, Mr Packer’s advice that Mr Hogg should read the riot act to the MHS and the slaughterhouse industry. In the formal instructions that Mr Hogg proceeded to issue to Mr McNeill, he instructed him that his staff:

. . . must ensure that all SBO is removed from a carcass before they give it a health stamp. Failure to do so should be viewed extremely seriously.

742 This led the MHS management to introduce what one union officer described to us as a ‘disciplinary purge’. Immediate and emphatic instructions were issued to the workforce that failure to ensure that all spinal cord was removed would be treated as a serious disciplinary offence. Mr Hogg for his part met with representatives of slaughterhouse operators and told them robustly that he would only be satisfied with 100 per cent compliance with the rules and that those who did not provide this would be prosecuted.

743 On 1 November Mr Don Curry, the chairman of the MLC, wrote a strong letter to Mr Hogg expressing concern at breaches in the integrity of the SBO system, in particular those leading to the four cases in which spinal cord had been found in carcasses that had been passed as fit by meat inspectors for consumption. He wrote:

We detect an attitude in the industry which says, ‘you have told us this disease was not a threat to humans so why do we need all these controls?’ The danger that such an attitude engenders to our market, both at home and overseas, is very worrying indeed.

89 YB95/10.25/16.1–16.2
This was one of a number of occasions in and after 1994 that the MLC commendably urged the importance of compliance with the SBO Regulations both on MAFF and on the industry. We would remark, however, that the attitude of which Mr Curry complained may well have been encouraged by some of the exaggerated reassurances that had been given earlier by the MLC.

On 7 November Dr Calman and Dr Metters met Mr Hogg, Mrs Browning and Mr Packer. Dr Calman did not mince his words. He said he found the attitude of the farming industry and the slaughterhouses astonishing. While there was no evidence that meat was not safe, it could not be said with confidence that no contaminated offal had entered the food chain. If pressed on the safety of food containing MRM, he would be in a difficult position.

On 20 November 1995 MRM was discussed at a meeting between Dr Calman, Mr Meldrum and other officials from both MAFF and DH. Dr Calman suggested that it was impossible to be 100 per cent certain that spinal cord was not being included in MRM derived from spinal column. Mr Meldrum confirmed that this was the position. It was agreed that SEAC should once again be invited to consider MRM.

On this occasion it was DH that had played the lead role in pursuing an issue arising from BSE in respect of the safety of food. Dr (now Sir Kenneth) Calman is to be commended for the vigour of his reaction on learning that segments of spinal cord were escaping the attention of slaughterhouse operatives and meat inspectors. By pursuing this matter with Mr Hogg, and subsequently with Mr Meldrum and other MAFF officials, he was instrumental in ensuring that the question of MRM was brought back before SEAC.

Action at last on MRM

We saw that a paper on MRM was placed before SEAC in August 1994 and deferred. A revised paper was prepared for its meeting on 21 June 1995. This annexed MAFF’s paper on slaughterhouse practices that had been before SEAC in 1990 and the EU Scientific Veterinary Committee’s recommendation that spinal column of cattle slaughtered in the UK should not be used for MRM.

The paper informed SEAC that the transfer of responsibility of meat inspection to the MHS:

\[\text{. . . should ensure that no carcass is permitted to leave the slaughterhouse for human consumption unless the spinal cord has been completely removed.}\]

The paper recommended that:

In the light of the changes which are to be made to the controls on SBO and the methods of enforcing these controls . . . SEAC is recommended to advise that the use of spinal columns from cattle born and slaughtered in the UK for the mechanical recovery of meat may continue.
751 SEAC duly concluded that:

\[ \ldots \text{provided in the slaughtering process the removal of spinal cord was done} \]
\[ \text{properly, the MRM process was safe and there was no reason for the} \]
\[ \text{Committee to change its advice.}^{90} \]

752 Just as in 1990, SEAC’s advice was premised on the total removal of
spinal cord.

753 When SEAC met on 28 November, it had a new chairman. Professor (later Sir)
John Pattison, who had been a member of the Committee since January 1995, had
replaced Dr Tyrrell. SEAC was informed that there had been 14 instances, involving
at least 25 carcasses, in which SBO had been left attached to carcasses after
dressing. The Committee was told of the steps that had been taken to tighten up
enforcement of the Regulations. After protracted debate, SEAC decided that until it
was clear that removal of spinal cord was being undertaken properly in all cases it
would be prudent, as a precaution, to suspend the use of vertebrae from cattle aged
over six months in the production of MRM.

754 SEAC’s advice was accepted by both Mr Hogg and Mr Dorrell. Despite
considerable resistance from the industry, the Order\(^{91}\) banning the use of bovine
vertebral column for the recovery of meat by mechanical means was made on
14 December 1995 and came into force the following day. For practical reasons, no
exception was made in respect of calves aged less than six months.

755 The minutes of SEAC’s meeting suggest that the decision was a close-run
thing, with arguments from Dr Will and Professor Pattison winning the day. Would
the decision have been the same, if the Committee had not known about the result
of the attack rate experiment and had been unaware of concerns raised by incidents
of CJD in farmers and young people? Would SEAC in 1990 have taken the same
decision, if aware then of the extent of the failures to remove spinal cord identified
in 1995? We do not believe that a confident answer can be given to either question.

756 As to preventing fragments of spinal cord getting into human food, SEAC’s
decision was to a large extent a case of shutting the stable door. Measures were in
hand to ensure effective implementation of the duty to remove all spinal cord from
the carcass. The more significant benefit of the new Order was that it kept dorsal
root ganglia out of human food. The benefit was not appreciated at the time. The
pathogenesis experiment had not yet shown these to be infective – the positive result
was to come later.

757 Has MRM infected humans with BSE in the years up to 1995, and if so on what
scale? It is too early to attempt to answer this question. What is, we think, now clear
is that this was the route by which infectious material was most likely to end up in
human food during that period.

**Cause for concern**

758 In the second half of 1995, the public learned of the death from CJD of a third,
and then a fourth, dairy farmer. The third had died in December 1994. There had

\[^{90}\] YB95/6.21/2.8
\[^{91}\] The Specified Bovine Offal (Amendment) Order 1995
been two cases of BSE on the farm where he worked. SEAC held a special meeting
to consider this case on 13 January 1995. They concluded that the occurrence of
three cases of CJD in dairy farmers with BSE in their herds was worrying, but that
more information was needed before any conclusions could be drawn. The death of
this farmer was reported in the national press on 29 September. On that day the
CMO learned of a suspected fourth case.

759 Again SEAC met in special session. The fourth farmer was still alive, but
suspected of having CJD. His herd had had a single case of BSE in 1991.

760 At this special meeting, SEAC considered that although four cases were likely
to be more than might be expected as a chance phenomenon for the known
population frequency of the disease, analysis of CJD in Europe showed that the
incidence of the disease in farmers was similar in countries with no or very few
cases of BSE. An important factor was that the clinical and pathological features
of these cases were no different from those found in classical sporadic CJD.
SEAC released a statement of its conclusions.

761 These findings remain unexplained. Among occupational groups exposed to
BSE, farmers remain the exception in having such an excess over the incidence of
CJD for the population as a whole. Recent transmission studies in mice indicate that
the causal agent in these cases has various characteristics, including incubation
period and neuropathology, which are distinct from both vCJD and BSE.

762 Thus they appear to have been typical cases of sporadic CJD, although it is not
easy to accept that these four cases were simply a statistical anomaly.

763 The farmers were not the only cases of CJD that were causing anxiety. Two
more adolescents had been diagnosed as having contracted the disease. SEAC
released a statement saying that it was not possible to draw any conclusions from
these cases, which needed to be studied in great detail. SEAC added that cases of
CJD had been found in the same age-group in other countries. This was true, but
such cases were extremely rare. Sporadic CJD almost always attacks the elderly.

764 Further reports of suspected cases of CJD in young people were received by
the CJDSU. By the year-end, ten cases of patients aged under 50 had been referred
to them. Three of those had been confirmed by neuropathology.

765 The scientists of the CJDSU were not alone in becoming concerned about
cases of CJD in young people. Professor Collinge, who was conducting BSE
experiments with transgenic mice, recognised these cases as extraordinary and
feared that they could represent the transmission of BSE to humans. At a meeting
with Dr Calman at the end of October he told him of his fears. In December 1995
Professor Collinge accepted an invitation to become a member of SEAC.

Public debate

766 Other scientists expressed their concerns more publicly. Dr Stephen Dealler
and Dr Will Patterson had been carrying out calculations of the number of cattle
subclinically infected with BSE that must have been slaughtered and eaten. Their
conclusion that these totalled 1.5 million received wide publicity in the press.
'Most beef eaten already exposed to mad cow agent’ was the headline in the Daily Telegraph.

On 1 December Sir Bernard Tomlinson, Emeritus Professor of Pathology at Newcastle University, said in a radio interview that he would not eat a beefburger and that all offal should be kept from public consumption. His views received wide press coverage. In The Times, he was quoted as saying:

I have become more cautious because of recent CJD cases in dairy farmers and teenagers. These seem to be more than coincidences. My feeling is that it is possible that BSE is transmitting to humans.

In a television interview on 3 December, Mr Dorrell explained that the Government had removed from the food chain all organs which could possibly carry the risk of transmission of BSE – even if it were transmissible. ‘So there is, you are saying, no conceivable risk from what is now in the food chain; that’s the position?’ asked the interviewer, Jonathan Dimbleby. ‘That is the position’, confirmed Mr Dorrell. Mr Dorrell told us that he regretted that answer because it went further than the words of his Chief Medical Officer. We think that it was regrettable that he gave a public assurance in terms more extreme than he could justify. He told us that it led to his being quoted in the press the next day as saying that there was no conceivable risk from eating beef.

The words of the CMO, to which Mr Dorrell referred, had been included in a press release in October to mark the release of the CJDSU’s fourth annual report. Dr Calman stated:

I continue to be satisfied that there is currently no scientific evidence of a link between meat eating and development of CJD and that beef and other meats are safe to eat. However, in view of the long incubation period of CJD, it is important that the Unit continues its careful surveillance of CJD for some years to come.

We do not think that Dr Calman should have gone out of his way on this occasion to volunteer the unqualified statement that he was satisfied that beef and other meats were safe to eat. We believe that at this time Dr Calman had concerns about slaughterhouse practices, which he expressed to Mr Packer later in the month. He also had concerns about the dairy farmers that had contracted BSE. If he was going to make a statement about the safety of beef, he should have made it plain that this depended on an improved standard of compliance with the SBO Regulations by those who worked in slaughterhouses.

Neither Dr Calman’s assurance about beef in October, nor Mr Dorrell’s assertion that there was no conceivable BSE risk from food, did much to quell the alarm raised by Sir Bernard Tomlinson. The Local Authorities Catering Association received hundreds of calls from worried parents and head teachers about school meals, and advised school cooks to substitute turkey, chicken and pork for beef. On 8 December The Independent reported that 1,150 schools had taken beef off the menu or were offering alternatives.

92 YB95/10.05/3.2
On learning that schools and caterers were beginning to remove beef from the menu, Dr Robert Kendell, the Chief Medical Officer for Scotland, decided to make a public statement. He did this on 7 December in these terms:

The Government’s independent scientific advisers are saying consistently that there is no evidence at all that eating beef or other foods derived from beef is dangerous. My general advice to people is therefore to carry on eating what you want to eat as you were before.

We have no evidence of any connection between BSE and CJD. However, both conditions are being monitored and studied by scientists, in this country and abroad, as there is much about both that is still unknown.  

We have the same concerns about this statement that we had about Dr Calman’s. Dr Kendell told us that, from early 1995 onwards, he was becoming increasingly concerned that BSE might have implications for human health. He told us that some of his concerns were allayed by Mr Hogg’s firm stance on the SBO Regulations and the ban on the use of bovine vertebral column for the recovery of MRM. We think that Dr Kendell should have made it plain in his statement that the safety of eating beef was dependent on strict compliance with the precautionary measures introduced by the Government.

BSE was discussed in the Cabinet on 7 December. Mr Hogg explained about the problems discovered in slaughterhouses and the action that he had decided to take in relation to MRM. In summing up the discussion which followed, the Prime Minister said:

. . . that there was a disturbing degree of public anxiety over BSE once more and that the Government must be ready with an immediate and coherent response. The key element in that response should continue to be the assurance from the Government’s chief professional advisers that there was no evidence that the disease could be transmitted to humans.

A campaign of reassurance

MAFF Ministers and officials met the same afternoon to discuss the way ahead. They decided to use SEAC to try to get the message across that beef was safe. Professor Pattison would be invited to draft a letter to the press. Mr Hogg instructed Mr Eddy to draft a questionnaire for SEAC with the intention that the answers that they gave should be made public.

On 8 December The Independent published a lengthy article by Dr Will. The tone of this was generally reassuring, although it contained a caveat that the possibility of a link between BSE and CJD could not be excluded for many years because of the long incubation period. It ended:

I do not believe it is reasonable to conclude that there is significant risk from eating beef. I have therefore not altered my consumption of beef or beef products, and neither have any of my colleagues at the CJD Surveillance Unit.
On the same day Professor Pattison and Dr Will, acting on behalf of SEAC, sent a long letter about the safety of beef to *The Times*. *The Times* was only prepared to publish this in an edited form, an offer which was declined. The letter was adapted and turned into a letter to Mr Dorrell and Mr Hogg, and presented to the press at a press conference on 14 December, attended by Mr Hogg, Mrs Browning, Dr Calman, Professor Pattison, and Mr McNeill (of the MHS). The letter, after describing the precautionary measures that the Government had taken, and the strengthening of those measures, stated that:

On the basis of the measures taken SEAC has a high degree of confidence that the beef reaching the shops is safe to eat.

This was a message that those who gave the press conference did their best to reinforce.

It is apparent to us that members of SEAC were pressed by government to intervene in the public debate about the safety of beef. We believe that this is something that was likely also to be apparent to members of the public. SEAC’s proper role was to provide expert advice to the Government – advice which it was normally desirable to make public. If it appeared to the public that members of SEAC were being used to provide publicity to bolster the beef market, SEAC’s credibility was likely to be damaged. We consider there was a danger of that on this occasion. When we look back on events in December 1995, we think that it would have been preferable if SEAC had not become involved in the public debate in this manner.

But for the intervention of Mr (now Sir Richard) Packer, Professor Pattison would have become even more embroiled in the ‘beef is safe’ campaign. After the press conference on 14 December, the MLC filmed an interview with Professor Pattison with the intention of using this as part of its advertisements for beef that were to be televised. When Mr Packer learned of this, he was concerned that it might ‘be interpreted as associating Professor Pattison unduly with the beef lobby, or in other words, could be used to justify claims that he lacked independence’.

Mr Packer intervened and Mr Colin Maclean of the MLC reluctantly agreed that the recorded interview with Professor Pattison should not be used for advertising purposes.

We consider that Mr Packer’s concerns were well founded. We commend him for his prompt intervention. This was an incident in a vigorous advertising campaign which the MLC ran in 1995. In the course of that campaign there were occasions when hyperbole displaced accuracy. Our criticisms of these can be found in Chapter 6 of vol. 6: *Human Health, 1989–1996*. Although he was not always personally involved in the choice of wording in the MLC’s promotional material, Mr Maclean has accepted that as Director-General he was responsible for it.

We come to the last section of this part of our narrative – the final months leading up to the Government’s announcement that young victims of a new variant of CJD had probably caught BSE. In the final days leading up to 20 March 1996,
there was frantic activity. In January and February the contemporary documents give no hint that anyone in MAFF or DH appreciated the storm that was gathering. Do they paint an accurate picture? Were MAFF and DH taken by surprise when scientists at the CJDSU identified a new variant of CJD and SEAC concluded that it was probably linked to BSE? Had they given any thought to how they might respond in that eventuality? Should they have done? Was the action taken in the final days an adequate response to the situation? If there was any delay in waking up to the fact that a crisis might be approaching, did it affect the outcome? These are some of the questions that we shall be considering in this section.

783 Before turning to these important matters, we propose to follow a sub-plot of less significance. In the last section, we looked at action being taken by the Government and by the MLC in an attempt to allay concerns about whether it was safe to eat beef. Further steps to achieve this object continued to be taken in 1996. We consider these both with a view to examining whether they were appropriate in the circumstances and for the light they throw on the extent to which those involved appreciated the storm that was about to break.

Mr Hogg’s questions

784 In the previous section (paragraph 775) we saw that Mr Hogg decided that SEAC should be asked a number of questions. This was not because he wished to know the answers. It was in the hope that the answers would be suitable to publish in order to give reassurance to those who were worried about the safety of eating beef.

785 This was a venture of which the MLC approved. It also hoped to make use of SEAC’s answers in its campaign to restore consumer confidence in beef. Dr Kimberlin, who was a member of SEAC, was also retained as a paid consultant to the MLC. Mr Colin Maclean sent Dr Kimberlin a list of model answers to SEAC’s questions. He explained:

We agree that we need succinct answers to these questions and my colleagues in our PR company . . . have drafted the sort of answers they would like to see (although they cannot put words into SEAC’s mouth!). However, this should give you some feel for what we would initially like before you face the questions in SEAC. Anything you can do to help get crisp answers would be a big help.

786 The model answers, as one might expect, all provided the maximum reassurance as to the safety of beef.

787 We do not think that Mr Maclean should have asked Dr Kimberlin to provide this assistance. It put him in a position where his interest in helping the MLC might reasonably have been perceived to conflict with his duties as a member of SEAC. Dr Kimberlin did not perceive that the request created a potential conflict of interest. He told us that when addressing the questions as a member of SEAC he was wearing his SEAC hat, not his MLC hat. He did not inform SEAC of the MLC’s request when discussing the answers to the questions.
SEAC considered the questions when they met on 5 January 1996 and again on 1 February. The Committee members did not agree on all the answers and the exercise was never completed; it was overtaken by events in March. Dr Kimberlin suggested answers of the kind that the MLC wanted. One was virtually verbatim in the form of the suggested model answers. All were reassuring about the safety of beef. We do not suggest that these represented other than Dr Kimberlin’s own opinions. Thus there was in fact no conflict between his duty to advise objectively as a member of SEAC and the interests of his client, the MLC. There was, nonetheless, the appearance of a conflict. Dr Kimberlin should have told the members of SEAC of the request that the MLC had made, so that no one would have been able to suggest at the time or subsequently that he had a hidden agenda.

Suggested answers to the questions from other members of SEAC were not succinct or unequivocal. They would have been quite unsuitable for use in support of a ‘beef is safe’ publicity campaign. We think that these members were not prepared to lend themselves to the exercise that Mr Hogg had planned. With hindsight we can see that it was not a desirable exercise. In the first place, it diverted SEAC from more important work which they might otherwise have been asked to do. In the second place, we consider that the appropriate role for SEAC was to provide advice to the Government, not to provide publicity material to bolster the beef market. In the third place, if SEAC had provided the sound bites which had been wanted, the public would have perceived them for what they were – publicity material – and SEAC’s credibility would have been damaged.

Mr Hogg and his officials gave further consideration to how to support the beef market at a meeting in the middle of January. Mr Hogg concluded that MAFF’s principal role was to put factual information into the public domain and that MAFF should not be involved with the MLC campaign. We think that this was a wise decision. MAFF set about preparing their own information pack and revising two booklets about BSE.

By the end of February MAFF had prepared a leaflet entitled ‘British Beef and BSE: The Facts’, which was intended for a wide distribution. On the front page it stated:

Two facts should be made absolutely clear at the outset:

Fact 1  There is currently no scientific evidence to indicate a link between BSE and CJD.

Fact 2  The independent expert committee set up to advise the Government on all aspects of BSE is satisfied that British beef is safe to eat.

Dr Wight, who was leading for DH on the medical aspects of BSE and CJD and attended SEAC’s meetings as an observer, met with MAFF officials on 28 February. The next day she minuted Dr Metters, suggesting that there was ‘some merit in the leaflet being issued jointly by both Departments’. Dr Metters did not agree. He replied:

... some statements are too definite and in time may be seen to be wrong. We should not follow MAFF’s hyperbole of reassurance. We must leave DH
Ministers and CMO in particular, an escape route if any of these categorical statements turns out to be WRONG.

793 Mr Richard Carden, Head of the Food Safety Directorate, told us that MAFF’s publicity material went to Ministers ‘on the precise day when the first report suggesting there was a new variant of CJD came through’ and that it was overtaken by events.

794 The fact that at the end of February Dr Wight was in favour of DH collaborating with MAFF in putting out this reassuring material suggests that she had no inkling of the storm that was about to break. The same can be said of the MAFF officials who placed the material before their Ministers at the moment that the thunder began to rumble.

SEAC’s meetings on 5 January and 1 February 1996

795 SEAC met on 5 January 1996. Dr Will updated members on the current state of CJD surveillance. He drew attention to the number of cases of CJD diagnosed in young people. Between 1970 and 1989 no one under 30 had contracted CJD in the UK. Since 1990 there had been four definite cases and one possible. Two of the cases had unusual pathology and Dr Will thought that there was a very high chance that they were genetic.

796 The minutes of the meeting, as finally agreed, recorded that:

Dr Will was not unduly concerned at the overall number of CJD suspect cases that had occurred in the under 30 age bracket. What he did find worrying was that all the cases had occurred over a very short period. Professor Collinge was extremely worried at the occurrence of this number of young cases in such a short period, which could suggest a link to BSE. He requested that a formal statistical analysis be carried out to assess this further. The Committee concluded that the situation demanded the continuation of intensive monitoring of CJD.

797 Following the meeting, Mr Eddy, SEAC secretariat, sent a full note of the entire proceedings to Mr Meldrum, who had asked for this. Mr Meldrum told us that he was already concerned about the cases of CJD in young people and that Mr Eddy’s minute indicated that there was no additional reason for concern.

798 Dr Wight told us that it was her practice to circulate a minute of SEAC meetings only if they had raised something that was relevant to public health, or required action that the Department needed to take forward, which senior officers needed to be aware of. On this occasion she sent a minute to Dr (now Sir) Kenneth Calman, which recorded the cases of CJD in young persons and added:

Although this is a significant increase over the incidence in the UK in this age group during the preceding surveillance period, it is not without precedent worldwide.

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95 SEAC’s membership had been strengthened by the addition of Professor John Collinge, Dr Michael Painter, Professor Peter Smith and Professor Jeffrey Almond
96 Save for some young people infected as a result of being injected with contaminated growth hormone
97 YB96/1.05/1.8 para. 25
This was an inadequate report of this important item of SEAC’s business. Dr Wight’s minute neither suggested that the figures were cause for concern nor disclosed that the head of the CJDSU considered them cause for concern. The cluster of young cases observed within such a short period were without precedent in the world, let alone in a single country, and there had been no such sporadic cases in the UK in the previous surveillance period. Dr Wight’s statement that ‘it is not without precedent worldwide’ was misleading and encouraged false reassurance. When giving evidence, she commented that her statement had been ‘not quite correct’. She had meant to say that cases in young persons were not without precedent worldwide. She added, ‘I probably dashed this off too quickly.’

Insofar as Dr Wight made no mention of the concerns expressed by Dr Will and Professor Collinge, we do not believe that she appreciated the significance of what was said. We consider that she should have communicated Dr Will’s concerns to the CMO. In the event, her minute went on to deal with recommendations in relation to research, and she appears to have thought that this was the most important item that arose at the meeting, so far as DH was concerned. Dr Wight’s minute was copied to Dr Metters and Dr Eileen Rubery, her immediate superior, among others. It did not alert anyone to the fact that the young victims of CJD were cause for concern. We are not surprised.

SEAC met again on 1 February. Dr Will’s concerns about the young cases of CJD had increased because they appeared to share both a novel pattern of clinical symptoms and a novel pathology, although it was still too soon to reach a concluded judgement about these. Dr Will informed SEAC of these developments. The minutes record that he:

reiterated that the crucial issue is not simply the young age or pathology of recent cases but the short time scale in which 5 cases in individuals under 30 years of age had occurred.

Dr Will told the Committee that his colleague, Dr James Ironside’s, view was that it was premature to decide that these cases were linked with BSE.

Professor Smith confirmed Professor Collinge’s suggestion that these cases were very significant in statistical terms. Professor Pattison’s concern about the cases in young people was minuted. Professor Collinge told us that he reiterated his concerns that this was likely to represent BSE transmission to humans. Dr Will told SEAC that he intended to publish two scientific papers, one being about the young cases of CJD.

Mr Eddy circulated a minute about the meeting to Mr Hogg, Mrs Browning, Mr Packer, Mr Carden and Mr Meldrum. We think that he should have included a clear warning of the concerns that had been expressed about the young cases and the possibility that they might prove to be linked to BSE. He did not do so. He referred to the papers to be published by Dr Will as likely to give rise to problems which were essentially presentational.

Dr Wight minuted Sir Kenneth Calman about the meeting, with copies to Dr Metters and Dr Rubery, among others. Once again her minute was inadequate in that it failed adequately to express the concerns of members of SEAC about the
young cases. In describing the conclusions that might be drawn from these, she used language which suggested that there was, in reality, no likelihood of a link between BSE and a new variant of CJD. We are inclined to think that this was, in fact, Dr Wight’s own understanding. That would explain her support for issuing reassuring publicity, which persisted until the end of the month. Although a careful reading of her minute of the February meeting should have alerted the reader to the fact that young victims were a cause for concern, Dr Wight should have put this beyond doubt by referring to the concerns expressed by Professor Pattison and Professor Collinge.

806 We observed at the start of this section that the contemporary documents gave no indication that either MAFF or DH was aware in February of the storm that was gathering. The evidence given to us by some of the witnesses painted a different picture. We propose to defer our analysis of this evidence until we have taken on the story that is supported by contemporary documents to its close.

**The storm clouds gather**

807 On 1 March Mr Eddy passed on to Mr Meldrum some disconcerting news that he had just received from Dr Wight. It was looking ‘rather firmer’ that the cases of CJD in young people represented the emergence of a new sub-population of the disease. Dr Wight had suggested a meeting between MAFF and DH officials and press officers to discuss how it should be handled. He had agreed with Dr Wight that it would be absolutely essential in handling the news to have some form of statement from SEAC as to the implications. He would keep Mr Meldrum posted on developments.

**Rumbles of thunder**

808 SEAC met on Friday 8 March. Dr Ironside gave a presentation showing that a subset of young people with CJD had been identified with a tendency to a long duration of illness and a unique neuropathology. The pathology differed from the rare young cases of CJD that had occurred abroad.

809 Later that day, Mr Mike Skinner 99 minuted Sir Kenneth Calman and Mr John Horam. 100 He informed them that SEAC had concluded that exposure to BSE in the 1980s was a likely explanation for the novel cases of CJD.

810 Sir Kenneth Calman received Mr Skinner’s minute on Monday 11 March. After discussing the position with his colleagues he decided to call a meeting with MAFF. This took place on 13 March.

811 On 11 March some members of SEAC made a visit to a slaughterhouse. They saw SBO being properly removed, identified and treated, and decided that there was no need to recommend any additional precautionary measures at that stage.

812 On 12 March Mr Eddy minuted Mr Packer to tell him of SEAC’s conclusions about the novel cases of CJD. Mr Packer told us that from that date the pace of

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99 Mr Skinner had succeeded Mr Charles Lister as DH secretary to SEAC in January
100 Mr Horam became a Parliamentary Under-Secretary for Health on 29 November 1995 and was given responsibility for BSE and CJD from 31 January 1996
events became frenetic as it became more apparent every day that they would shortly be at the centre of a major national crisis.

813 Mr Hogg told us that he learned of the approaching crisis when Mr Packer came to his room one evening and told him that SEAC was coming to the view that BSE was transmissible to humans. There was no record of this visit, but Mr Hogg believed that it must have been sometime after SEAC’s meeting on 8 March.

814 On 13 March Sir Kenneth Calman and other DH officials met Mr Packer, Mr Meldrum and MAFF officials. Professor Pattison was also present. Mr Packer advised Professor Pattison that SEAC should consider what action it thought appropriate. If the Committee made a recommendation, the Government would be likely to follow it. He added that it did not follow from the worst case scenario that the current rules needed to be changed. In a minute to Mr Hogg the same day, Mr Packer said that some elements in SEAC were apparently thinking of recommending a ban on the consumption of beef from animals over two years old. He questioned whether the cost of such a measure would be proportionate to any reduction in risk. He added:

> Nevertheless, on the pessimistic scenario worries about the economic consequences of SEAC recommendations would be academic. If SEAC and the CMO issue statements acknowledging the possibility of BSE/CJD transmission I am sure that the public and market reaction would be such that the political and economic effects would be a disaster of unparalleled magnitude so far as UK food scares are concerned. The consumption of beef would be likely to fall immediately to a small proportion of its former level.

815 In discussion on that day and the next, Mr Packer and Mr Hogg agreed that it was necessary to get clear advice from SEAC as to the facts and the steps which the Government should take. They also agreed that they should ‘avoid seeking to influence in any way’ the conclusions to which SEAC would come. On 14 March Mr Hogg wrote to Professor Pattison asking him to submit SEAC’s advice as soon as he was in a position confidently to do so.

### The storm breaks

816 SEAC held an emergency meeting on Saturday 16 March. Dr Will gave details of nine confirmed and three suspect cases of CJD in young patients. Three independent neuropathologists had confirmed that these cases formed ‘a distinct entity unlike any previously seen CJD’. There was intense discussion of what, if any, additional precautionary measures should be put in place. So far as human health was concerned, options discussed included:

- a ban on cattle aged more than 30 months entering the human food chain; and
- a requirement that meat from animals over 30 months old should be completely deboned and their obvious nervous and lymphatic tissue removed.

817 The discussion was inconclusive, apart from agreement that SEAC should ‘recommend that all steps should be taken to ensure that the current SBO ban be enforced completely rigorously’. Finally SEAC agreed on a statement to Ministers.
This noted that it had proved impossible adequately to explain the cases of CJD in young people, and continued:

This is cause for great concern. On current data the most likely explanation at present is that these cases are linked to exposure to BSE before the introduction of the SBO ban in 1989.

818 Mr Carden told the Inquiry that SEAC’s desire to give further thought to the need for new measures caused acute difficulty over the following three days. At meetings during this period, Mr Hogg, Mr Packer and officials explored with Professor Pattison what SEAC’s likely recommendations might be, but it became clear that SEAC could not reach a final view until it had fully assessed all the options.

819 On Monday 18 March Mr Hogg discussed with his officials a plan of action that he had decided on. He suggested that there should be a ban on the sale of beef from animals over 30 months old (what became known as ‘the Over Thirty Month scheme’), and a judicial inquiry into the Government’s handling of BSE. Both Mr Packer and Mr Meldrum questioned whether the 30 months scheme was proportionate and cautioned against taking action ahead of advice from SEAC. Mr Hogg said that he was not prepared to rely on the SBO ban as the sole line of defence when the controls were not being implemented perfectly. He wanted ‘belt and braces’. Furthermore he was minded to recall all beef products from the food chain. In the early afternoon Mr Hogg had a meeting with Professor Pattison, who said that SEAC would not be in a position to advise until after its next meeting, which was scheduled for 23/24 March. He expressed a personal view that Mr Hogg’s proposal of a 30 months scheme was ‘justifiable, logical and not irrational’.

820 Before his meeting with Professor Pattison, Mr Hogg had signed a letter to the Prime Minister, to be sent jointly by himself and Mr Dorrell. This explained what had occurred to date and said that a detailed analysis of what would need to be done would depend in part on SEAC’s recommendations and the policy conclusions that would flow from them. Before Mr Major had seen this, Mr Hogg told Mr Michael Heseltine, the Deputy Prime Minister, about the information it contained. Mr Heseltine was plainly horrified. He asked about the implications of slaughtering the entire national herd, and interrupted a meeting that Mr Major was holding to draw his attention to the joint letter.

821 Later in the day Mr Hogg sent a second letter to the Prime Minister. This set out his proposal for the 30 month scheme. It raised the possibility of withdrawing all beef products from the food chain and proposed a judicial inquiry into the Government’s reaction to BSE.

822 In the early evening Mr Hogg and Mr Dorrell met, accompanied by their officials. Mr Hogg told Mr Dorrell of his proposal for a ban on beef from animals over 30 months old and for a judicial inquiry. The implications for DH of SEAC’s findings were discussed. These included investigations into the safety of products other than food which had bovine content, such as vaccines.
Late in the evening Mr Hogg, Mr Dorrell and other members of the Cabinet met the Prime Minister. It was decided to call a ministerial meeting the following day and invite the CMO, the CVO and Professor Pattison to give their advice.

At the ministerial meeting on the morning of Tuesday 19 March, Mr Hogg told us that his recommendations were comprehensively rejected by his colleagues and that he accepted the decision of the meeting, although he believed it to be mistaken. This rejection is not clearly apparent from the contemporary record of the meeting. What is clear is that Professor Pattison would not be drawn into giving specific advice in advance of SEAC’s meeting, scheduled for the weekend. After lengthy discussion it was decided that further information from SEAC was necessary in order to enable the Government to make a statement that included something of substance. ‘An early meeting of SEAC would therefore be encouraged.’

Encouragement resulted, by 4.00 in the afternoon, in the assembling of Professors Pattison, Almond, Smith and Collinge and Dr Will in London, and the establishment of telephone linkage with Mr Bradley and Dr Kimberlin in Paris, where they had been attending a meeting of the Office International des Epizooties. Different options were discussed at length. By late in the evening no conclusion had been reached, but the meeting had received a message that the Government needed advice by 1030 the next morning. The meeting adjourned until 0800 the next day.

On 20 March it became clear that the news about BSE had leaked. ‘Official: Mad cow can kill you’, announced the headline of The Mirror. Other newspapers also carried the story that the Government was to announce the possibility that BSE could be transmitted to humans.

SEAC reconvened at 0800. By 0930 the Committee had agreed a statement. After saying that 10 cases of CJD in young people had been identified, this continued:

On current data and in the absence of any credible alternative the most likely explanation at present is that these cases are linked to exposure to BSE before the introduction of the SBO ban in 1989.

CJD remains a rare disease and it is too early to predict how many further cases, if any, there will be of this new form.

The Committee went on to make the following recommendations:

a. that carcasses from cattle aged over 30 months must be deboned in licensed plants supervised by the Meat Hygiene Service and the trimmings must be classified as SBO.

b. prohibition on the use of mammalian meat and bonemeal in feed for Rall farm animals.

c. that HSE and ACDP, in consultation with SEAC, should urgently review their advice in the light of these findings.

d. that the Committee urgently consider what further research is necessary.
The Committee does not consider that these findings lead it to revise its advice on the safety of milk.

If the recommendations set out above are carried out the Committee concluded that the risk from eating beef is now likely to be extremely small.

828 The Cabinet met at 1045 to consider SEAC’s statement and a statement that Sir Kenneth Calman had prepared. It was decided that SEAC’s recommendations would be accepted in full. It was also agreed that both Mr Dorrell and Mr Hogg should make statements to the House of Commons.

829 That afternoon Mr Dorrell made the first statement to the House. He described the CJD Surveillance Unit’s findings of a new variant of CJD in young people and SEAC’s conclusion that the most likely explanation was that those cases were linked to exposure to BSE before the introduction of the SBO ban in 1989. He explained the recommendations that SEAC had made and said that the Government had accepted them in full and would implement them as soon as possible. He then turned to a question that Sir Kenneth Calman had raised that morning – the question of whether children were more at risk than adults of contracting CJD. He stated:

There is at present no evidence for age sensitivity and the scientific evidence for the risks of developing CJD in those who eat meat in childhood has not changed as a result of the new findings. However, parents will be concerned about the implications for their children, and I have asked the advisory committee to provide specific advice on that issue following its next meeting.

830 Mr Hogg followed with his statement. He confirmed that the Government had accepted SEAC’s recommendation that carcasses from cattle over 30 months must be ‘deboned in specially licensed plants supervised by the MHS, and that any trimmings would be kept out of both the human and the animal food chains. In addition, Mr Hogg explained that he had instructed that existing controls in slaughterhouses and other meat plants and in feedmills should be more rigorously enforced. He emphasised that if the public accepted ‘the best opinion that we have’ that beef and beef products could be eaten with confidence, then he believed there would be no damage to the British beef market.

Postscript

831 This brings the period with which this Inquiry is concerned to an end. We should, however, record that on 3 April 1996 Mr Hogg announced to Parliament that the 30 month scheme that he had favoured would be put in place rather than the deboning scheme that SEAC had recommended. The principal reason for this change of policy was that the deboning scheme did not suffice to allay the anxieties of the consumer. Furthermore, within 24 hours of the Government’s announcement accepting SEAC’s advice, supermarkets made it clear that they would not be willing to sell meat from animals aged more than 30 months. A further, though subsidiary, problem was that the capacity of deboning plants was not enough to provide for the deboning under official supervision of all beef. It may be that a further motivation for the change was that it might help to persuade the EU to reverse the ban, which it had just imposed, on all British beef.
We have asked ourselves whether these problems that confronted the Government in its choice of policy option could not and should not have been foreseen. This leads us to the question of the extent to which there was any contingency planning in the months leading up to 20 March.

**Contingency planning**

At the meeting of the MAFF Consumer Panel, set up by Mr Gummer, of 24 January 1996, MAFF tabled a paper which included details of the recent young victims of CJD. Dr Godfrey, a member of the Panel, wrote a response, dealing with what he accepted was the unlikely possibility that they might prove to have been infected by BSE. He commented:

> If the tiny cluster is due to people having been infected, further cases are likely, perhaps many of them. It seems best for government to plan now for this highly improbable possibility. This should include: (a) taking statistical advice on what will be taken as significant evidence, leading to action; (b) what advice should be given to consumers. It should be the aim to get advice across to us before the predictable reactions to what would be major tragedy, but also a major news story; (c) what action should be taken, in this hypothetical situation, to make the beef that could be eaten by consumers in the future safe again. This would obviously cost a lot, and be technically difficult, but possible.

His observations made sound sense.

In his first witness statement to us, Mr Carden gave this account of the reaction within MAFF to Mr Eddy’s minute of 6 February:

> Those of us who received Mr Eddy’s 6 February report were aware that we could be on the edge of a very far-reaching change in the picture we had of BSE. My recollection is that from then on until SEAC reached a concluded view on 20 March 1996, we felt in a state of high alert. We – I am referring to myself and the circle of people within Government to whom the news at that state was deliberately confined – paid extremely close attention to each new indication from the leading experts. But for more than a month the tentative indications from SEAC’s 1 February meeting were all we had to go on. The hints of bad news remained tentative, and we lived in suspense.

In a subsequent statement, he added:

> Dr Will’s findings were the first firm indications that the balance of probability might be shifting in favour of BSE actually being transmissible to man (contrary to what had generally been believed in MAFF up till then), and that one suspected means of transmissibility – ingestion of beef – had suddenly gained ground over the others that had been attracting more attention in autumn 1995 . . .

I and my colleagues in MAFF devoted much time and energy in the first months of 1996 to watching every new indication of what was going on; we moved into a state of high alert as events unfolded, and discussed and
evaluated each new development intensively; with MAFF and DH in very close touch both at official and ministerial level at all key stages.

836 This is precisely what we would have expected to have happened on receipt of Mr Eddy’s minute. We have criticised Mr Eddy for not drawing attention in it to the concerns expressed by members of SEAC about the implications of the young victims of CJD. Despite this, we consider that the contents of his minute should have put those who read it on alert in the manner described by Mr Carden. It did not. Mr Carden’s recollection of the reaction to Mr Eddy’s minute is mistaken. Whatever impression Mr Eddy’s minute made on those who read it, it did not lead any of them to take any action.

837 Despite the shortcomings in Mr Eddy’s minute, on reading that minute Mr Hogg and Mrs Browning should have sought to discuss its implications with Mr Packer, Mr Carden and Mr Meldrum. Similarly, on reading that minute, those officials, after discussion among themselves, ought to have raised its implications with Mrs Browning and Mr Hogg. Each of these five individuals should have considered the action that might be required should the scientists advise that BSE had probably been transmitted to humans, and they should have recognised the need for MAFF and DH to address the implications in conjunction, for example by seeking the views of Sir Kenneth Calman and by discussion between Mr Hogg and Mr Dorrell. In the event Mr Eddy’s minute seems to have been treated by all simply as information on matters that called neither for action nor for discussion.

838 Mr Hogg told us, on the basis not of recollection, but of reconstruction, that he believed that he must have developed his 30 month scheme over a period of months, and discussed it with Mr Packer and other officials. Mr Packer gave this evidence some faint support when speaking of dim recollections of discussions with Ministers and others on a ‘what if’ basis. We are satisfied that there were no such discussions about Mr Hogg’s 30 months scheme. Mr Hogg did not decide on this until shortly before he presented it to his officials on 18 March. There was no discussion between Mr Hogg and his officials prior to 8 March as to the options that would need to be considered should it prove that BSE had been transmitted to humans.

839 The position was precisely the same in DH. Sir Kenneth Calman made it plain that he was not himself involved in any contingency planning or discussions before March 1996. He added:

After the meeting in February, clearly both the Department of Health and MAFF, particularly through Dr Rubery’s Division, were and should have been looking at these issues; indeed, as MAFF were; and clearly Ministers would be informed, as they always are when things are changing.

840 Dr Rubery, Dr Wight’s superior, told us that she was worried about the cases of CJD in young people. She spoke of having frequent meetings with Dr Roger Skinner, a Principal Medical Officer at DH, which reflected her and her Department’s growing concern about them. She said that this concern was also reflected in ‘many informal discussions with Dr Wight, Dr Skinner, Dr Metters, the CMO and the Permanent Secretary’, although she could not recall any further details of these informal meetings. We are satisfied that Dr Rubery’s recollection that such meetings took place in February is mistaken. DH was not on a state of alert.
about the implications of these cases prior to March. Mr Dorrell was not even notified of the findings reported to SEAC at its February meeting. Dr Metters gave us some additional written evidence after he had appeared in Phase 2 of the Inquiry, in which he spoke of discussing prevention, care and treatment options with the Permanent Secretary and with Sir Kenneth Calman in mid-February. We do not believe that these discussions can have taken place before March.

841 Mr Carden stated that MAFF and DH were in very close touch at both official and ministerial level at all key stages. We have found that there were no interdepartmental discussions about the possible implications of the findings of the CJDSU in either January or February. Indeed, the Departments do not seem to have started to work together to address these until the meeting called by Sir Kenneth Calman on 13 March. Even then Mr Hogg proceeded to decide on the response that he considered appropriate without reference to Mr Dorrell or Sir Kenneth Calman. When we asked him whether he should not have discussed the 30 month scheme with Mr Dorrell, he replied:

No, forgive me, the 30 month rule was down to me; that was my policy; it was something for which MAFF was answerable.

842 We have already expressed the view that MAFF officials and Ministers should have consulted Sir Kenneth Calman when they learned about the content of the SEAC meeting in February. Equally we consider that when Sir Kenneth and Dr Metters received Dr Wight’s minute of that meeting, albeit that it was couched in sedative terms, they should have initiated discussions with MAFF officials to discuss the implications of the new evidence, and Sir Kenneth should have alerted Mr Dorrell.

843 What was the reason for the inertia on the part of both Departments prior to March? Mr Carden gave this answer when asked why there had not been contact between MAFF and DH after SEAC’s meeting of 1 February:

I think that both Departments will have been looking to SEAC to bring forward a firmer scientific view.

844 It was not merely SEAC’s scientific view that the two Departments were awaiting. By 1996 the practice had become firmly established of looking to SEAC to advise on policy decisions – to an extent that came close to delegating them to SEAC. Witnesses told us that as the Government would not be prepared to take a decision without the advice of SEAC, contingency planning was a waste of time until SEAC’s advice had been received.

845 Waiting for SEAC was not a satisfactory alternative to examining policy options. The choice between those options did not turn simply on matters falling within SEAC’s areas of expertise. Wider political considerations needed to be taken into account, and these could well have been identified and discussed, on a contingency basis, in February. Nor was there any reason why SEAC should not have been asked to consider the various options that might be adopted to reduce risk of transmission further, and comment on their efficacy.
What would contingency planning have achieved?

846 The major policy decision taken on 20 March proved almost immediately not to be viable. The deboning option was not acceptable to the market, nor was it practicable. This option was recommended by SEAC under enormous pressure and instantly adopted by the Government, with no time to consider its implications. Mr Hogg took the view that it was not safe to rely on the proper performance of slaughterhouse operations to guarantee the safety of food. He wanted belt and braces. The supermarkets took the same view. Had MAFF, with the assistance of SEAC, begun to consider the options in February on a contingency basis, it is at least possible that they would have anticipated the problems which resulted in the choice of the deboning option being reversed almost as soon as it was made.

847 When Mr Dorrell made his statement to Parliament, he was unable to answer an obvious question. Were children more susceptible than adults to BSE? All that he could say was that he had asked SEAC to advise on this. In the event SEAC advised that there was no reason to believe that children were particularly susceptible. Contingency planning should have led to the anticipation of that question. SEAC could have been requested to answer it. Had its advice been obtained before 20 March, parents could have been reassured rather than alarmed.

848 There is a more fundamental question. One body of opinion considers that the over 30 months scheme was an over-reaction and that the risk that BSE was shown to pose to humans would have been adequately addressed by SEAC’s deboning recommendation. We have asked ourselves whether the announcement of 20 March would have come as less of a shock:

- if the communication of risk to the public had not suffered from the defects that we have described;
- if successive CMOs and SEAC had stated plainly that they had growing concerns that BSE might be transmissible and that some humans might have been infected before the various precautions were introduced; and
- if those officials who commented on risk had frankly stated that the cases of CJD in farmers and in young persons were cause for concern, rather than emphasising that it was safe to eat beef.

Would the public have accepted that SEAC’s deboning recommendation was an adequate response, so that beef from cattle aged over 30 months, removed from the bone, could have continued to be sold and eaten?

849 We have no doubt that had the approach to risk communication been that suggested above, the announcement of 20 March would have been less of a shock, and the public would not have felt that they had been deceived about the risk posed by BSE. But we do not believe the outcome would have been different. In March 1996 it was not clear how and to what extent the ruminant feed ban and the animal SBO ban had cut the rate of infection in cattle. No one knew, or could reliably calculate, how many cattle subclinically infected with BSE were entering the food chain. The improvement in slaughterhouse standards of removal of SBO was not yet clear. We believe that the public would inevitably have shared Mr Hogg’s reaction that belt and braces were needed. Even today, over four years on, when these
matters can much more readily be evaluated, the Over Thirty Months Scheme remains in place.