

Date: 6 December 2000
Time: 9.00am to 12.30pm
Venue: Committee Room, National Assembly Building

PHILLIPS REPORT - BSE CONTROLS

Purpose

1. To provide the Committee with an assessment of the latest position on BSE in cattle in Wales and the effectiveness of animal health control measures.

BSE in Cattle in Wales

2. There have been 16,377 cases of BSE in cattle in Wales since the disease was identified. Since 1994 numbers have steadily declined so that there were 152 confirmed cases last year and 75 so far in 2000. A table listing the number of cases per year by former county area is appended at **Annex 1**. Comparative figures with the other three UK countries are also provided.

3. **Annex 2** gives details of the compensation paid to Welsh farmers as a result of the BSE epidemic and **Annex 3** lists the numbers of animals from Wales which have been compulsorily slaughtered.

BSE Control Measures

4. The table at **Annex 4** lists the principal BSE control measures, together with the year they were introduced.

5. The Food Standards Agency (FSA) has recently completed a review of the BSE control measures as they affect human health: a copy of the executive summary of the latest draft of the review is provided at **Annex 5**. It is anticipated that the report will be published in December. The FSA's principal recommendations are: -

- no relaxation of the ban on feeding ruminant protein to ruminants for the foreseeable future
- non-feed use of inert tallow derivatives from SRM tallow should be considered but blood, gelatin and tallow should not be used in feed.
- discrepancies in the identification and tracing of cattle should be reduced to as close to zero as possible
- no relaxation of the over thirty months' rule until specific conditions are met
- further research required on BSE in sheep, pigs and poultry

- urgent need to develop and apply a rapid screening method of testing sheep for BSE
- further research required to develop a method of detecting whether meat products contain mechanically recovered meat (MRM)
- EU Commission requested to take action on cross-contamination, especially in countries with a known risk of BSE.

6. The Chief Veterinary Officer for Wales has considered the effectiveness of the animal health control measures and the decline of the epidemic is evidence of just how effective the animal health measures have been. The latest information on the number of confirmed cases is available monthly on the MAFF website (www.maff.gov.uk/bse) but the figures for Wales are as follows:

Year	Wales	GB
1994	2296	23945
1995	1322	14302
1996	636	8016
1997	323	4312
1998	230	3179
1999	152	2274
2000 (end of October)	75	947

There is roughly a 50% reduction year-on-year in the figures. The UK pattern is well within the predicted incidence and this pattern as can be seen from the table is also found in the Welsh figures.

7. The Chief Veterinary Officer has considered what would be the effect a ban on the use of blood, gelatin and tallow in animal feed. Little blood is used in animal feed and a ban on this would have minimal impact. Gelatin, whilst a micro component of animal feed in terms of volume, is often an important ingredient in that it is used to coat vitamin supplements, etc. The loss of this substance would have an impact although without more detailed analysis it is difficult to gauge just what the impact would be. Tallow is used as a fat substitute in milk replacement feeds for calves. The loss of this would also therefore have an impact. At the moment it is not clear again what the impact would be and investigations are continuing into the volume of tallow used this way and the options for identifying a substitute.

NUMBER OF CONFIRMED CASES OF BSE BY YEAR OF RESTRICTION AND NUMBER TAKEN BEFORE THE BSE ORDER [Pre]

Figures are as at 31 October 2000

COUNTY	Pre	1988	1989	1990	1991	1992	1993
CLWYD	5	12	71	181	380	570	606
DYFED	33	63	238	583	1257	2000	1827
GLAM. M	1	3	10	37	42	43	46
GLAM. S	3	8	29	22	58	114	107
GLAM. W	0	1	2	8	10	35	30
GWENT	4	25	59	90	154	267	249
GWYNEDD	5	5	27	30	81	172	174
POWYS	3	13	71	132	252	514	588
TOTALS	54	130	507	1083	2234	3715	3627

COUNTY	1994	1995	1996	1997	1998	1999	2000
CLWYD	395	233	109	67	51	48	12
DYFED	1113	574	257	118	84	44	20
GLAM. M	42	26	11	5	7	4	2
GLAM. S	53	30	10	7	6	1	2
GLAM. W	17	14	3	4	2	2	1
GWENT	139	106	59	33	23	14	4
GWYNEDD	110	69	42	17	9	4	0
POWYS	427	270	145	72	48	35	34

TOTALS	2296	1322	636	323	230	152	75

NUMBER OF CONFIRMED CASES OF BSE IN ENGLAND, SCOTLAND NORTHERN IRELAND AND WALES BY YEAR OF RESTRICTION

Year	NI	England	Scotland	Wales	UK
1986-88	-	661	12	54	727
1988	3	2001	49	130	2183
1989	30	6419	207	507	7163
1990	100	12611	486	1084	14281
1991	170	21985	808	2233	25196
1992	332	31116	1849	3715	37012
1993	487	28536	2208	3626	34857
1994	363	20322	1325	2296	24306
1995	170	12307	672	1322	14471
1996	81	7076	301	636	8094
1997	28	3845	141	323	4337
1998	18	2864	84	230	3196
1999	6	2065	37	152	2260
2000	13	1015	29	75	1132
Total	1,801	152,823	8208	16,383	179,215

AMOUNT OF COMPENSATION PAID TO FARMERS IN WALES UNDER SLAUGHTER SCHEMES

OVER THIRTY MONTH SCHEME [OTMS]

£ 164,021,284.81

NB Year by year figures are not available.

SELECTIVE CULL SCHEME

YEAR	AMOUNT £
1997	4,876,721.70
1998	3,306,702.10
1999	190,424.13
2000	0

OFFSPRING CULL SCHEME

	1998	1998	1999	1999	2000	2000
	Amount	Offspring	Amount	Offspring	Amount	Offspring
Valuations	£24,884	32	£185,781	168	£83,261	75
Table	£45,805	106	£92,929	244	£36,935	113
Total	£70,689	138	£278,710	412	£120,196	188

NB The number of offspring cull animals compensated reflect the number found alive.

CALF PROCESSING AID SCHEME = APRIL 1996 TO DECEMBER 1999

	ENGLAND	WALES	SCOTLAND
TOTAL	£115,030,498.03	£20,433,483.96	£18,168,687.21

ANNEX 3

**NUMBER OF ANIMALS ENTERING THE SLAUGHTER SCHEMES IN WALES
OVER THIRTY MONTH SCHEME [OTMS]**

	ENGLAND & WALES	SCOTLAND	N.I
1996	774,158	158,447	164,163
1997	555,777	114,803	97,403
1998	543,840	113,333	119,396
1999	583,310	121,759	123,892
2000	462,733	93,606	87,752

NB The figures for England/Wales are not available separately

SELECTIVE CULL SCHEME

	ENGLAND	WALES	SCOTLAND
1997	43,307	3,276	1,675
1998	23,216	1,988	859
1999	1,361	172	119
2000	29	0	0

OFFSPRING CULL SCHEME

	WALES	G.B
1998	632	9479
1999	374	5452
2000	257	3444

NB By date of initial report of the dam. This includes all offspring slaughtered, found dead, untraceable, and consigned out of GB. Action may not have been taken until the following year, particularly when dealing with the backlog which went on into 1999.

ANNEX 4

PRINCIPAL BSE CONTROL MEASURES

Date	Controls (& Legislation)	Enforcement
July 1988	Ruminant Feed ban introduced (BSE Order 1988) – banning potentially infective material from use in ruminant feed	LAs
August 1988	Slaughter policy & compensation (BSE Amendment Order 1988 & BSE Compensation Order 1988) – requiring all cattle suspected of having BSE to be destroyed, sent for analysis and then disposed of by incineration.	LAs

Nov 1989	Specified Bovine Offal (SBO) ban introduced (Bovine Offal (Prohibition) Regs 1989) – banning from the human food chain tissues which might contain BSE infectivity (later called Specified Risk Material – SRM)	LAs
Apr 1995	MHS took over hygiene control in Slaughterhouses and Cutting Plants	MHS - FSA to supervise
March 1996	Meat and Bone Meal (MBM) ban introduced (BSE Amendment Order 1996) prohibiting the sale or supply of any MBM, or any feeding stuff known to include MBM, for the purpose of feeding to farm animals.	LAs
March 1996	OTMS introduced (Beef Emergency Control Order 1996) – prohibiting the sale for human consumption of cattle aged over months (Scheme run by IB on behalf of UK Depts)	MHS - (FSA to supervise)
July 1996	Cattle Passports introduced (Cattle Passports Order 1996) – animal identification and tracing being an important part of the measures against BSE and in lifting the export ban.	LAs/app Minister under Animal Health Act
Sep 1996	SRM controls extended to sheep & goats (Heads of Sheep & Goats Order 1996)	MHS - (FSA) (slaughterhouse/cutting plants) LAs
Jan 1997	Selective Cull Scheme introduced (BSE No2 Order 1996) – targeting animals that have been exposed to infected feed. (Scheme run by IB on behalf of UK Depts)	LAs
Jan 1998	SRM controls introduced in UK (SRM Order & Regs 1997). The Order imposes controls on the import of Class I SRM, prohibits use of SRM in certain products, and approves premises for processing SRM. The Regs control sale and use of SRM for human consumption, and production of mechanically recovered meat (MRM).	MHS - (FSA) (slaughterhouse/cutting plants) LAs

Jan 1999	Offspring Cull Scheme introduced (BSE Offspring Slaughter Regs) – a compulsory cull of offspring born on or after 1/8/1996 to confirmed BSE cases (Scheme run by IB on behalf of UK Depts)	LAs/SoS under Animal Health Act

LA = Local Authorities

FSA = Food Standards Agency

MHS = Meat Hygiene Service

ANNEX 5

FSA Review of BSE Controls 3rd draft report – 6/11/2000

Main points and recommendations

Introduction

Perhaps more than in any other area of food safety, BSE is characterised by scientific uncertainty. This uncertainty means that the current risk management options for protecting the health of the public are precautionary in nature and are aimed at risk reduction in the light of current knowledge, recognising that risks may not be totally eliminated.

It should be noted that the main controls are inextricably linked, in that any relaxation in one would affect decisions about whether the others could be altered.

The draft report is still subject to consultation and will be finally agreed at a meeting of the FSA Board on 9 November in Cardiff.

Recommendations (these remain the subject of consultation)

Animal blood, gelatin and tallow in animal feed

Although SEAC has not recommended banning the use of blood, gelatin and tallow in animal feed, we have noted the uncertainties and concern surrounding the issue. Our recommendation at paragraph 59,

about a ban on intra-species recycling, is that it should include recycling of blood, gelatin and tallow.

Intra-species recycling

We have not heard any convincing arguments for relaxation for the foreseeable future the ban on feeding ruminant protein to ruminants. In addition, we agree with SEAC's view, that recycling of animal material within any species used for human, animal or fish food is undesirable. Such recycling could theoretically amplify a new TSE in the species. It would then probably be some time before this were detected, by which time a substantial pool of infectivity could have been established, and a further BSE-like epidemic created. We recommend that consideration should be given to a complete ban on intra-species recycling and that no animal products should be fed to herbivores. (paragraph 59)

On the assumption that pigs do not carry TSEs, the pig industry has requested that pig MBM (meat and bone meal) should be allowed to be fed to poultry. However, given the complexity of the chain of animal feed manufacture and previous problems of cross-contamination, we are not confident that, given the risks involved, adequate policing to maintain separation of feed streams for pigs and cattle could be assured or enforced. We accept SEAC's view that any infectivity in pig MBM fed to chickens would not be inactivated in the chicken intestine. If infected chicken tissues were then incorporated into pig feed it would amount to intra-species recycling. (paragraph 60)

Spreading blood on land

Blood from animals which have passed the ante-mortem check at the abattoir (i.e. animals permitted to go for human consumption) is permitted to be spread on land. Such spreading is subject to certain waste management controls. SEAC is shortly to consider the safety issues involved in this method of disposal. We plan to revisit this issue once SEAC's advice is available, to assess any food safety implications. (paragraph 65)

Conditions for changes to the feed ban

We see no likelihood or scope for relaxing the ban on feeding ruminant protein to ruminants. Even the "pressure cooking" rendering process can only reduce infectivity and not eliminate it. Other changes might therefore be considered in future only when:

- (i) practical and sensitive diagnostic tests are available to distinguish ruminant from other mammalian material in animal feed;
- (ii) it can be concluded that pigs and chickens fed with BSE and scrapie material do not carry infectivity in their tissues;
- (iii) it can be demonstrated that stringent and enforceable segregation procedures are in place and can be maintained. Relevant experience in other EU Member States should be examined first; and

(iv) the UK achieves low BSE status.

We recommend that non-feed use of inert tallow derivatives from SRM tallow should be considered but blood, gelatin and tallow should not be used in feed. (paragraph 67)

Identification and tracing of cattle

Controls on the identification and tracing of cattle have been gradually increased in the last few years. There is the Cattle Tracing System in Great Britain and the Animal and Public Health Information System (APHIS) in Northern Ireland. Agriculture departments have been routinely imposing sanctions which involve individual and whole herd movement restrictions with compulsory slaughter of unidentified animals where appropriate. A strategy for educating farmers is being developed with the help of the industry. Nevertheless, the need for continuing physical checks of teeth at the slaughterhouses remains. We recommend that the discrepancies be reduced to as close to zero as possible. (paragraph 37)

Over Thirty Month rule (OTM)

Although records of cattle rejected under the rule are kept at individual abattoirs, these are not collated centrally by the Meat Hygiene Service. We recommend that in future this should be done. (paragraph 41)

Conditions surrounding any possible changes in the Over Thirty Month rule

In order to relax or phase out the OTM rule we will have to be sure that to protect the public from additional risk:

- (i) the BSE epidemic is declining as currently forecast; and
- (ii) the number of BSE cases in cattle born after 1 August 1996 is in line with predicted levels; and
- (iii) we have evidence of comprehensive and reliable cattle identification procedures covering all animals which are robustly enforced and subject to independent evaluation; and
- (iv) the feed ban continues to be rigorously enforced.

If these conditions are satisfied, it should be possible to phase out the OTM rule, with a view to its eventual abolition. We recommend that 30 months should remain the age at which controls are most appropriate. It would be safer to relate any change in controls to a specific date after which cattle were born rather than embark upon an incremental increase in the age at which cattle may be slaughtered for

human consumption. Changes might be considered differentially by geographical area in the light of different levels of BSE incidence. However, practical difficulties might be created because of normal commercial movement of animals. (paragraphs 42 and 43)

We recommend that January 2002 is the earliest date on which a decision could be taken to announce the year of birth of animals that need not enter the OTM scheme (this could not be earlier than August 1996 when the enhanced feed ban was introduced). (paragraph 44)

Any relaxation of the OTM rule should be accompanied by a tightening of the rules to prevent carcasses of casualty animals, other than those which have been injured or have discrete local lesions, from entering the human food chain. (paragraph 44)

BSE in other animals used for food

Experimental attempts to infect chickens by mouth and by injection of BSE infected material directly into the brain have been unsuccessful. However, as SEAC has recommended, we agree that further research on pigs and poultry should be undertaken to extend earlier findings indicating that these species do not harbour TSE infectivity when orally exposed. (paragraph 30)

Chronic Wasting Disease has been observed in deer and elk in the United States of America. CWD has not been described in any species of deer in continental Europe or the UK. However, very little work has been done in this area and sample sizes have been very small. We recommend that further work should be carried out. (paragraph 31)

Specified risk material

A relaxation in respect of intestine and thymus of cattle of six months old or under and heads of sheep and goats (but not skull, brain or eyes of sheep over 12 months old) was introduced in October 2000 when the EU Commission Decision on EU-wide SRM controls (adopted in June 2000) was implemented. We accept SEAC's view that: "On balance, however, the Committee felt that the benefit of introducing controls on SRM across the European Union, outweighed the slight increase in risk that may arise from any consequential change to the UK's existing controls". Benefits will also derive from the controls on imports from third countries explained in paragraph 73. (paragraph 45)

For cattle, any future changes will depend on whether there has been any relaxation of the OTM rule and the achievement of low BSE status for the UK.

BSE in sheep

There is a theoretical possibility that BSE is present in sheep in the UK, although, so far it has not been found naturally. The possibility that some cattle and sheep may be carriers of BSE without developing the disease is being researched. Healthy cattle are also being researched. We recommend that further

research in this area be carried out. (paragraph 29)

Current research to look for BSE in sheep is costly and slow. Therefore as a matter of great urgency there is a need to develop and apply a rapid screening method so that large numbers of sheep can be tested to reduce the uncertainty of whether or not BSE occurs. (paragraph 25)

The proposed MAFF breeding programme using genetically resistant rams will take 10 years or more to complete. More immediate steps are needed - MAFF is developing these steps (see paragraph 49). The risk management option should consider what might be done whilst BSE in sheep remains a theoretical possibility and a contingency plan if BSE were to be discovered. Also, at SEAC's request, the FSA is commissioning an assessment of boodborne risk to human health should BSE infection be confirmed in the national flock. (paragraph 26)

If BSE were to be discovered in sheep the draft report says the current controls would be inadequate and additional measures would have to be considered. (paragraph 52)

Sheep tissue and BSE infectivity

Sheep intestines are used for sausage casings. It has been said that the process employed in the production of sausage casings ensures that lymphoid tissue and, with it, any risk of infectivity is removed. We recommend that further research is undertaken to assess the validity of this assertion and to indicate any risks involved in this use of sheep intestines. (paragraph 48)

Milk

Milk for human consumption is allowed from cows (but is banned from cows suspected of BSE) regardless of age. Studies conducted so far have not revealed evidence of infection in milk. Also, no cases of BSE were recorded in offspring that were suckled by BSE-affected dams for at least one month. A new study is about to start in which evidence of prion protein will be sought by fractionation and immunoassay methods in milk collected throughout the lactation of cattle experimentally challenged with high and low doses of BSE. (paragraph 68)

Mechanically recovered meat (MRM)

The presence of MRM in meat products raises issues of consumer choice as well as safety. The presence of MRM (and the species of animal from which it is derived) is required to be listed on the label of relevant processed meat products. This requirement is enforced by local authorities, which can be done relatively easily by inspection of the plant producing the product. However, this is not possible in relation to imported products and there is no analytical method available to test such produces for the presence of MRM. A test is, however, being developed to identify the presence of neural tissues in meat products. This would also detect such tissues in MRM. We welcome this and recommend that further research should be undertaken to develop a method of analysis to detect the presence of MRM in meat

products. (paragraph 72)

Imports

The problems of cross-contamination formerly found in the UK are likely to be occurring elsewhere, possibly with similar results. We therefore formally request the EU Commission to take action on problems of cross-contamination, especially in countries with a known risk of BSE. (paragraph 76).

There is a clear need to keep under review the measures to detect illegal sales, and keep up to date the list of countries considered to be BSE free. (paragraph 75)

The FSA has undertaken to monitor the implementation of the new SRM rules across all EU member states. (paragraph 77)