EUROPEAN COMMISSION

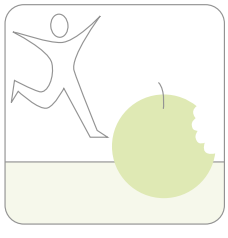
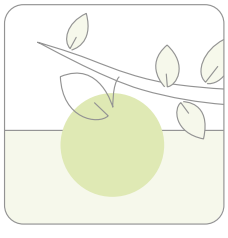
Health & Consumer Protection
Directorate-General

ISSN: 1725-583X

Report on the monitoring and testing of ruminants for the presence of transmissible spongiform encephalopathy (TSE) in the EU in 2004






Health & Consumer Protection
Directorate-General

Report on the monitoring and testing of ruminants for the presence of transmissible spongiform encephalopathy (TSE) in the EU in 2004

Directorate D – Food Safety: production and distribution chain
D2 – Biological risk

13 June 2005

Europe Direct is a service to help you find answers to your questions about the European Union

Freephone number:

00 800 6 7 8 9 10 11

A great deal of additional information on the European Union is available on the Internet.
It can be accessed through the Europa server (http://europa.eu.int).

Cataloguing data can be found at the end of this publication.

Luxembourg: Office for Official Publications of the European Communities, 2005

ISBN 92-894-7431-9

© European Communities, 2005
Reproduction is authorised provided the source is acknowledged.

Printed in Italy

PRINTED ON WHITE CHLORINE-FREE PAPER

Introduction

I am delighted to present here the 2004 report on the monitoring and testing of cattle, sheep and goats for the presence of transmissible spongiform encephalopathy (TSE) in the European Union.

Since the start of an expanded monitoring programme on bovine spongiform encephalopathy (BSE) in 2001, more than 41 million cattle have been tested, in addition to those tested as BSE suspects. The surveillance involves active monitoring of healthy slaughtered cattle, risk animals such as fallen stock and cattle with an epidemiological link to known BSE cases. It ensures that no BSE cases are slaughtered for human consumption, thus further increasing the safety of beef. In addition, the monitoring provides a reliable insight into the prevalence and evolution of BSE in the Member States.

The monitoring programme in bovine animals in 2004 was very similar to the programme in 2002 and 2003 in the former 15 Member States, allowing comparisons between both years within the same target group (e.g. healthy slaughtered cattle) and within the same age group. Overall, the BSE situation has improved considerably, showing the effect of measures taken in the past. However, given the long incubation period of BSE it will take many years still before we can hope for a complete eradication of BSE.

Ten new Member States entered the European Union on 1 May 2004. I am most pleased that this report demonstrates that these Member States have started an extensive monitoring long before their accession and that the prevalence of BSE, if present, in these Member States is low. I also welcome very much the results forwarded from Bulgaria, a candidate country, and Norway.

The report furthermore summarises the results of TSE monitoring in small ruminants in 2004. The recent confirmation of BSE in a goat underlines the need for surveillance in small ruminants. Considerable efforts were already carried out by Member States and further increased in February 2005 in order to obtain a clear view on BSE prevalence in small ruminants by an extended monitoring programme.

I would like to thank all Member States for making this report possible. Our combined efforts have enhanced the understanding of the epidemiology of TSEs. They also provide a solid basis for the determination of the future direction of our policies to protect animal and human health.

I hope that this report will provide useful data to all interested parties.

Robert Madelin
Director General

Table of contents

List of acronyms

AM:	Ante-mortem inspection
BSE:	Bovine spongiform encephalopathy
CWD:	Chronicle wasting disease
DNA:	Deoxyribonucleic acid
EU 15:	The 15 countries, member of the European Union before 1 May 2004
EU 15-UK:	The EU 15 except the United Kingdom
EU 25:	The 25 countries, member of the European Union since 1 May 2004
EU 25-UK:	The EU 25 except the United Kingdom
Mio:	Million
MS:	Member States the European Union
Na:	not available
nMS:	The 10 countries, members of the European Union from 1 May 2004 on
NSP:	National scrapie plan
OTM:	Over thirty months
TSE:	Transmissible spongiform encephalopathy
TSE Regulation:	Regulation (EC) No 999/2001 as amended by Regulation (EC) No 2245/2003.

See also list of ISO codes for countries on page 10.

1. Summary

In 2004, a total of 11.049.822 bovine, 312.803 ovine and 36.115 caprine animals were tested in the EU in the framework of the TSE monitoring programme. 865 bovine, 2.663 ovine and 398 caprine animals turned out positive.

1.478.650 risk bovine animals and 9.551.469 healthy animals slaughtered for human consumption were tested by rapid tests. 3.207 bovine animals were tested in the framework of passive surveillance (animals reported as BSE suspects by the farmer or the veterinary practitioner and subject to laboratory examination). In addition, 16.496 animals were tested in the framework of culling of animals with an epidemiological connection to a BSE case. 80 % of positive cases were detected by the active monitoring (testing of risk animals, healthy slaughtered and culled cattle) and 20 % were detected by passive surveillance. BSE cases were found in all Member States except Austria, Cyprus, Estonia, Greece, Hungary, Latvia, Lithuania, Luxembourg, Malta, Finland and Sweden. The number of BSE cases and the overall prevalence in tested animals decreased by respectively 37 % and 38 % in 2004 compared to 2003. The decrease was similar in both risk and healthy animals. These reductions and the increasing age of positive cases indicate that measures taken in the past are having some effect.

310.146 ovine animals were tested by active monitoring, while 2.667 were animals reported as TSE suspects and therefore subjected to laboratory examination. In caprine animals, the numbers of tests in the respective groups were 35.082 (active monitoring) and 1.033 (TSE suspects). Respectively 3.506 and 57 TSE cases in sheep and goats confirmed between 1998 and 2004 were subjected to discriminatory testing. By such testing, BSE was detected in 1 goat slaughtered in France in 2002. The information on the genotypes of both TSE positive and random sampled sheep is a major tool to decide how to progress in TSE eradication programs in these animals.

In addition to the Member States, Bulgaria and Norway forwarded information on the TSE testing of bovine, ovine and caprine animals.

Further information:
Health and Consumer Protection Directorate-General, Unit D2;
fax: +32-2-296.90.62;
e-mail: joaquim.ordeig-vila@cec.eu.int (cattle)
or kris.de-smet@cec.eu.int (small ruminants)

2. Monitoring programmes, sampling and test methods

2.1 Legal basis

Animals **suspected** of a TSE shall be examined in accordance with Article 12.2 of Regulation (EC) No 999/2001[1] of the European Parliament and of the Council laying down rules for the prevention, control and eradication of certain transmissible spongiform encephalopathies (the TSE Regulation) as amended. The legal framework for the **active monitoring of ruminants** for the presence of TSE is laid down in Article 6 of the TSE Regulation and specified in its Annex III Chapter A. In 2004, active monitoring was carried out in accordance with the amendments of the TSE Regulation laid down in Commission Regulation (EC) No 2245/2003[2]. Compared to 2003, monitoring of small ruminants was focussed on fallen stock. The EU legislation on TSE monitoring applicable in 2004 is summarised in Table 1.

The legal basis for the **sample collection and for the test methods** was Chapter C of Annex X in the TSE Regulation.

Finally, the legal basis for the **survey of prion protein genotypes of TSE cases in sheep, of random sampled sheep** are points 7.1 and 7.2 to Chapter A in Annex III of the TSE Regulation.

2.2 BSE monitoring of bovine animals

The monitoring of bovine animals for the presence of BSE was divided into the following target groups:

(1) **Fallen stock**: Bovine animals which have died or have been killed on the farm or in transport, but not slaughtered for human consumption nor killed in the framework of an epidemic. Member States may decide to derogate from this provision in remote areas with a low animal density, where no collection of dead animals is organised. The derogation shall not cover more than 10% of the bovine population in the Member State.

(2) **Emergency slaughtered animals**: Bovine animals subject to 'Special emergency slaughtering' as defined in Article 2 of Council Directive 64/433/EEC[3] as amended.

---

1 OJ L 147, 31.5.2001, p 1.

2 OJ L 333, 20.12.2003, p. 28.

3 OJ L 121, 29.7.1964, p. 2012.

(3) **Animals with clinical signs at AM**: Bovine animals sent for normal slaughter but the slaughter of which was deferred because they were:

(a) suspected of suffering from a disease which is communicable to man and to animals or showing symptoms or being in a general condition such as to indicate that such a disease may occur.

(b) Showing symptoms of a disease or of a disorder of their general conditions which is likely to make their meat unfit for human consumption.

(as referred to in Directive 64/433/EEC, Annex I, Chapter VI, points 27-28)

(4) **Healthy slaughtered animals**: Bovine animals subject to normal slaughter for human consumption and animals without clinical signs of disease slaughtered in the context of a disease eradication campaign other than BSE. Sweden was allowed to test only a random sample.

(5) **Animals culled under BSE eradication**: birth cohorts (bovine cattle born in a herd within 1 year before or after the birth of a BSE case), rearing cohorts (bovine animals reared together with a BSE case during the first year of their life), offspring and any other bovine animals killed because of an epidemiological link to a BSE case**.**

(6) **Suspects** subject to laboratory examination: Bovine animals reported as suspects of TSE as defined in Article 3(h) of the TSE Regulation and subject to the measures described in Articles 12 and 13 of this Regulation.

In the United Kingdom, bovine animals over 30 months (OTM) were purchased for destruction pursuant to Regulation 716/96[4]. All these animals were tested if subject to emergency slaughter or showing clinical signs of any disease at ante-mortem. In addition, a part of the healthy slaughtered animals were tested (see Table 1).

2.3 TSE monitoring of ovine and caprine animals

The testing of ovine and caprine animals for the presence of TSE was divided into the following target groups:

(1) Healthy animals over 18 months of age which are slaughtered for human consumption. Testing was only mandatory in ovine animals in Member States in which the population of ewes and ewe lambs put to the ram exceeds 750 000 animals. Most other Member States tested a number of healthy slaughtered ovine and caprine animals voluntarily or within the frame of a national scrapie control programme. The above age cut off was used except Finland testing animals over 2 years of age.

(2) Risk animals containing almost exclusively fallen stock, with a few emergency slaughtered animals and animals with clinical signs at AM which have died or been killed, but which were not killed in the framework of an epidemic or slaughtered for human consumption.

(3) Animals culled under TSE eradication including animals additionally tested on infected herds before culling measures were applied.

(4) TSE suspects subject to laboratory examination.

[4] OJ L 99. 20.04.1996, p. 14.

Table 1: **Summary of the EU legislation on TSE monitoring in 2004**

	EU except SV and UK	SV	UK
Legal provisions	Regulation (CE) No 999/2001 as amended	Regulation (CE) No 999/2001 as amended	Regulation (CE) No 999/2001 as amended Regulation (CE) No 716/96.
Bovine animals			
Special emergency slaughter	All > 24 months		
Clinical signs at ante-mortem inspection	All > 24 months		
Fallen stock	All > 24 months		
Animals slaughtered for human consumption	All >30 months	Random sample comprising at least 10 000 animals >30 months	All > 30 months
BSE suspects	All	All	All
Other			Animals slaughtered under the OTM scheme All animals >30 months subject to 'special emergency slaughter', with clinical signs at ante-mortem or born after 1/8/96 and > 42 months old Random sample comprising at least 10 000 animals of remaining animals (born before 1/8/96).
Ovine and caprine animals			
Animals slaughtered for human consumption	Minimum annual sample of 10 000 ovine animals > 18 months in Member States with a population of ewes and ewe lambs put to the ram above 750 000		
Animals not slaughtered for human consumption	Minimal sample size in ovine and caprine animals > 18 months		
Animals in infected flocks	Minimal sample size in ovine and caprine animals > 12 months or which have a permanent incisor erupted though the gum		
Other than bovine, ovine and caprine animals: voluntary			

2.4 TSE monitoring in other animal species

The provisions on examination of cases of TSE suspicions in Article 12.2 of the TSE Regulation applies to all animal species. Active monitoring in species other than bovine, ovine and caprine animals is voluntary and without further specifications.

2.5 Sampling and testing for TSE monitoring

Samples collected in the context of active monitoring (risk animals, healthy slaughtered animals and animals culled in the framework of TSE eradication) were screened by one of the five approved rapid tests. Confirmation tests from inconclusive or positive results in the active monitoring and analysis of samples from suspects were performed by histopathology or, if appropriate, by immunocytochemistry, immunoblotting or by demonstration of characteristic fibrils by electron microscopy.

Further discrimination between BSE and scrapie has become mandatory from January 2005 on by Commission Regulation (EC) No 36/2005. To this purpose the discriminatory immuno-blottings, immunocytochemistry and enzyme linked immunosorbent assay were laid down in Chapter C point 3.2.(c) of Annex X of the TSE Regulation. In addition the mouse bio-assay method should be applied to certain samples for final confirmation or exclusion of BSE. Member States have however been requested to forward information on such discriminatory testing carried out on confirmed TSE cases detected in 2004 or earlier. Prior to the harmonisation of discriminatory testing in January 2005, laboratories may also have used their own discriminatory method.

2.6 Genotyping of ovine animals

The genotyping of ovine animals was conducted under the following categories:

(1) TSE positive animals.

(2) The crossbreed survey – a random sample selected from the healthy animals over 18 months of age slaughtered for human consumption or live animals of a similar age.

2.7 Sampling and testing for the prion protein genotype

The alleles were defined by reference to the amino acids encoded by codons 136, 154 and 171 of the prion protein gene. Routine methods for the collection of samples and DNA genotyping were used.

3. Annual and monthly reports

In accordance with Article 6.4 specified in Chapter B.I of Annex III in the TSE Regulation Member States shall submit an **annual report to the Commission** on the monitoring programme performed and the outcome of it. In 2004, the specifications laid down in Regulation (EC) No 2245/2003, amending the TSE Regulation were applicable.

In addition, the Commission invited the Member States of the EU in the Standing Committee on the Food Chain and Animal Health to provide **monthly reports** on TSE testing on a voluntary basis.

In particular, the Commission requested, per species, information on:

1. Positive cases detected during the reporting period: month of birth, target group, diagnostic method used for screening and diagnostic method used for confirmation.
2. Monitoring carried out during the reporting period: number of samples, number of positive results, number of negative results, number of tests pending and age limit for each target group.
3. The results of the epidemiological investigation in BSE cases born after 1 January 1996.
4. Genotypes of confirmed TSE cases in ovine animals and of random sampled and culled ovine animals.

Finally, the Commission invited the Member States at the end of 2004 to provide **additional data** on a voluntary basis on

- the age structure of the tested bovine animals, separated per semester and per target group.
- Further analysis in TSE cases in small ruminants in order to detect atypical or BSE-like strains.

All this information has been introduced and processed in a database in order to summarise the information provided and to elaborate summary tables to be distributed within the Commission and to the Member States, Bulgaria and Norway. The present report should be considered as a final update of the information received and as the **Commission summary report** as requested by Article 6.4 of the TSE Regulation.

The target groups in parts 4 and 5 of this report were divided into the following categories:

(1) Bovine animals:

(a) Active Monitoring

- Fallen stock
- Emergency slaughter
- Animals with clinical signs at AM
- Healthy slaughtered animals
- Animals culled in connection to a BSE case.

Fallen stock, emergency slaughtered animals and animals with clinical signs at ante-mortem inspection are considered as '**risk animals**'.

(b) Passive Surveillance

Animals reported as BSE suspects by the farmer or the veterinary practitioner and subject to laboratory examination.

The age limits used in testing different target groups of bovine animals are summarised in Table 2.

(2) Ovine and caprine animals

(a) Active Monitoring

- Risk animals containing almost exclusively fallen stock with a few tests in emergency slaughtered animals and animals with clinical signs at AM. If known, only primary (index) cases are included.
- Healthy slaughtered animals. If known, only primary (index) cases are included.
- Animals culled in a herd where an animal has been declared TSE positive including animals additionally tested on infected herds before culling measures were applied. These group therefore contains all secondary cases.

(b) Passive Surveillance

- Animals reported as scrapie suspects by the farmer or the veterinary practitioner and subject to laboratory examination. If known, only primary (index) cases are included.

Table 2: Age limits used in sampling of bovine animals

	Age limit					
	Fallen Stock	**Emergency slaughtered**	**Clinical signs at AM**	**Healthy slaughtered**	**BSE culling**	**BSE suspects**
Belgique/België	> 24 months[5]	> 24 months[5]	> 12 months	> 30 months[5]	> 24 months	No age limit
Česká Republika	> 24 months			> 30 months	No age limit	No age limit
Danmark	> 24 months			> 30 months	> 24 months	No age limit
Deutschland	Compulsory testing > 24 months, voluntary testing < 24 months				No age limit	No age limit
Eesti	> 24 months			> 30 months	No age limit	No age limit
Ellas	> 24 months	> 24 months	No age limit	> 30 months	No age limit	No age limit
España	> 24 months				No age limit	No age limit
France	> 24 months					No age limit
Ireland	> 24 months			> 30 months	> 30 months	No age limit
Italia	> 24 months				No age limit	No age limit
Kypros	> 24 months			> 30 months	No age limit	No age limit
Latvija	> 24 months			> 30 months	No age limit	No age limit
Lietuva	> 24 months			> 30 months	No age limit	No age limit
Luxembourg	> 24 months			> 30 months	> 24 months	No age limit
Magyarország	> 24 months			> 30 months	No age limit	No age limit
Malta	> 24 months			> 30 months	No age limit	No age limit
Nederland	> 24 months			> 30 months	No age limit	No age limit
Österreich	> 24 months[5]	> 24 months[5]	> 24 months	> 30 months[5]	No age limit	No age limit
Polska	> 24 months			> 30 months	No age limit	No age limit
Portugal	> 24 months			> 30 months	> 24 months	No age limit
Slovenija	> 24 months			> 30 months[6]	No age limit	No age limit
Slovensko	> 24 months			> 30 months	No age limit	No age limit
Suomi/Finland	> 24 months			> 30 months	No age limit	No age limit
Sverige	> 24 months			> 30 months	No age limit	No age limit
United Kingdom	> 24 months			> 30 months	No age limit	No age limit
Bulgaria	> 24 months			> 30 months	No age limit	No age limit
Norway	> 24 months			> 30 months	No age limit	No age limit

[5] A limited number of samples were collected in younger bovine animals.

[6] Untill 1 May 2004: > 24 months.

The names of the Member States are quoted in this report in their own language or by using the ISO code.

Name	ISO Code	English	Français	Deutsch
Belgique/België	BE	Belgium	Belgique	Belgien
Česká Republika	CZ	Czech Republic	République tchèque	Tschechische Republik
Danmark	DK	Denmark	Danemark	Dänemark
Deutschland	DE	Germany	Allemagne	Deutschland
Eesti	EE	Estonia	Estonie	Estland
Ellas	EL	Greece	Grèce	Griechenland
España	ES	Spain	Espagne	Spanien
France	FR	France	France	Frankreich
Ireland	IE	Ireland	Irelande	Irland
Italia	IT	Italy	Italie	Italien
Kypros	CY	Cyprus	Chypre	Zypern
Latvija	LV	Latvia	Lettonie	Lettland
Lietuva	LT	Lithuania	Lituanie	Litauen
Luxembourg	LU	Luxembourg	Luxembourg	Luxemburg
Magyarország	HU	Hungary	Hongrie	Ungarn
Malta	MT	Malta	Malte	Malta
Nederland	NL	Netherlands	Pays-Bas	Niederlande
Österreich	AT	Austria	Autriche	Österreich
Polska	PL	Poland	Pologne	Polen
Portugal	PT	Portugal	Portugal	Portugal
Slovenija	SI	Slovenia	Slovénie	Slowenien
Slovensko	SK	Slovakia	Slovaquie	Slovakei
Suomi/Finland	FI	Finland	Finlande	Finnland
Sverige	SV	Sweden	Suède	Schweden
United Kingdom	UK	United Kingdom	Royaume-Uni	Vereinigtes Königreich

In addition, results of the monthly reports of Bulgaria (BG) and Norway (NO) are included.

4. Summary of the BSE testing in bovine animals during 2004

The information was extracted directly from the monthly reports. The monthly information is often updated and/or corrected by the Member States in the following reports. The information shown in the following summaries is updated according to the information received on 13 June 2005.

Information on the population was obtained from Eurostat.

4.1 Sampling

Comments on the sampling

The monitoring programme carried out in 2004 was similar to the programme carried out in 2003. Therefore the differences in the number of tests in different target groups are minor. Almost 41 million cattle have been tested by active monitoring in the EU since 2001. The percentage of tested risk animals and healthy slaughtered cattle compared to the adult population (Table B2) should be interpreted with caution as certain Member States were running different monitoring programmes (only random sampling in Sweden, the purchase for destruction scheme of healthy slaughtered cattle in the UK without obligatory testing), as additional voluntary testing of younger cattle occurred in certain Member States and as there may be a difference in risk animals, including fallen stock, per year in relation to the population because of different production systems. The increased effort of certain Member States in 2004 compared to 2003 to monitor risk animals (see Table B3) and the efforts of new Member States to carry out active monitoring are appreciated.

Table B1: Total tests performed in 2004 per Member State and target group

	Number of tests performed						
	BSE culling	Clinical signs at AM	Emergency Slaughter	Fallen Stock	Healthy Slaughter	BSE suspects	Total
Belgique/België	172	85	1 308	35 322	356 813	169	393 869
Česká Republika	1 135	62	33 531	35 865	130 124	0	200 717
Danmark	86	7	1 803	36 164	246 156	18	284 234
Deutschland	1 312	2 634	7 173	226 685	2 292 714	1 986	2 532 504
Eesti	0	30	1 568	4 156	21 277	0	27 031
Ellas	0	5	107	2 533	26 161	0	28 806
España	1 477	2 205	1 413	94 918	478 037	75	578 125
France	919	0	0	266 123	2 624 634	96	2 891 772
Ireland	8 556	0	2 313	85 300	605 396	275	701 840
Italia	572	61 475	5 111	64 118	851 014	27	982 317
Kypros	0	39	137	1 287	5 888	0	7 351
Latvija	1	0	169	1 388	28 017	1	29 576
Lietuva	0	127	200	2 670	47 506	0	50 503
Luxembourg	0	3	18	3 102	13 575	2	16 700
Magyarország	0	35	2 436	12 264	81 284	62	96 081
Malta	0	0	153	163	2 068	0	2 384
Nederland	283	14 526	1 179	50 425	467 448	19	533 880
Österreich	0	2 349	1 326	13 461	188 520	2	205 658
Polska	65	0	9 259	24 449	447 332	11	481 116
Portugal	1 217	3 365	1 633	29 934	78 783	85	115 017
Slovenija	5	1 444	328	8 101	35 767	21	45 666
Slovensko	127	54	2 353	16 851	63 553	1	82 939
Suomi/Finland	0	477	1 138	17 301	107 168	1	126 085
Sverige	0	0	1 924	23 849	10 318	20	36 111
United Kingdom	569	17 053	146 777	92 889	341 916	336	599 540
Total EU 25	**16 496**	**105 975**	**223 357**	**1 149 318**	**9 551 469**	**3 207**	**11 049 822**
Bulgaria	0	0	433	127	7 789	0	8 349
Norway	0	1 353	9 212	2 085	10 438	3	23 091

Table B2: **Active monitoring in relation to the adult population ≥ 2 years of age)**

	Adult cattle	Risk Animals		Healthy Slaughtered	
	(x1000)*	N° Tests	% tests/adult cattle	N° Tests	% tests/adult cattle
Belgique/België	1 410	36 715	2.60%	356 813	25.31%
Česká Republika	654	69 458	10.62%	130 124	19.90%
Danmark	772	37 974	4.92%	246 156	31.89%
Deutschland	5 998	236 492	3.94%	2 292 714	38.22%
Eesti	131	5 754	4.39%	21 277	16.24%
Ellas	337	2 645	0.78%	26 161	7.76%
España	3 407	98 536	2.89%	478 037	14.03%
France	10 477	266 123	2.54%	2 624 634	25.05%
Ireland	3 046	87 613	2.88%	605 396	19.88%
Italia	2 861	130 704	4.57%	851 014	29.75%
Kypros	26	1 463	5.63%	5 888	22.65%
Latvija	204	1 557	0.76%	28 017	13.73%
Lietuva	477	2 997	0.63%	47 506	9.96%
Luxembourg	93	3 123	3.36%	13 575	14.60%
Magyarország	389	14 735	3.79%	81 284	20.90%
Malta	9	316	3.51%	2 068	22.98%
Nederland	1 730	66 130	3.82%	467 448	27.02%
Österreich	963	17 136	1.78%	188 520	19.58%
Polska	3 067	33 708	1.01%	447 332	14.59%
Portugal	812	34 932	4.30%	78 783	9.70%
Slovenija	202	9 873	4.89%	35 767	17.71%
Slovensko	270	19 258	7.13%	63 553	23.54%
Suomi/Finland	384	18 916	4.93%	107 168	27.91%
Sverige	671	25 773	3.84%	10 318	1.54%
United Kingdom	4 870	256 719	5.27%	341 916	7.02%
Total EU 25	**43 260**	**1 478 650**	**3.42%**	**9 551 469**	**22.08%**
Bulgaria	409	560	0.14%	7 789	1.90%
Norway	404	12 650	3.13%	10 438	2.58%

* Eurostat: Dec 2004

Table B3: **Comparative active monitoring 2004 versus 2003**

	Healthy Slaughtered			Risk Animals			Total active monitoring		
	2003	2004	Δ	2003	2004	Δ	2003	2004	Δ
Belgique/België	356 184	356 813	0.18%	34 988	36 715	4.94%	392 298	393 700	0.36%
Danmark	250 558	246 156	-1.76%	37 332	37 974	1.72%	289 664	284 216	-1.88%
Deutschland	2 337 605	2 292 714	-1.92%	249 489	236 492	-5.21%	2 588 219	2 530 518	-2.23%
Ellas	24 533	26 161	6.64%	1 999	2 645	32.32%	26 532	28 806	8.57%
España	471 252	478 037	1.44%	94 183	98 536	4.62%	567 791	578 050	1.81%
France	2 920 157	2 624 634	-10.12%	283 695	266 123	-6.19%	3 205 521	2 891 676	-9.79%
Ireland	600 586	605 396	0.80%	87 437	87 613	0.20%	700 009	701 565	0.22%
Italia	658 770	851 014	29.18%	124 050	130 704	5.36%	784 968	982 290	25.14%
Luxembourg	14 598	13 575	-7.01%	3 110	3 123	0.42%	17 710	16 698	-5.71%
Nederland	439 403	467 448	6.38%	65 943	66 130	0.28%	506 300	533 861	5.44%
Österreich	205 658	188 520	-8.33%	16 990	17 136	0.86%	222 648	205 656	-7.63%
Portugal	81 633	78 783	-3.49%	26 393	34 932	32.35%	109 297	114 932	5.16%
Suomi/Finland	108 198	107 168	-0.95%	23 202	18 916	-18.47%	131 400	126 084	-4.05%
Sverige	9 856	10 318	4.69%	24 708	25 773	4.31%	34 564	36 091	4.42%
United Kingdom	237 490	341 916	43.97%	222 251	256 719	15.51%	460 296	599 204	30.18%
Total EU 15	**8 716 481**	**8 688 653**	**-0.32%**	**1 295 770**	**1 319 531**	**1.83%**	**10 037 217**	**10 023 347**	**-0.14%**
Česká Republika	133 046	130 124	-2.20%	76 431	69 458	-9.12%	210 183	200 288	-4.71%
Eesti	19	21 277	111884.21%	3 964	5 754	45.16%	3 983	27 031	578.66%
Kypros	6 401	5 888	-8.01%	1 325	1 463	10.42%	7 726	7 351	-4.85%
Latvija	4 838	28 017	479.10%	1 277	1 557	21.93%	6 115	29 574	383.63%
Lietuva	7 418	47 506	540.42%	2 328	2 997	28.74%	9 746	50 503	418.19%
Magyarország	86 595	81 284	-6.13%	10 795	14 735	36.50%	97 390	96 019	-1.41%
Malta	1 089	2 068	89.90%	110	316	187.27%	1 199	2 384	98.83%
Polska	428 452	447 332	4.41%	26 873	33 708	25.43%	455 362	481 077	5.65%
Slovenija	54 751	35 767	-34.67%	11 357	9 873	-13.07%	66 135	45 667	-30.95%
Slovensko	65 192	63 553	-2.51%	21 805	19 258	-11.68%	87 008	82 822	-4.81%
New MS	**787 801**	**862 816**	**9.52%**	**156 265**	**159 119**	**1.83%**	**944 847**	**1 022 716**	**8.24%**
Norway	10 726	10 438	-2.69%	13 296	12 650	-4.86%	24 022	23 088	-3.89%
Total EU 25	9 504 282	9 551 469	0.50%	1 452 035	1 478 650	1.83%	10 982 064	11 046 063	0.58%

Table B4: **Evolution of positive cases world-wide since BSE was recognised**

Pays/country	< 1988	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	Total
Belgique/België	0	0	0	0	0	0	0	0	0	0	1	6	3	9	46	38	15	11	129
Česká Republika	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	4	7	15
Danmark	0	0	0	0	0	1(a)	0	0	0	0	0	0	0	1	6	3	2	1	14
Deutschland	0	0	0	0	0	1(a)	0	3(a)	0	0	2(a)	0	0	7	125	106	54	65	363
Ellas	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1
España	0	0	0	0	0	0	0	0	0	0	0	0	0	2	82	134	173	138	529
France	0	0	0	0	5	0	1	4	3	12	6	18	31(b)	162	277	240	138	54	951
Ireland	0	0	15(b)	14(b)	17(b)	18(b)	16	19(b)	16(b)	74	80	83	95	149	246	333	185	121	1 481
Italia	0	0	0	0	0	0	0	2(a)	0	0	0	0	0	0	50	36(b)	31	8	127
Luxembourg	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	2
Nederland	0	0	0	0	0	0	0	0	0	0	2	2	2	2	20	24	19	6	77
Österreich	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1
Polska	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	5	11	20
Portugal	0	0	0	1(a)	1(a)	1(a)	3(a)	12	15	31	30	127	159	150(b)	113	86(b)	133(b)	91	953
Slovenija	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	2	5
Slovensko	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	6	2	7	20
Suomi/Finland	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1
Total EU-UK	0	0	15	15	23	21	20	40	34	117	122	236	290	482	976	1 014	762	522	4 689
United Kingdom	442	2 514	7 228	14 407	25 359	37 280	35 090	24 436	14 562	8 149	4 393	3 235	2 301	1 441	1 196	1 130	614	343	184 120
Total EU 25	442	2 514	7 243	14 422	25 382	37 301	35 110	24 476	14 596	8 266	4 515	3 471	2 591	1 923	2 172	2 144	1 376	865	188 809
Canada	0	0	0	0	0	0	1(a)	0	0	0	0	0	0	0	0	0	1	1	2
Switzerland	0	0	0	2	8	15	29	64	68	45	38	14	50	33	42	24	21	3	456
Israel	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
Japan	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	2	4	5	14
Liechtenstein	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	2
United States	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1(a)	0	0
Total world	442	2 514	7 243	14 424	25 390	37 316	35 139	24 540	14 664	8 311	4 553	3 487	2 641	1 956	2 217	2 171	1 402	874	189 284

Sources : < 1997: OIE; From 1997 Systematic notification of animal diseases by MS, completed by monthly reports of the UK and Portugal, and since 2001, of the other MS; websites of the competent authorities of MS and the IOE.

(a) All imported cases

(b) Including imported cases : Ireland : 5 in 1989, 1 in 1990, 2 in 1991 and 1992, 1 in 1994 and 1995; France : 1 in 1999; Portugal : 1 in 2000, 2002 and 2003; Italy: 1 in 2002

Chart B1: **Evolution of BSE detected by passive surveillance and active monitoring in the UK**

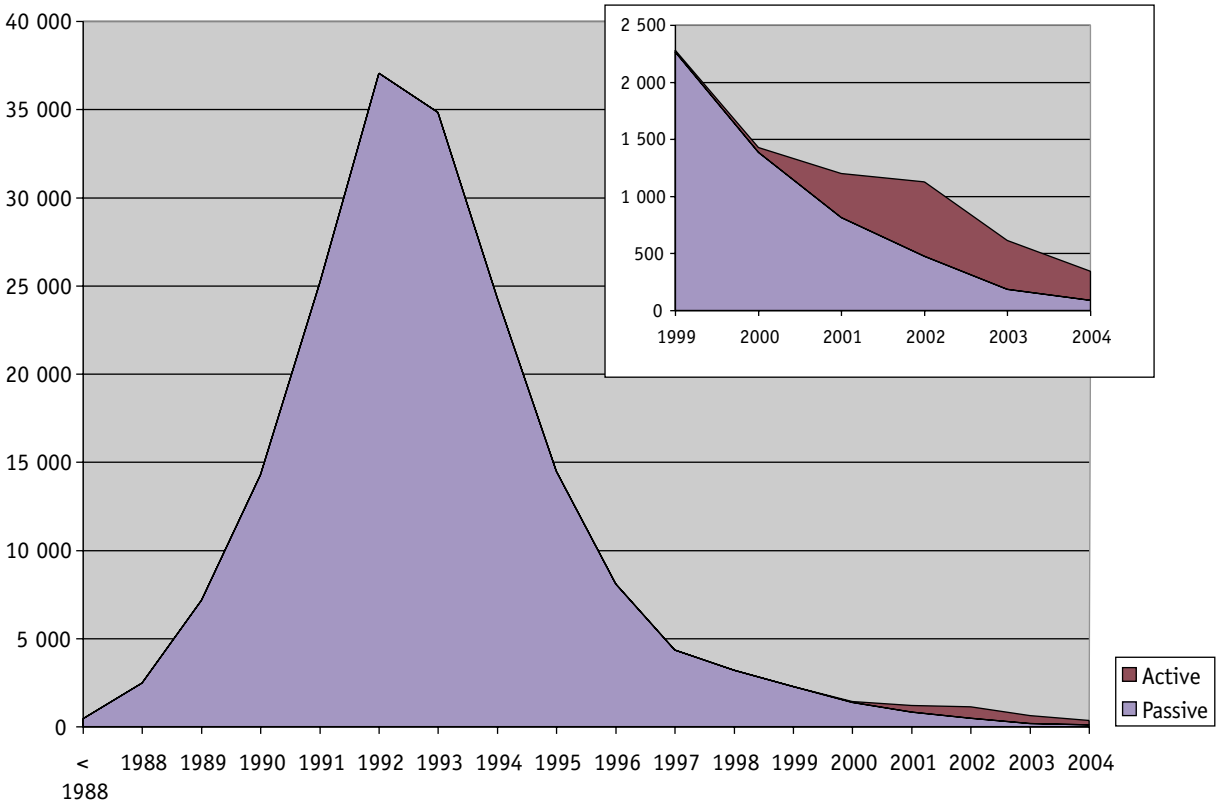


Chart B2: **Evolution of BSE detected by passive surveillance and active monitoring in the rest of the EU 25**

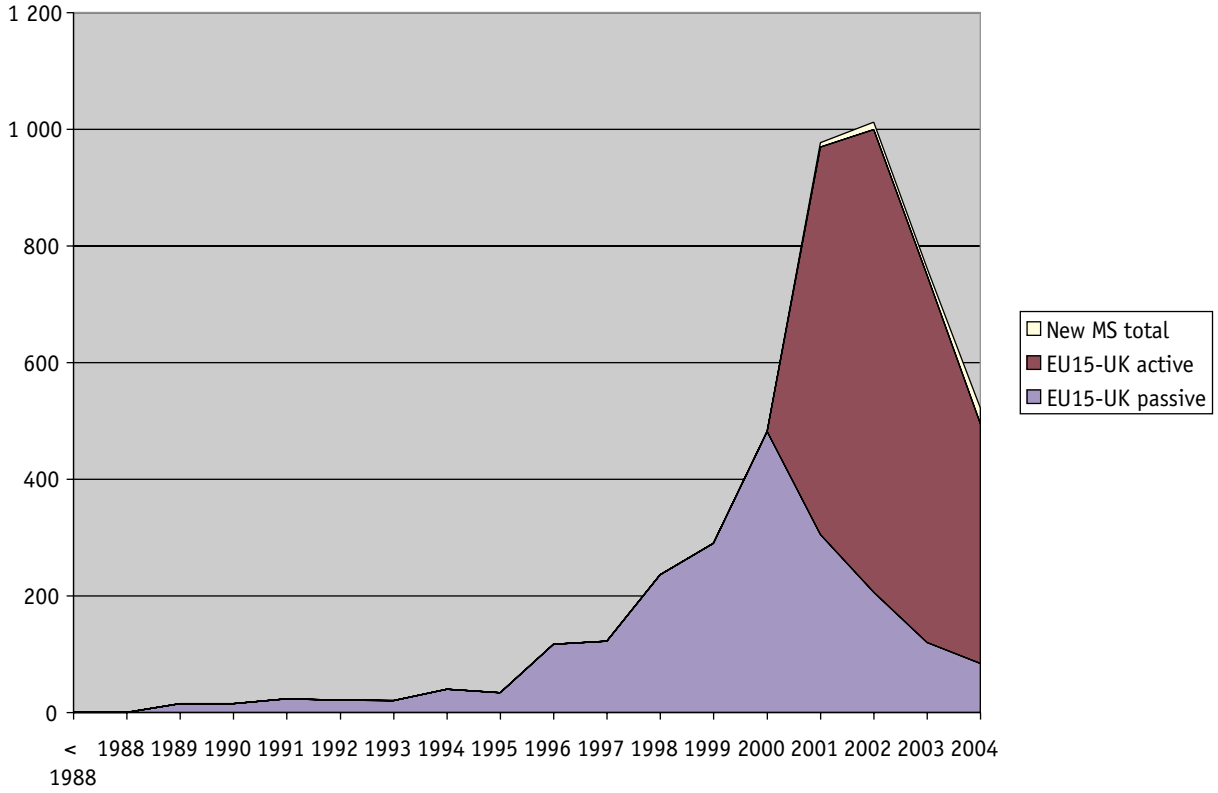


Table B5: Total positive cases per number of cattle tested or present in the adult population (> 24 months of age)

	Adult cattle (x1000)*	Tests No.	Positives	Ratio[1]	Prevalence[2]	
					Passive Surveill.	Total Monit.
Belgique/België	1 410	393 869	11	0.28	2.13	7.80
Česká Republika	654	200 717	7	0.35	0.00	10.70
Danmark	772	284 234	1	0.04	0.00	1.30
Deutschland	5 998	2 532 504	65	0.26	0.50	10.84
Eesti	131	27 031	0	0.00	0.00	0.00
Ellas	337	28 806	0	0.00	0.00	0.00
España	3 407	578 125	138	2.39	7.63	40.50
France	10 477	2 891 772	54	0.19	0.76	5.15
Ireland	3 046	701 840	121	1.72	10.18	39.72
Italia	2 861	982 317	8	0.08	0.00	2.80
Kypros	26	7 351	0	0.00	0.00	0.00
Latvija	204	29 576	0	0.00	0.00	0.00
Lietuva	477	50 503	0	0.00	0.00	0.00
Luxembourg	93	16 700	0	0.00	0.00	0.00
Magyarország	389	96 081	0	0.00	0.00	0.00
Malta	9	2 384	0	0.00	0.00	0.00
Nederland	1 730	533 880	6	0.11	0.00	3.47
Österreich	963	205 658	0	0.00	0.00	0.00
Polska	3 067	481 116	11	0.23	0.00	3.59
Portugal	812	115 017	91	7.91	16.01	112.07
Slovenija	202	45 666	2	0.44	0.00	9.90
Slovensko	270	82 939	7	0.84	0.00	25.93
Suomi/Finland	384	126 085	0	0.00	0.00	0.00
Sverige	671	36 111	0	0.00	0.00	0.00
United Kingdom	4 870	599 540	343	5.72	18.48	70.43
Total EU 25	**43 260**	**11 049 822**	**865**	**0.78**	**4.02**	**20.00**
Bulgaria	409	8 349	0	0.00	0.00	0.00
Norway	404	23 091	0	0.00	0.00	0.00

1 : Positives per 10 0000 bovine animals tested

2 : Cases over the last 12 months per 1 Million adult bovine animals

* Eurostat Dec 2004

Map 1: **European Countries where positive cases were detected in 2004**

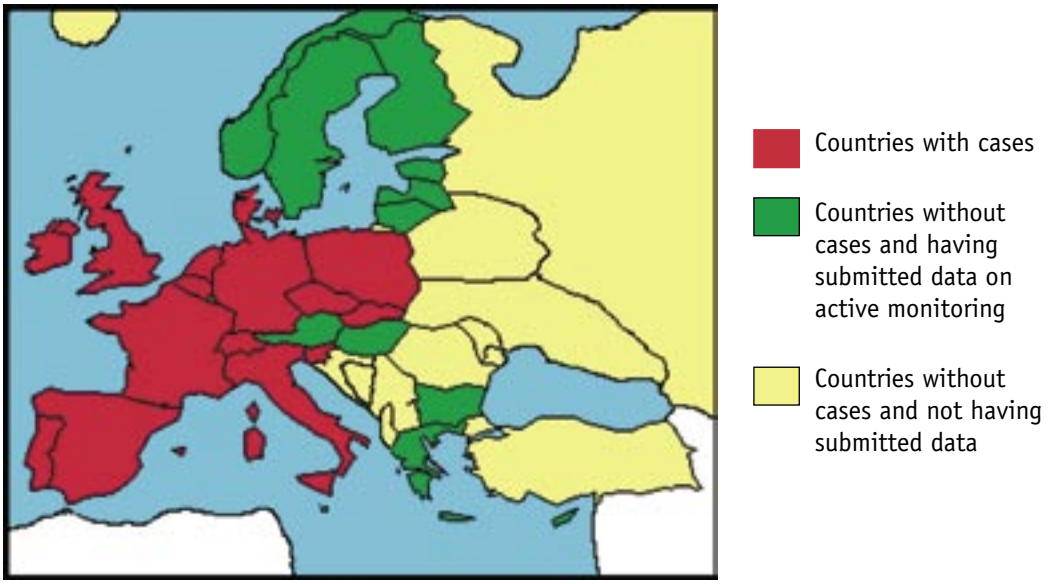
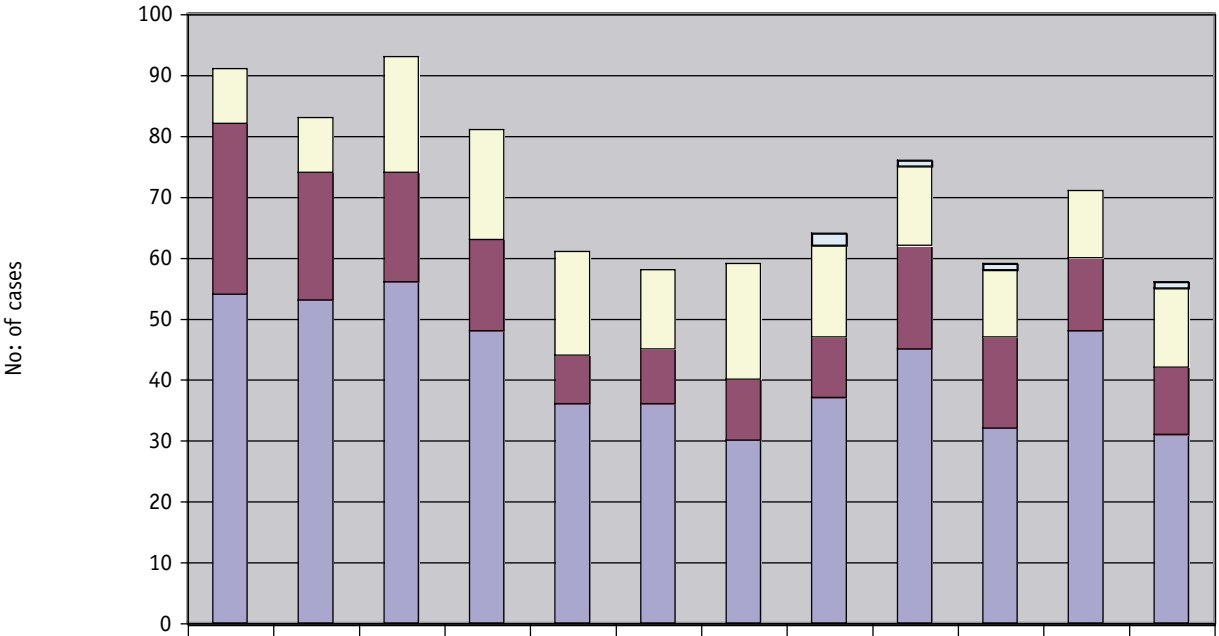


Chart B3: **Number of positive cases per month in different target groups in the EU in 2004**



	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec
BSE culling	0	0	0	0	0	0	0	2	1	1	0	1
Healthy sl.	9	9	19	18	17	13	19	15	13	11	11	13
Suspect	28	21	18	15	8	9	10	10	17	15	12	11
Risk Animals	54	53	56	48	36	36	30	37	45	32	48	31

Table B6: Positives in active monitoring and passive surveillance

	Active monitoring			Passive surveillance			Percentage of cases detected by active monitoring
	Tests			Tests			
	No.	Positive	Ratio*	No.	Positive	Ratio*	
Belgique/België	393 700	8	0.20	169	3	177.51	73%
Česká Republika	200 717	7	0.35	0	0		100%
Danmark	284 216	1	0.04	18	0	0.00	100%
Deutschland	2 530 518	62	0.25	1 986	3	15.11	95%
Eesti	27 031	0	0.00	0	0		
Ellas	28 806	0	0.00	0	0		
España	578 050	112	1.94	75	26	3 466.67	81%
France	2 891 676	46	0.16	96	8	833.33	85%
Ireland	701 565	90	1.28	275	31	1 127.27	74%
Italia	982 290	8	0.08	27	0	0.00	100%
Kypros	7 351	0	0.00	0	0		
Latvija	29 575	0	0.00	1	0	0.00	
Lietuva	50 503	0	0.00	0	0		
Luxembourg	16 698	0	0.00	2	0	0.00	
Magyarország	96 019	0	0.00	62	0	0.00	
Malta	2 384	0	0.00	0	0		
Nederland	533 861	6	0.11	19	0	0.00	100%
Österreich	205 656	0	0.00	2	0	0.00	
Polska	481 105	11	0.23	11	0	0.00	100%
Portugal	114 932	78	6.79	85	13	1 529.41	86%
Slovenija	45 645	2	0.44	21	0	0.00	100%
Slovensko	82 938	7	0.84	1	0	0.00	100%
Suomi/Finland	126 084	0	0.00	1	0	0.00	
Sverige	36 091	0	0.00	20	0	0.00	
United Kingdom	599 204	253	4.22	336	90	2 678.57	74%
Total EU 25	11 046 615	691	0.63	3 207	174	542.56	80%
Bulgaria	8 349	0	0.00	0	0		
Norway	23 088	0	0.00	3	0	0.00	

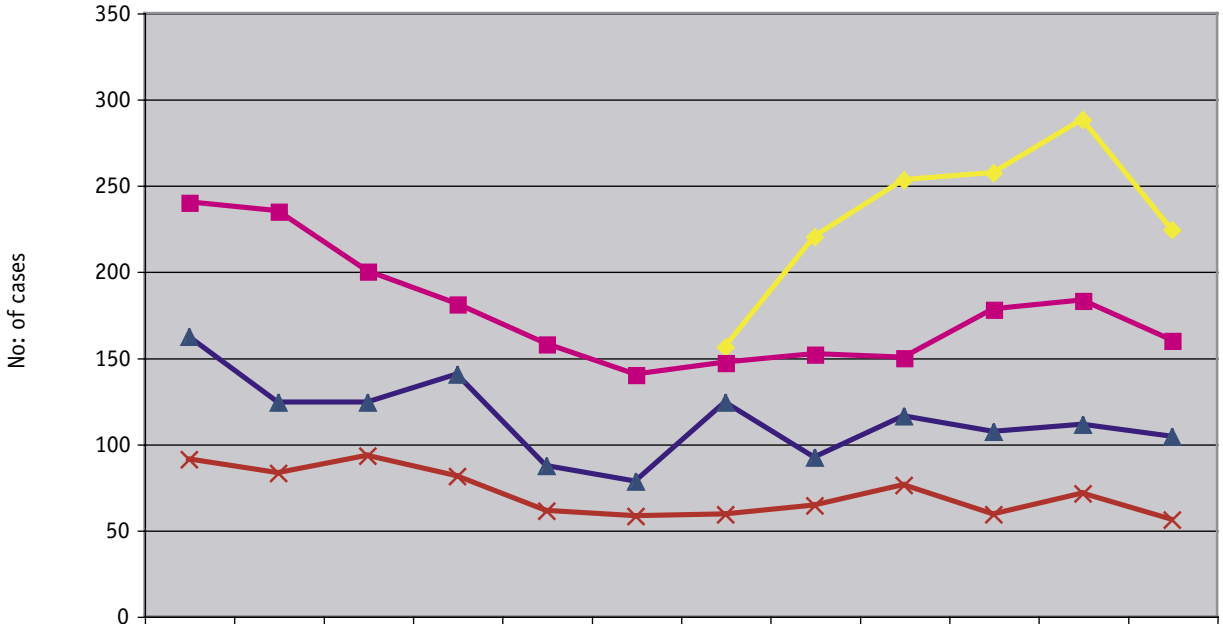
* : Positives per 10 000 bovine animals tested

Table B7: **Comparison of the number of positive cases and the prevalence in 2004 and 2003**

	Number of Positives			Prevalence*		
	2003	2004	Δ	2003	2004	Δ
Belgique/België	15	11	-27%	0.38	0.28	-27%
Danmark	2	1	-50%	0.07	0.04	-49%
Deutschland	54	65	20%	0.21	0.26	23%
Ellas	0	0		0.00	0.00	
España	173	138	-20%	3.05	2.39	-22%
France	138	54	-61%	0.43	0.19	-57%
Ireland	185	121	-35%	2.64	1.72	-35%
Italia	31	8	-74%	0.39	0.08	-79%
Luxembourg	0	0		0.00	0.00	
Nederland	19	6	-68%	0.38	0.11	-70%
Österreich	0	0		0.00	0.00	
Portugal	133	91	-32%	12.16	7.91	-35%
Suomi/Finland	0	0		0.00	0.00	
Sverige	0	0		0.00	0.00	
United Kingdom	614	343	-44%	13.33	5.72	-57%
Total EU 15	**1 364**	**838**	**-39%**	**1.36**	**0.84**	**-39%**
Česká Republika	4	7	75%	0.19	0.35	83%
Eesti	0	0		0.00	0.00	
Kypros	0	0		0.00	0.00	
Latvija	0	0		0.00	0.00	
Lietuva	0	0		0.00	0.00	
Magyarország	0	0		0.00	0.00	
Malta	0	0		0.00	0.00	
Polska	5	11	120%	0.11	0.23	108%
Slovenija	1	2	100%	0.15	0.44	190%
Slovensko	2	7	250%	0.23	0.84	267%
New MS	12	27	125.00%	0.13	0.26	107.78%
Bulgaria	0	0		0.00	0.00	
Norway	0	0		0.00	0.00	
Total EU 25	1 376	865	-37%	1.25	0.78	-38%

* : positive cases per 10 000 bovine animals tested

Chart B4: **Evolution of positive cases per month since July 2001 in the EU 15**



	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec
2001							156	220	253	257	288	224
2002	240	235	200	181	158	140	147	152	150	178	183	160
2003	162	124	124	140	87	78	124	92	116	107	111	104
2004	91	83	93	81	61	58	59	64	76	59	71	56

Comments on positive cases

When analysing Charts B1 and B2, it should be kept in mind that active monitoring was limited before 2001. The expanded active monitoring became fully applicable in July 2001. The number of tests was about 25 % higher in 2002, 2003 and 2004 than in 2001. Therefore, the prevalence of BSE is reducing since 2002 despite a higher number of cases detected in 2002 compared to 2001.

The results of UK in Tables B5, B6 and B7 cannot be compared to other Member States because the monitoring programme was not the same. Furthermore in Table B5, the results of Member States using a lower age limit should not be compared with results of Member States using the standard age limit.

Overall the number of cases and the prevalence of BSE dropped respectively by 39% and 38% in the EU15 in 2004 compared to 2003. However, in Germany an increase was observed as illustrated in Table B7. Portugal and Spain registered a decrease in the number of cases and the prevalence in contrast with 2003. Also, a reduction of the number of positive cases was observed during 2004 although some seasonal effect similar to 2002 and 2003 was observed (Charts B3 and B4).

In Germany, the increased number of positive cases and ratio may be explained by the relatively high number of cases detected in 2004 in young animals born between 1998 and 2000 (see table B15). This age group now reached the average age when the disease becomes clinical, which is 4-6 years, and consequently the number of reported cases increases. In addition, the prevalence had a decreasing trend in the second semester of 2004.

In the new Member States with reported BSE cases, the number of tested animals increased significantly in 2004 resulting in more positive cases and a higher prevalence, although it remains at a low level, in active monitoring.

4.3 Testing by target group

Table B8: Testing on emergency slaughtered bovine animals

	Emergency slaughter				
	No.	Positives	Ratio*		
			2004	2003	Δ
Belgique/België	1 308	0	0.00	0.00	
Danmark	1 803	0	0.00	0.00	
Deutschland	7 173	3	4.18	0.00	
Ellas	107	0	0.00	0.00	
España	1 413	1	7.08	13.73	-48%
France	0	0	0.00	0.00	
Ireland	2 313	0	0.00	16.11	-100%
Italia	5 111	2	3.91	3.83	2%
Luxembourg	18	0	0.00	0.00	
Nederland	1 179	0	0.00	0.00	
Österreich	1 326	0	0.00	0.00	
Portugal	1 633	1	6.12	25.61	-76%
Suomi/Finland	1 138	0	0.00	0.00	
Sverige	1 924	0	0.00	0.00	
United Kingdom	146 777	172	11.72	21.76	-46%
Total EU 15	**173 223**	**179**	**10.33**	**18.22**	**-43%**
Česká Republika	33 531	3	0.89	0.23	290%
Eesti	1 568	0	0.00	0.00	
Kypros	137	0	0.00	0.00	
Latvija	169	0	0.00	0.00	
Lietuva	200	0	0.00	0.00	
Magyarország	2 436	0	0.00	0.00	
Malta	153	0	0.00	0.00	
Polska	9 259	2	2.16	0.00	
Slovenija	328	0	0.00	0.00	
Slovensko	2 353	0	0.00	1.21	-100%
New MS	50 134	5	1.00	0.29	240%
Bulgaria	433	0	0.00	0.00	
Norway	9 212	0	0.00	0.00	
Total EU 25	223 357	184	8.24	13.31	-38%

* : positive cases per 10 000 bovine animals tested

Table B9: Testing on bovine animals with clinical signs at ante-mortem

	Clinical signs at ante-mortem inspection				
	No.	Positives	Ratio*		
			2004	2003	Δ
Belgique/België	85	0	0.00	0.00	
Danmark	7	0	0.00	0.00	
Deutschland	2 634	0	0.00	0.00	
Ellas	5	0	0.00	0.00	
España	2 205	4	18.14	16.57	9%
France	0	0	0.00	0.00	
Ireland	0	0	0.00	0.00	
Italia	61 475	3	0.49	1.46	-67%
Luxembourg	3	0	0.00	0.00	
Nederland	14 526	0	0.00	0.71	-100%
Österreich	2 349	0	0.00	0.00	
Portugal	3 365	4	11.89	25.36	-53%
Suomi/Finland	477	0	0.00	0.00	
Sverige	0	0	0.00	0.00	
United Kingdom	17 053	13	7.62	1666.67	-100%
Total EU 15	**104 184**	**24**	**2.30**	**3.46**	**-34%**
Česká Republika	62	0	0.00	0.00	
Eesti	30	0	0.00	0.00	
Kypros	39	0	0.00	0.00	
Latvija	0	0	0.00	0.00	
Lietuva	127	0	0.00	0.00	
Magyarország	35	0	0.00	0.00	
Malta	0	0	0.00	0.00	
Polska	0	0	0.00	0.00	
Slovenija	1 444	0	0.00	0.00	
Slovensko	54	0	0.00	0.00	
New MS	**1 791**	**0**	**0.00**	**0.00**	
Bulgaria	0	0	0.00	0.00	
Norway	1 353	0	0.00	0.00	
Total EU 25	**105 975**	**24**	**2.26**	**3.34**	**-32%**

* : positive cases per 10 000 bovine animals tested

Table B10: Testing on fallen stock

	Fallen Stock				
	No.	Positives	Ratio*		
			2004	2003	Δ
Belgique/België	35 322	2	0.57	1.48	-62%
Danmark	36 164	1	0.28	0.00	
Deutschland	226 685	23	1.01	0.83	22%
Ellas	2 533	0	0.00	0.00	
España	94 918	71	7.48	6.93	8%
France	266 123	29	1.09	3.07	-65%
Ireland	85 300	69	8.09	12.71	-36%
Italia	64 118	1	0.16	0.78	-80%
Luxembourg	3 102	0	0.00	0.00	
Nederland	50 425	1	0.20	0.99	-80%
Österreich	13 461	0	0.00	0.00	
Portugal	29 934	50	16.70	22.27	-25%
Suomi/Finland	17 301	0	0.00	0.00	
Sverige	23 849	0	0.00	0.00	
United Kingdom	92 889	58	6.24	11.62	-46%
Total EU 15	**1 042 124**	**305**	**2.93**	**4.12**	**-29%**
Česká Republika	35 865	2	0.56	0.00	
Eesti	4 156	0	0.00	0.00	
Kypros	1 287	0	0.00	0.00	
Latvija	1 388	0	0.00	0.00	
Lietuva	2 670	0	0.00	0.00	
Magyarország	12 264	0	0.00	0.00	
Malta	163	0	0.00	0.00	
Polska	24 449	1	0.41	0.00	
Slovenija	8 101	2	2.47	1.24	100%
Slovensko	16 851	2	1.19	0.00	
New MS	**107 194**	**7**	**0.65**	**0.12**	**455%**
Bulgaria	127	0	0.00	0.00	
Norway	2 085	0	0.00	0.00	
Total EU 25	**1 149 318**	**312**	**2.71**	**3.82**	**-29%**

* : positive cases per 10 000 bovine animals tested

Table B11: **Testing on all risk bovine animals (Fallen stock, bovine animals with clinical signs at AM and emergency slaughter)**

	Total Risk animals				
	No.	Positives	Ratio*		
			2004	2003	Δ
Belgique/België	36 715	2	0.54	1.43	-62%
Danmark	37 974	1	0.26	0.00	
Deutschland	236 492	26	1.10	0.80	37%
Ellas	2 645	0	0.00	0.00	
España	98 536	76	7.71	7.22	7%
France	266 123	29	1.09	3.07	-65%
Ireland	87 613	69	7.88	12.81	-39%
Italia	130 704	6	0.46	1.21	-62%
Luxembourg	3 123	0	0.00	0.00	
Nederland	66 130	1	0.15	0.91	-83%
Österreich	17 136	0	0.00	0.00	
Portugal	34 932	55	15.74	23.11	-32%
Suomi/Finland	18 916	0	0.00	0.00	
Sverige	25 773	0	0.00	0.00	
United Kingdom	256 719	243	9.47	18.40	-49%
Total EU 15	**1 319 531**	**508**	**3.85**	**6.04**	**-36%**
Česká Republika	69 458	5	0.72	0.13	450%
Eesti	5 754	0	0.00	0.00	
Kypros	1 463	0	0.00	0.00	
Latvija	1 557	0	0.00	0.00	
Lietuva	2 997	0	0.00	0.00	
Magyarország	14 735	0	0.00	0.00	
Malta	316	0	0.00	0.00	
Polska	33 708	3	0.89	0.00	
Slovenija	9 873	2	2.03	0.88	130%
Slovensko	19 258	2	1.04	0.46	127%
New MS	**159 119**	**12**	**0.75**	**0.19**	**293%**
Bulgaria	560	0	0.00	0.00	
Norway	12 650	0	0.00	0.00	
Total EU 25	**1 478 650**	**520**	**3.52**	**5.41**	**-35%**

* : positive cases per 10 000 bovine animals tested

Table B12: Testing on healthy slaughtered bovine animals

	Healthy Slaughter				
	No.	Positives	Ratio*		
			2004	2003	Δ
Belgique/België	356 813	6	0.17	0.28	-40%
Danmark	246 156	0	0.00	0.04	-100%
Deutschland	2 292 714	34	0.15	0.01	51%
Ellas	26 161	0	0.00	0.00	
España	478 037	36	0.75	1.57	-52%
France	2 624 634	17	0.06	0.13	-49%
Ireland	605 396	20	0.33	0.52	-36%
Italia	851 014	2	0.02	0.23	-90%
Luxembourg	13 575	0	0.00	0.00	
Nederland	467 448	5	0.11	0.25	-57%
Österreich	188 520	0	0.00	0.00	
Portugal	78 783	21	2.67	5.39	-51%
Suomi/Finland	107 168	0	0.00	0.00	
Sverige	10 318	0	0.00	0.00	
United Kingdom	341 916	10	0.29	0.80	-63%
Total EU 15	**8 688 653**	**151**	**0.17**	**0.30**	**-43%**
Česká Republika	130 124	2	0.15	0.23	-32%
Eesti	21 277	0	0.00	0.00	
Kypros	5 888	0	0.00	0.00	
Latvija	28 017	0	0.00	0.00	
Lietuva	47 506	0	0.00	0.00	
Magyarország	81 284	0	0.00	0.00	
Malta	2 068	0	0.00	0.00	
Polska	447 332	8	0.18	0.09	92%
Slovenija	35 767	0	0.00	0.00	
Slovensko	63 553	5	0.79	0.15	413%
New MS	**862 816**	**15**	**0.17**	**0.10**	**71%**
Bulgaria	7 789	0	0.00	0.00	
Norway	10 438	0	0.00	0.00	
Total EU 25	**9 551 469**	**166**	**0.17**	**0.29**	**-40%**

* : positive cases per 10 000 bovine animals tested

Table B13: Testing on bovine animals culled in the frame of BSE eradication

	Culled animals				
	No.	Positives	Ratio*		
			2004	2003	Δ
Belgique/België	172	0	0.00	0.00	
Danmark	86	0	0.00	0.00	
Deutschland	1 312	2	15.24	8.89	72%
Ellas	0	0	0.00	0.00	
España	1 477	0	0.00	25.47	-100%
France	919	0	0.00	11.98	-100%
Ireland	8 556	1	1.17	0.83	40%
Italia	572	0	0.00	0.00	
Luxembourg	0	0	0.00	0.00	
Nederland	283	0	0.00	0.00	
Österreich	0	0	0.00	0.00	
Portugal	1 217	2	16.43	0.00	
Suomi/Finland	0	0	0.00	0.00	
Sverige	0	0	0.00	0.00	
United Kingdom	569	0	0.00	0.00	
Total EU 15	**15 163**	**5**	**3.30**	**4.01**	**-18%**
Česká Republika	1 135	0	0.00	0.00	
Eesti	0	0	0.00	0.00	
Kypros	0	0	0.00	0.00	
Latvija	1	0	0.00	0.00	
Lietuva	0	0	0.00	0.00	
Magyarország	0	0	0.00	0.00	
Malta	0	0	0.00	0.00	
Polska	65	0	0.00	0.00	
Slovenija	5	0	0.00	0.00	
Slovensko	127	0	0.00	0.00	
New MS	1 333	0	0.00	0.00	
Bulgaria	0	0	0.00	0.00	
Norway	0	0	0.00	0.00	
Total EU 25	16 496	5	3.03	3.88	-22%

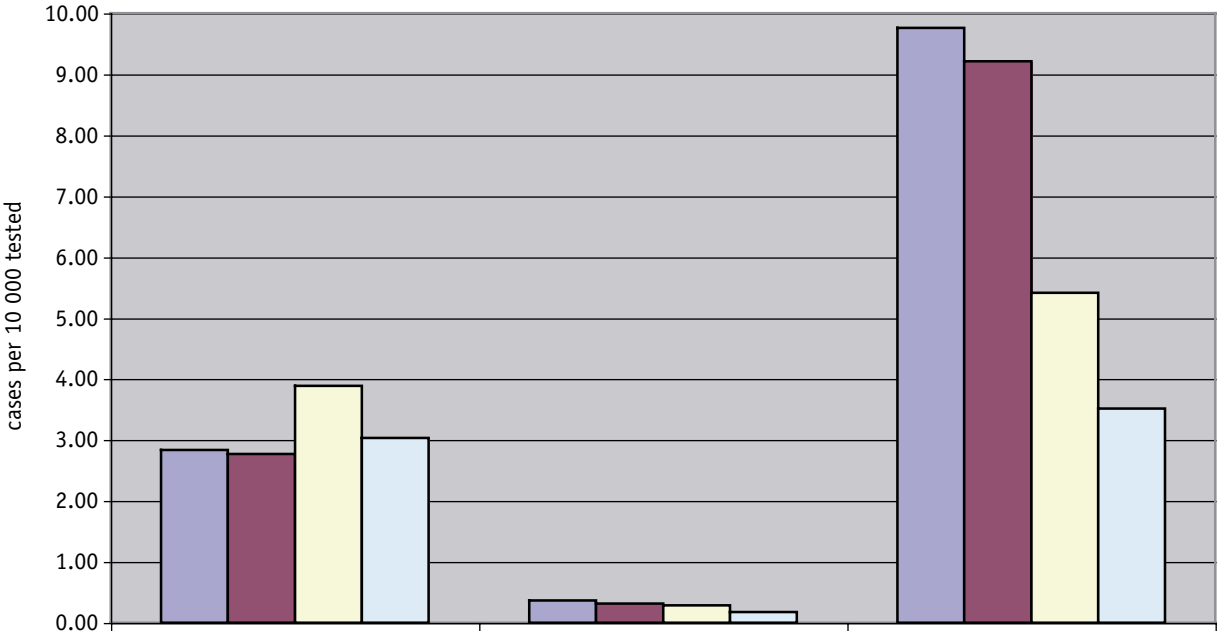
* : positive cases per 10 000 bovine animals tested

Table B14: Total of testing by active monitoring

	Total active monitoring				
	No.	Positives	Ratio*		
			2004	2003	Δ
Belgique/België	393 700	8	0.20	0.38	-47%
Danmark	284 216	1	0.04	0.03	2%
Deutschland	2 530 518	62	0.25	0.17	44%
Ellas	28 806	0	0.00	0.00	
España	578 050	112	1.94	2.61	-26%
France	2 891 676	46	0.16	0.39	-60%
Ireland	701 565	90	1.28	2.06	-38%
Italia	982 290	8	0.08	0.38	-79%
Luxembourg	16 698	0	0.00	0.00	
Nederland	533 861	6	0.11	0.34	-67%
Österreich	205 656	0	0.00	0.00	
Portugal	114 932	78	6.79	9.61	-29%
Suomi/Finland	126 084	0	0.00	0.00	
Sverige	36 091	0	0.00	0.00	
United Kingdom	599 204	253	4.22	9.30	-55%
Total EU 15	**10 023 347**	**664**	**0.66**	**1.05**	**-37%**
Česká Republika	200 717	7	0.35	0.19	83%
Eesti	27 031	0	0.00	0.00	
Kypros	7 351	0	0.00	0.00	
Latvija	29 575	0	0.00	0.00	
Lietuva	50 503	0	0.00	0.00	
Magyarország	96 019	0	0.00	0.00	
Malta	2 384	0	0.00	0.00	
Polska	481 105	11	0.23	0.09	160%
Slovenija	45 645	2	0.44	0.15	190%
Slovensko	82 938	7	0.84	0.23	267%
New MS	1 023 268	27	0.26	0.12	127%
Bulgaria	8 349	0	0.00	0.00	
Norway	23 088	0	0.00	0.00	
Total EU 25	11 046 615	691	0.63	0.97	-36%

* : positive cases per 10 000 bovine animals tested

Chart B5: **Evolution of the prevalence in target groups detected by active monitoring**



	BSE eradication	Healthy slaughtered	Risk animals
2001	2.83	0.36	9.76
2002	2.77	0.31	9.21
2003	3.88	0.29	5.41
2004	3.03	0.17	3.51

Comments on the testing by target group

Figures between different Member States should be compared with caution as:

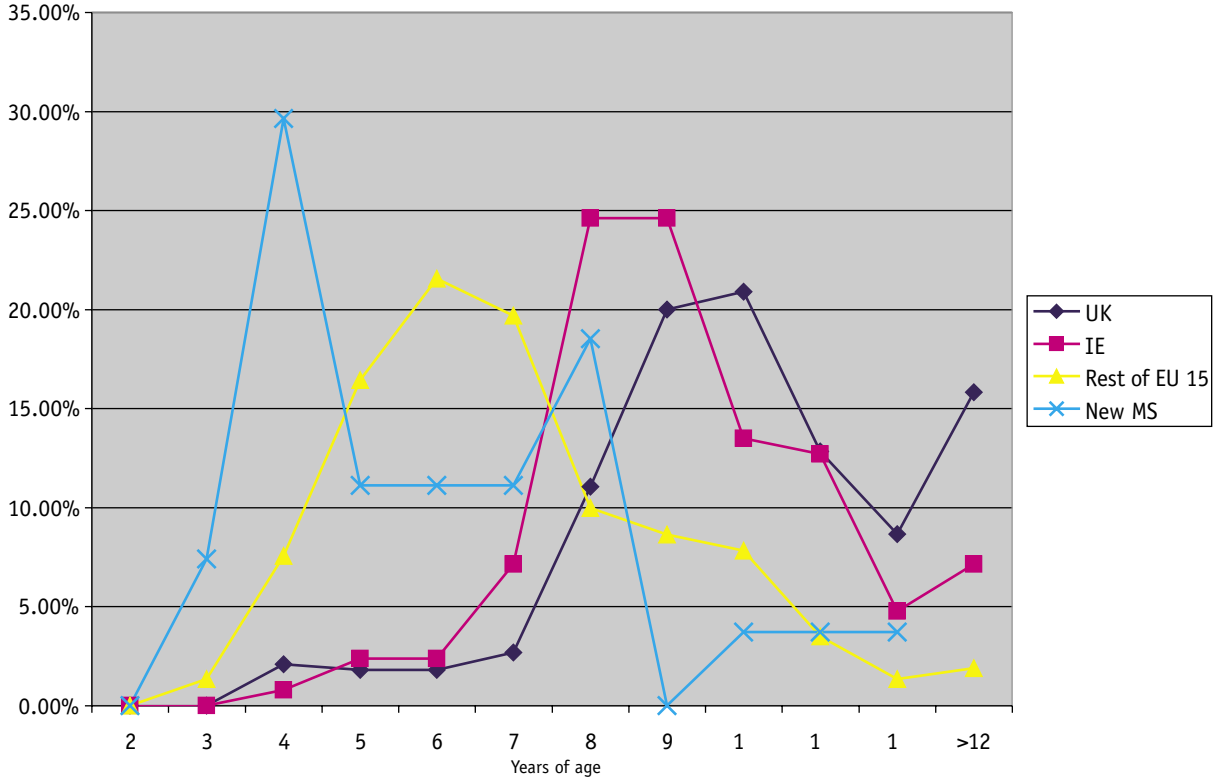
- The policy on emergency slaughter varies between Member States. In certain countries cattle are hardly, or not, received for emergency slaughter.
- The policy on animals with clinical signs at ante-mortem inspection also varies between Member States.
- Different monitoring programmes were run in healthy slaughtered cattle. Testing younger cattle on a voluntary basis results in a lower ratio. In addition, the testing in the UK focussed on animals born after the date of the effective feed ban.
- The results of different target groups are interdependent and should not be viewed in isolation. For example, an effective passive surveillance will increase the number of cases found in suspects and may at the same time decrease the ratio of positive cases in the other target groups, in particular in fallen stock and emergency slaughtered animals.

The figures illustrate that the likelihood of finding BSE cases is around 20 times higher in fallen stock, emergency slaughtered cattle and cattle with general clinical signs at ante-mortem ('risk animals') than in healthy slaughtered cattle. In culled animals, the prevalence was more than 15 times higher than in healthy slaughtered cattle.

Table B15: **Age distribution of all positive cases**

		Age (years old)										
		3	4	5	6	7	8	9	10	11	12	>12
		(36-47m)	(48-59m)	(60-71m)	(72-83m)	(84-95m)	(96-107m)	108-119m)	(120-131m)	(132-143m)	(144-155m)	(>155m)
Belgique / België	No of cases	0	0	1	3	5	1	0	1	0	0	0
	%	0%	0%	9%	27%	46%	9%	0%	9%	0%	0%	0%
Danmark	No of cases	0	0	0	0	0	0	0	0	0	0	1
	%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%
Deutschland	No of cases	2	18	13	9	13	5	3	1	0	0	1
	%	3%	28%	20%	14%	20%	8%	5%	2%	0%	0%	2%
España	No of cases	2	9	30	45	23	12	7	3	4	1	1
	%	2%	7%	22%	33%	17%	9%	5%	2%	3%	1%	1%
France	No of cases	0	0	6	4	10	6	11	10	1	2	1
	%	0%	0%	12%	8%	20%	12%	22%	20%	2%	4%	2%
Ireland	No of cases	0	1	3	3	9	31	31	17	16	6	9
	%	0%	1%	2%	2%	7%	25%	25%	14%	13%	5%	7%
Italia	No of cases	0	1	0	1	3	3	0	0	0	0	0
	%	0%	13%	0%	13%	38%	38%	0%	0%	0%	0%	0%
Nederland	No of cases	0	0	0	2	2	1	0	0	0	1	0
	%	0%	0%	0%	33%	33%	17%	0%	0%	0%	17%	0%
Portugal	No of cases	1	0	12	17	17	8	11	15	6	1	3
	%	1%	0%	12%	17%	19%	10%	12%	15%	9%	1%	3%
United Kingdom	No of cases	0	7	6	6	9	37	67	70	43	29	53
	%	0%	2%	2%	2%	3%	11%	20%	21%	13%	9%	16%
Total EU 15	**No of cases**	**5**	**36**	**70**	**89**	**91**	**105**	**130**	**116**	**72**	**40**	**69**
	%	**1%**	**4%**	**8%**	**11%**	**11%**	**13%**	**16%**	**14%**	**9%**	**5%**	**8%**
Česká Republika	No of cases	0	3	1	2	0	1	0	0	0	0	0
	%	0%	43%	14%	29%	0%	14%	0%	0%	0%	0%	0%
Polska	No of cases	0	1	2	0	3	2	0	1	1	1	0
	%	0%	9%	18%	0%	27%	18%	0%	9%	9%	9%	0%
Slovenija	No of cases	0	1	0	1	0	0	0	0	0	0	0
	%	0%	50%	0%	50%	0%	0%	0%	0%	0%	0%	0%
Slovensko	No of cases	2	3	0	0	0	2	0	0	0	0	0
	%	29%	43%	0%	0%	0%	29%	0%	0%	0%	0%	0%
New MS	No of cases	2	8	3	3	3	5	0	1	1	1	0
	%	7%	30%	11%	11%	11%	19%	0%	4%	4%	4%	0%

Chart B6: **Age distribution of positive cases in the UK, Ireland, the rest of the EU and the new Member States in 2004**



Charts B7, B8 and B9: **Comparison of the age distribution of positive cases detected in 2004, 2003, 2002 and 2001: United Kingdom, Ireland and the rest of the EU**

Charts B7: UK

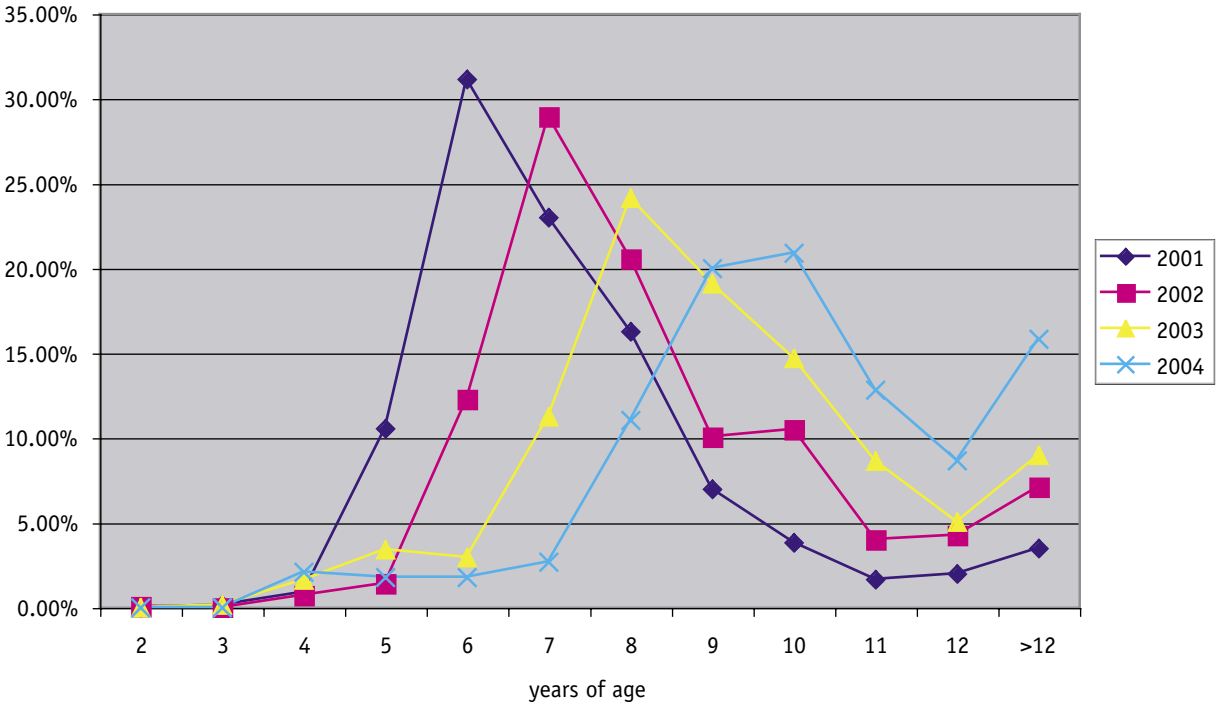


Chart B8: **Ireland**

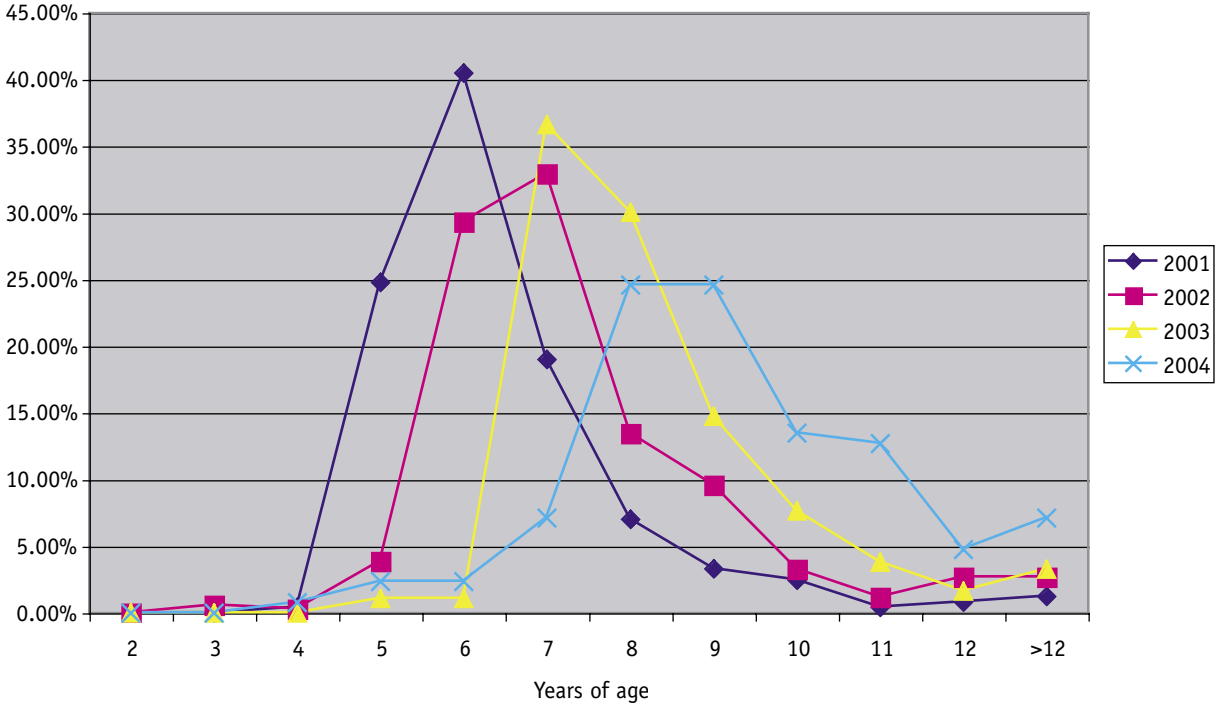


Chart B9: **Rest of the EU 15**

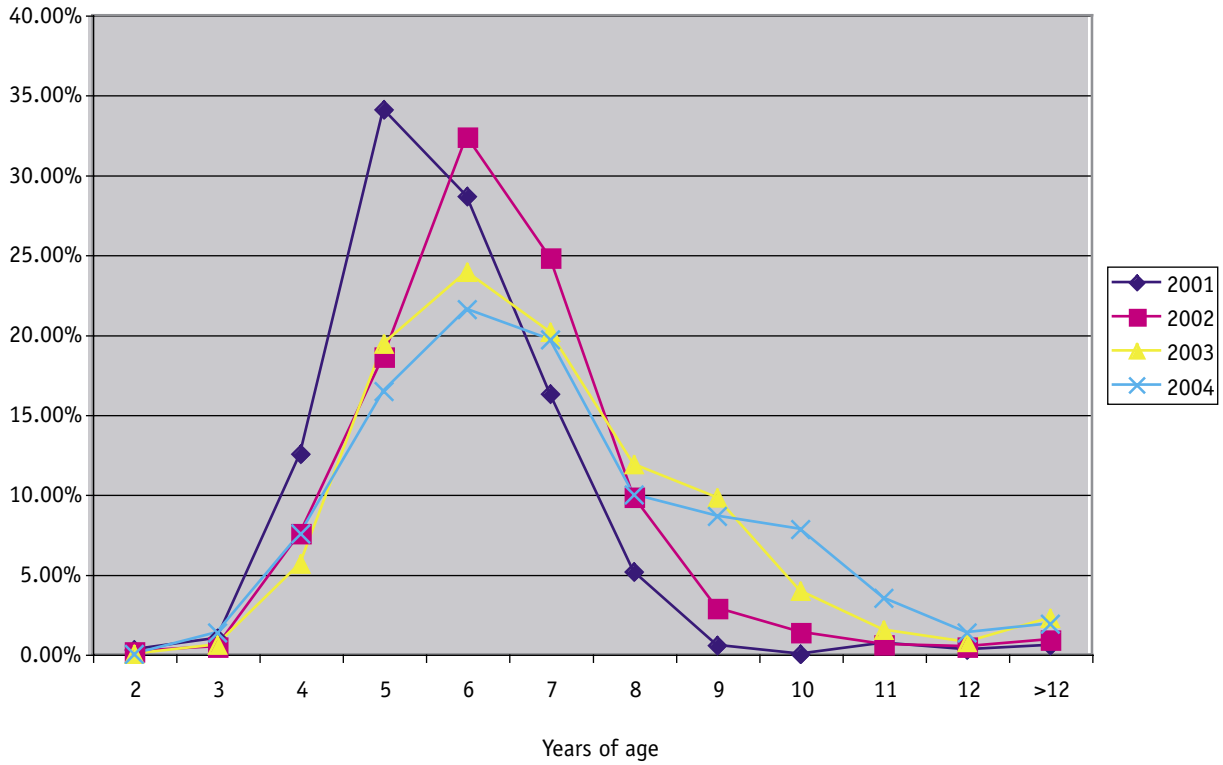
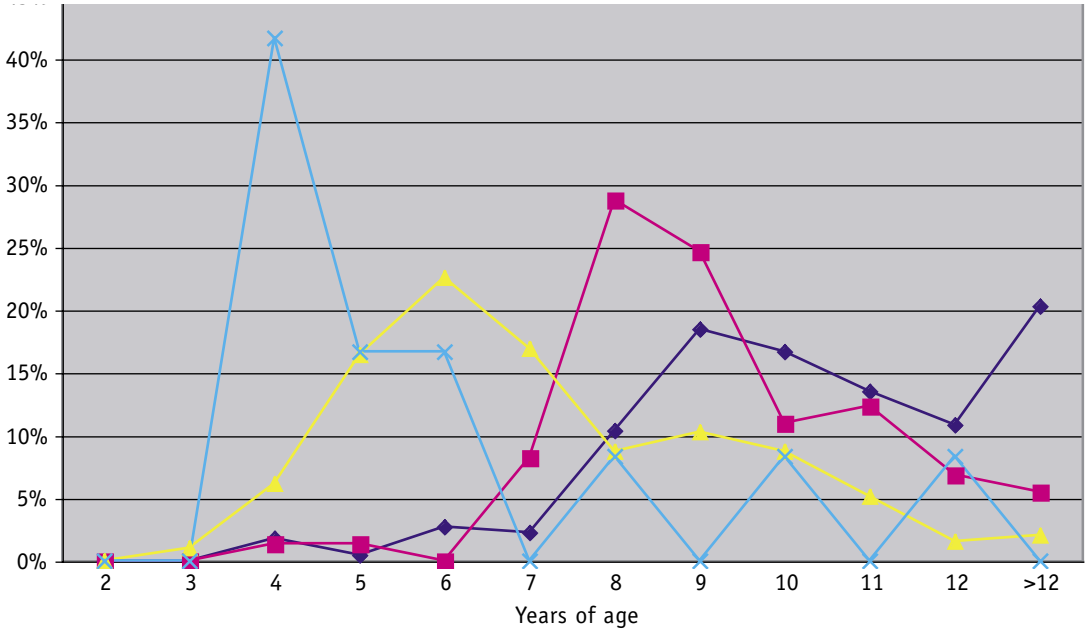
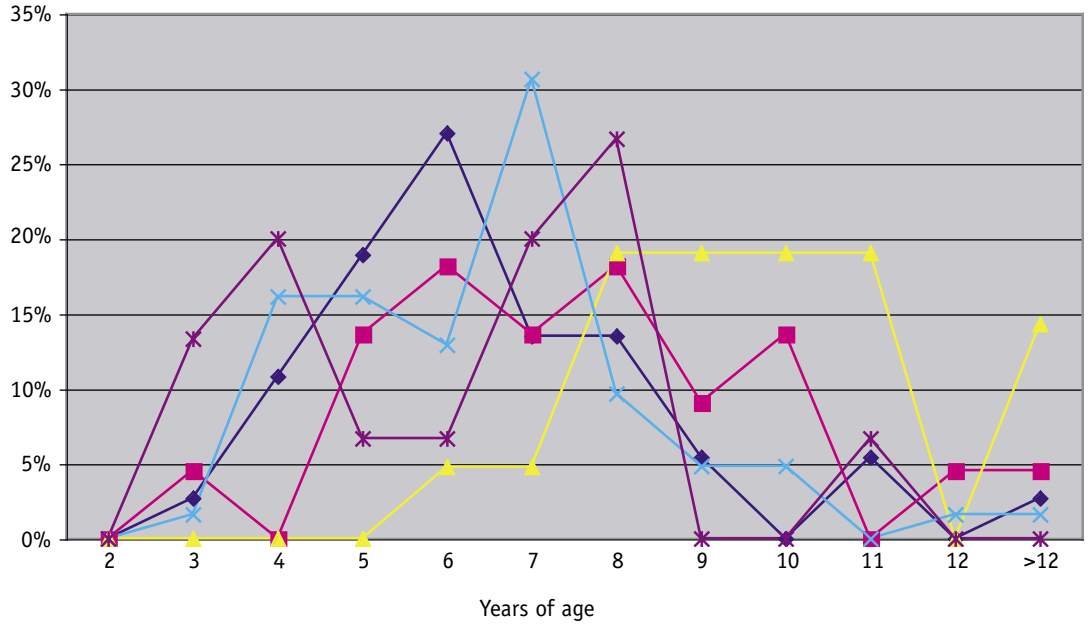


Chart B10: Age distribution in risk animals 2004



UK	0%	0%	2%	0%	3%	2%	10%	18%	17%	14%	11%	20%
Ireland	0%	0%	1%	1%	0%	8%	29%	25%	11%	12%	7%	5%
Rest of EU 15	0%	1%	16%	16%	23%	17%	9%	10%	9%	5%	2%	2%
New MS	0%	0%	42%	17%	17%	0%	8%	0%	8%	0%	8%	0%

Chart B11: Age distribution in healthy slaughtered cattle in 2004



ES	0%	3%	11%	19%	27%	14%	14%	5%	0%	5%	0%	3%
PT	0%	5%	0%	14%	18%	14%	18%	9%	14%	0%	5%	5%
IE	0%	0%	0%	0%	5%	5%	19%	19%	19%	19%	0%	14%
Rest of EU 15	0%	2%	16%	16%	13%	31%	10%	5%	5%	0%	2%	2%
New MS	0%	13%	20%	7%	7%	20%	27%	0%	0%	7%	0%	0%

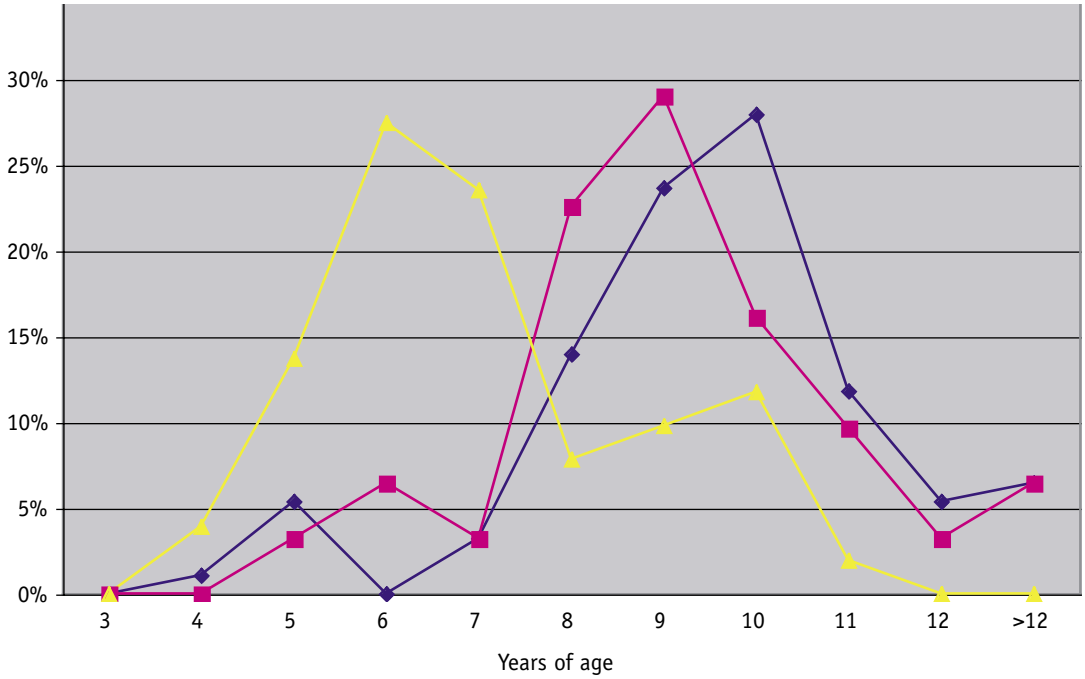
Table B16: **Age distribution of positive cases in risk animals (Fallen stock, emergency slaughter and clinical signs at AM) in 2004**

		Age (years old)										
		3	4	5	6	7	8	9	10	11	12	>12
		(36-47m)	(48-59m)	(60-71m)	(72-83m)	(84-95m)	(96-107m)	108-119m)	(120-131m)	(132-143m)	(144-155m)	(>155m)
Belgique / België	No of cases	0	0	0	1	1	0	0	0	0	0	0
	%	0%	0%	0%	50%	50%	0%	0%	0%	0%	0%	0%
Danmark	No of cases	0	0	0	0	0	0	0	0	0	0	1
	%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%
Deutschland	No of cases	1	8	7	3	3	2	2	0	0	0	0
	%	4%	31%	27%	12%	12%	8%	8%	0%	0%	0%	0%
España	No of cases	1	4	18	26	13	5	4	2	2	1	0
	%	1%	5%	24%	34%	17%	7%	5%	3%	3%	1%	0%
France	No of cases	0	0	2	3	3	2	8	7	0	2	1
	%	0%	0%	7%	11%	11%	7%	29%	25%	0%	7%	4%
Ireland	No of cases	0	1	1	0	6	21	18	8	9	5	4
	%	0%	1%	1%	0%	8%	29%	25%	11%	12%	7%	6%
Italia	No of cases	0	0	0	0	3	3	0	0	0	0	0
	%	0%	0%	0%	0%	50%	50%	0%	0%	0%	0%	0%
Nederland	No of cases	0	0	0	1	0	0	0	0	0	0	0
	%	0%	0%	0%	100%	0%	0%	0%	0%	0%	0%	0%
Portugal	No of cases	0	0	7	11	10	4	6	9	6	0	2
	%	0%	0%	9%	18%	18%	9%	11%	15%	15%	0%	4%
United Kingdom	No of cases	0	4	1	6	5	23	41	37	30	24	45
	%	0%	2%	1%	3%	2%	10%	19%	17%	14%	11%	20%
Total EU 15	**No of cases**	**2**	**17**	**34**	**50**	**44**	**61**	**79**	**62**	**49**	**32**	**53**
	%	**0%**	**4%**	**7%**	**10%**	**9%**	**12%**	**16%**	**13%**	**10%**	**7%**	**11%**
Česká Republika	No of cases	0	3	1	1	0	0	0	0	0	0	0
	%	0%	60%	20%	20%	0%	0%	0%	0%	0%	0%	0%
Polska	No of cases	0	0	1	0	0	0	0	1	0	1	0
	%	0%	0%	33%	0%	0%	0%	0%	33%	0%	33%	0%
Slovenija	No of cases	0	1	0	1	0	0	0	0	0	0	0
	%	0%	50%	0%	50%	0%	0%	0%	0%	0%	0%	0%
Slovensko	No of cases	0	1	0	0	0	1	0	0	0	0	0
	%	0%	50%	0%	0%	0%	50%	0%	0%	0%	0%	0%
New MS	No of cases	0	5	2	2	0	1	0	1	0	1	0
	%	0%	42%	17%	17%	0%	8%	0%	8%	0%	8%	0%

Table B17: **Age distribution of positive cases in healthy slaughtered cattle**

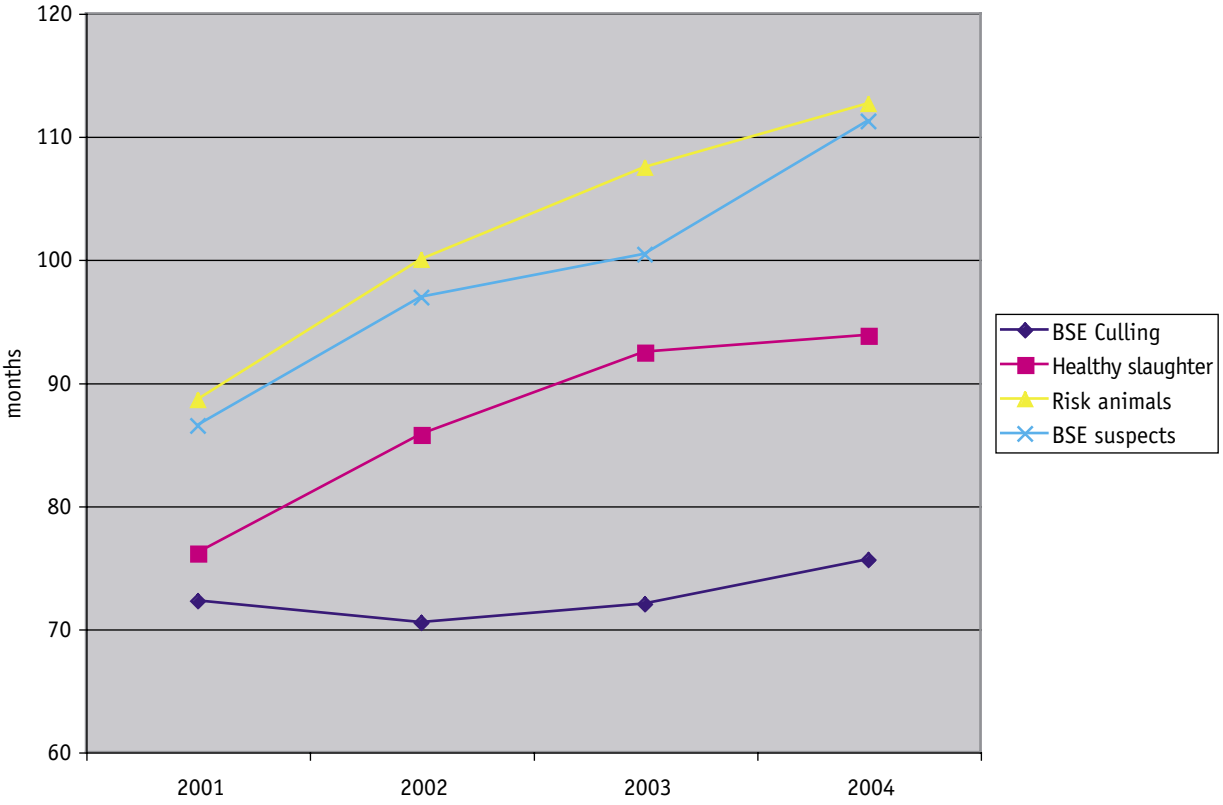
		Age (years old)										
		3	4	5	6	7	8	9	10	11	12	>12
		(36-47m)	(48-59m)	(60-71m)	(72-83m)	(84-95m)	(96-107m)	108-119m)	(120-131m)	(132-143m)	(144-155m)	(>155m)
Belgique / België	No of cases	0	0	1	0	3	1	0	1	0	0	0
	%	0%	0%	17%	0%	50%	17%	0%	17%	0%	0%	0%
Deutschland	No of cases	1	9	5	5	9	2	1	1	0	0	1
	%	3%	27%	15%	15%	27%	6%	3%	3%	0%	0%	3%
España	No of cases	1	4	7	10	5	5	2	0	2	0	1
	%	3%	11%	19%	27%	14%	14%	5%	0%	5%	0%	3%
France	No of cases	0	0	4	1	5	2	2	1	0	0	0
	%	0%	0%	27%	7%	33%	13%	13%	7%	0%	0%	0%
Ireland	No of cases	0	0	0	1	1	4	4	4	4	0	3
	%	0%	0%	0%	5%	5%	19%	19%	19%	19%	0%	14%
Italia	No of cases	0	1	0	1	0	0	0	0	0	0	0
	%	0%	50%	0%	50%	0%	0%	0%	0%	0%	0%	0%
Nederland	No of cases	0	0	0	1	2	1	0	0	0	1	0
	%	0%	0%	0%	20%	40%	20%	0%	0%	0%	20%	0%
Portugal	No of cases	1	0	2	4	3	4	2	3	0	1	1
	%	5%	0%	14%	18%	14%	18%	9%	14%	0%	5%	5%
United Kingdom	No of cases	0	2	0	0	1	1	4	7	2	0	2
	%	0%	10%	0%	0%	5%	5%	20%	35%	10%	0%	10%
Total EU 15	**No of cases**	**3**	**16**	**20**	**23**	**29**	**20**	**15**	**17**	**8**	**2**	**8**
	%	**2%**	**10%**	**12%**	**14%**	**18%**	**12%**	**9%**	**11%**	**5%**	**1%**	**5%**
Česká Republika	No of cases	0	0	0	1	0	1	0	0	0	0	0
	%	0%	0%	0%	50%	0%	50%	0%	0%	0%	0%	0%
Polska	No of cases	0	1	1	0	3	2	0	0	1	0	0
	%	0%	13%	13%	0%	38%	25%	0%	0%	13%	0%	0%
Slovensko	No of cases	2	2	0	0	0	1	0	0	0	0	0
	%	40%	40%	0%	0%	0%	20%	0%	0%	0%	0%	0%
New MS	**No of cases**	**2**	**3**	**1**	**1**	**3**	**4**	**0**	**0**	**1**	**0**	**0**
	%	**13%**	**20%**	**7%**	**7%**	**20%**	**27%**	**0%**	**0%**	**7%**	**0%**	**0%**

Chart B12: Age distribution in suspects in 2004



UK	0%	1%	5%	0%	3%	14%	24%	28%	12%	5%	6%
Ireland	0%	0%	3%	6%	3%	23%	29%	16%	10%	3%	6%
Rest of EU 15	0%	4%	14%	27%	24%	8%	10%	12%	2%	0%	0%

Chart B13: Average age of positive cases detected in 2001, 2002, 2003 and 2004



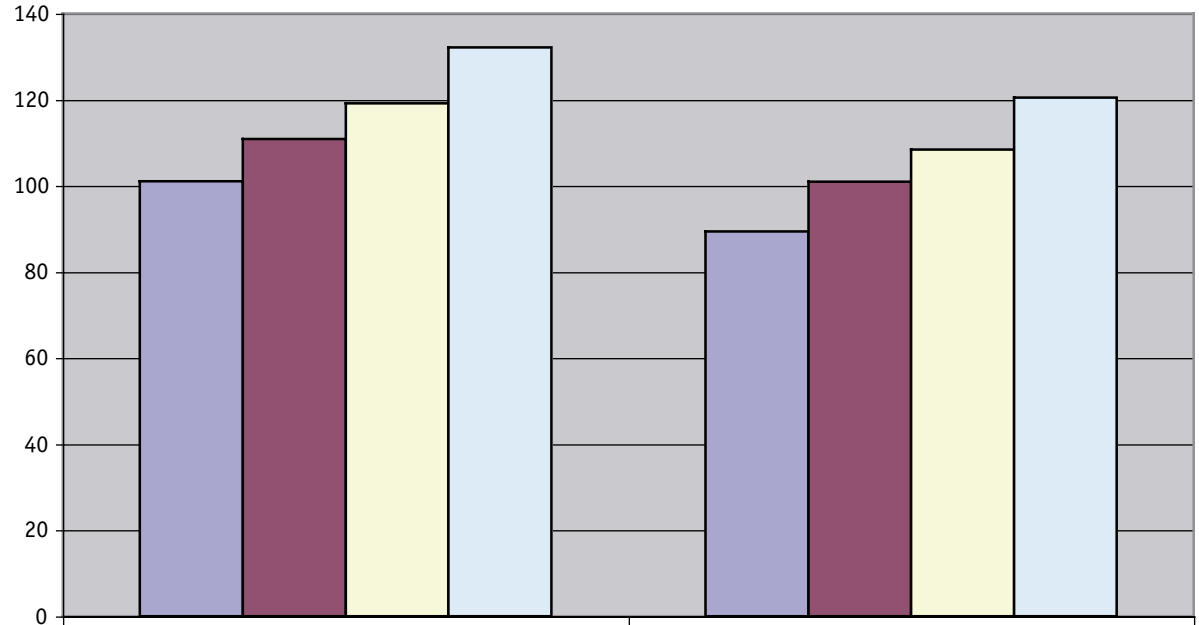
T*able B18:* **Age distribution of positive cases in BSE suspects:**

		4 (48-59m)	5 (60-71m)	6 (72-83m)	7 (84-95m)	8 (96-107m)	9 108-119m)	10 (120-131m)	11 (132-143m)	12 (144-155m)	>12 (>155m)
Belgique / België	No of cases	0	0	2	1	0	0	0	0	0	0
	%	0%	0%	67%	33%	0%	0%	0%	0%	0%	0%
Deutschland	No of cases	1	1	0	1	0	0	0	0	0	0
	%	33%	33%	0%	33%	0%	0%	0%	0%	0%	0%
España	No of cases	1	5	9	5	2	1	1	0	0	0
	%	4%	21%	38%	21%	8%	4%	4%	0%	0%	0%
France	No of cases	0	0	0	2	2	1	2	1	0	0
	%	0%	0%	0%	25%	25%	13%	25%	13%	0%	0%
Ireland	No of cases	0	1	2	2	6	9	5	3	1	2
	%	0%	3%	7%	7%	19%	29%	16%	10%	3%	7%
Portugal	No of cases	0	1	2	4	0	3	3	0	0	0
	%	0%	8%	15%	31%	0%	23%	23%	0%	0%	0%
United Kingdom	No of cases	1	5	0	3	13	22	26	11	5	6
	%	1%	5%	0%	3%	14%	24%	28%	12%	5%	7%
Total EU 15	**No of cases**	**3**	**13**	**15**	**18**	**23**	**36**	**37**	**15**	**6**	**8**
	%	**2%**	**7%**	**9%**	**10%**	**13%**	**21%**	**21%**	**9%**	**3%**	**5%**

Table B19: **Average age in months per target group**

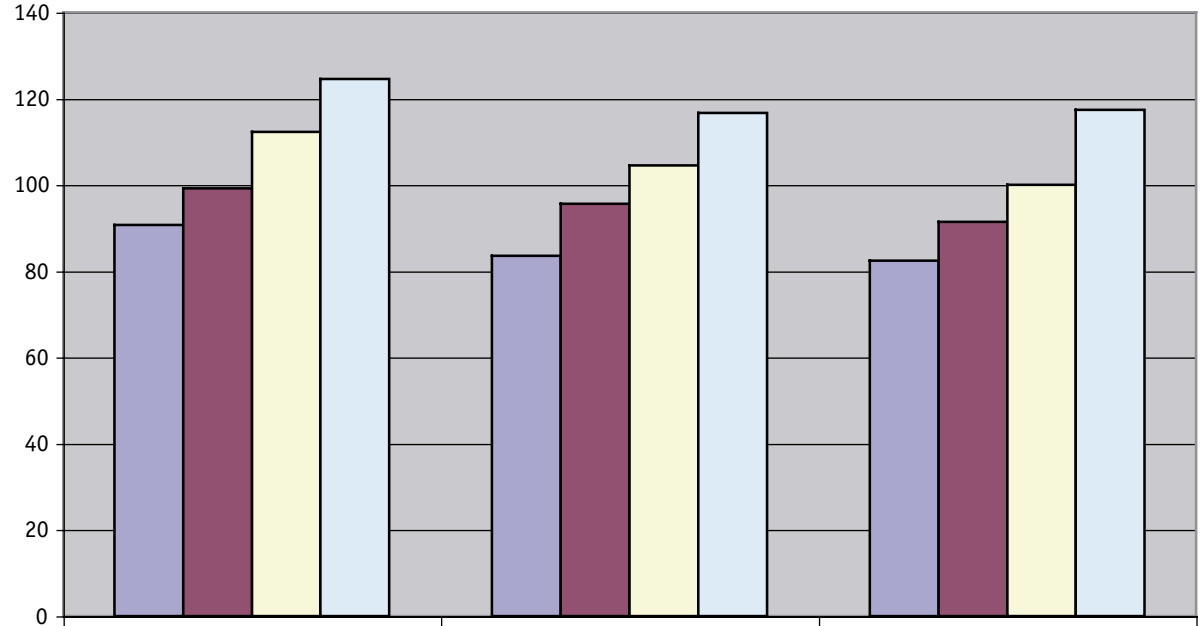
	BSE Culling				Healthy slaughter				Risk animals				BSE suspects			
	2001	2002	2003	2004	2001	2002	2003	2004	2001	2002	2003	2004	2001	2002	2003	2004
Belgique/België	74.0	0.0	0.0	0.0	72.1	74.8	88.1	91.8	73.6	84.0	81.6	83.0	73.9	81.0	0.0	79.7
Danmark	0.0	0.0	0.0	0.0	57.7	71.0	86.0	0.0	78.0	64.0	0.0	166.0	48.0	0.0	66.0	0.0
Deutschland	61.5	56.3	52.0	87.5	68.4	78.3	72.7	78.4	63.8	78.5	77.0	71.2	64.7	70.5	71.7	68.7
Ellas	0.0	0.0	0.0	0.0	56.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
España	0.0	0.0	69.0	0.0	83.0	81.3	84.2	83.2	72.5	76.4	84.2	81.5	64.3	86.6	74.0	82.7
France	86.0	79.0	0.0	0.0	75.6	86.6	99.7	90.5	79.3	85.5	97.6	110.3	74.6	83.9	81.7	111.3
Ireland	0.0	71.6	95.0	69.0	90.7	99.1	112.3	124.6	83.5	95.6	104.5	116.7	82.4	91.5	100.0	117.4
Italia	0.0	0.0	0.0	0.0	66.5	80.3	91.5	67.0	71.9	75.9	97.3	93.8	0.0	0.0	96.0	0.0
Luxembourg	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	73.0	0.0	0.0	0.0	0.0	0.0	0.0
Nederland	0.0	0.0	0.0	0.0	76.2	79.3	85.4	99.0	70.8	72.9	69.8	83.0	78.0	75.0	79.0	0.0
Österreich	0.0	0.0	0.0	0.0	70.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Portugal	0.0	99.0	0.0	67.0	81.2	86.9	94.5	97.3	82.3	85.2	92.1	104.9	81.9	88.2	93.2	100.5
Suomi/Finland	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	81.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
United Kingdom	0.0	0.0	0.0	0.0	57.0	102.0	109.4	118.3	101.0	110.9	119.2	132.1	89.4	101.0	108.4	120.4
Total EU 15	**72.3**	**70.5**	**72.0**	**75.6**	**76.2**	**85.9**	**93.1**	**95.0**	**88.7**	**100.1**	**107.6**	**113.5**	**86.5**	**96.9**	**100.5**	**111.2**
Česká Republika	0.0	0.0	0.0	0.0	72.0	73.5	62.7	88.0	68.0	0.0	76.0	60.6	0.0	0.0	0.0	0.0
Polska	0.0	0.0	0.0	0.0	0.0	76.3	74.0	93.4	0.0	0.0	0.0	114.7	0.0	99.0	67.0	0.0
Slovenija	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	72.0	0.0	44.0	62.5	0.0	0.0	0.0	0.0
Slovensko	0.0	0.0	0.0	0.0	72.8	95.3	93.0	60.2	78.0	71.3	72.0	75.0	0.0	0.0	0.0	0.0

Chart B14: **Average age of positive cases per target group in the UK: comparison of 2004, 2003, 2002 and 2001**



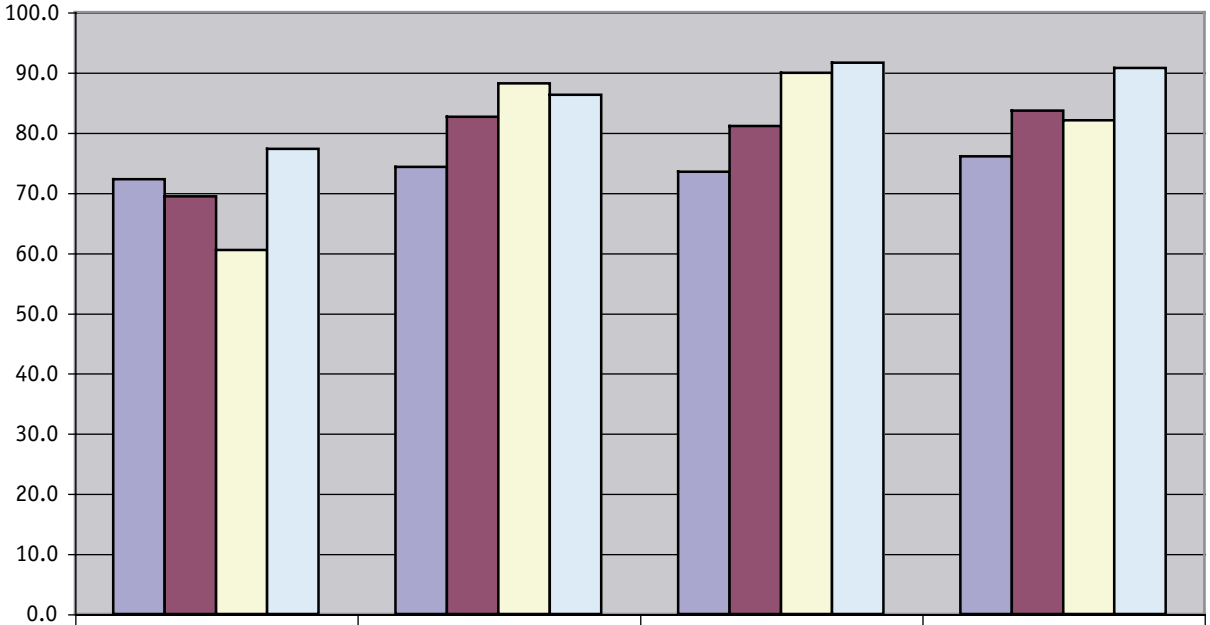
	Risk animals	BSE suspects
2001	101.0	89.4
2002	110.9	101.0
2003	119.2	108.4
2004	132.1	120.4

Chart B15: **Average age of positive cases per target group in Ireland: comparison of 2004, 2003, 2002 and 2001**



	Healthy slaughtered	Risk animals	BSE suspects
2001	90.7	83.5	82.4
2002	99.1	95.6	91.5
2003	112.3	104.5	100.0
2004	124.6	116.7	117.4

Chart B16: **Average age of positive cases per target group in the rest of the EU 15: comparison of 2004, 2003, 2002 and 2001**



	BSE culling	Healthy slaughtered	Risk animals	BSE suspects
2001	72.3	74.3	73.5	76.1
2002	69.4	82.6	81.1	83.6
2003	60.5	88.1	89.9	82.0
2004	77.3	86.2	91.6	90.7

Comments on the age distribution of positive cases

Tables B15 to B18, and Charts B6 to B12 illustrate that there are differences between Member States in the age profile of positive cases in 2004 as was already observed in 2003 and 2002. A favourable evolution is observed in the average age of positive cases of the major target groups (BSE suspects, healthy slaughtered cattle and risk animals) from 2001 to 2004 in the EU15 (Table B19 and Charts B13 to B16). Taking into consideration an average incubation period of 5 years, these figures are an indication that measures taken from 1997 onwards may have had some effect and that the prevalence of BSE in young animals is decreasing.

When assessing the figures in healthy slaughtered animals in the UK, it should be borne in mind that the testing was targeted at animals born after 1 August 1996.

Table B20: **Year of birth distribution of positive cases**

		Year of Birth												
		Before 1990	**1990**	**1991**	**1992**	**1993**	**1994**	**1995**	**1996**	**1997**	**1998**	**1999**	**2000**	**2001**
Belgique / België	No of cases	0	0	2	4	2	15	28	41	16	3	0	0	0
	%	0%	0%	2%	4%	2%	14%	25%	37%	14%	3%	0%	0%	0%
Danmark	No of cases	0	1	0	0	1	0	0	6	2	2	0	0	0
	%	0%	8%	0%	0%	8%	0%	0%	50%	17%	17%	0%	0%	0%
Deutschland	No of cases	1	2	2	2	3	15	83	133	43	29	36	13	0
	%	0%	1%	1%	1%	1%	4%	23%	37%	12%	8%	10%	4%	0%
Ellas	No of cases	0	0	0	0	0	0	0	1	0	0	0	0	0
	%	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%	0%
España	No of cases	10	3	0	5	33	36	89	102	129	85	26	10	0
	%	2%	1%	0%	1%	6%	7%	17%	19%	24%	16%	5%	2%	0%
France	No of cases	4	2	5	11	59	180	290	84	35	14	4	0	0
	%	1%	0%	1%	2%	9%	26%	42%	12%	5%	2%	1%	0%	0%
Ireland	No of cases	22	17	25	41	102	157	363	148	11	4	5	0	0
	%	3%	2%	3%	5%	11%	18%	41%	17%	1%	0%	1%	0%	0%
Italia	No of cases	3	0	1	1	5	14	26	48	23	3	1	0	0
	%	2%	0%	1%	1%	4%	11%	21%	38%	18%	2%	1%	0%	0%
Nederland	No of cases	1	0	2	2	3	4	7	32	11	5	1	0	0
	%	2%	0%	3%	3%	4%	6%	10%	47%	16%	7%	2%	0%	0%
Österreich	No of cases	0	0	0	0	0	0	0	1	0	0	0	0	0
	%	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%	0%
Portugal	No of cases	6	6	2	13	74	94	58	74	66	33	6	1	0
	%	1%	1%	1%	3%	17%	22%	13%	17%	15%	8%	1%	0%	0%
Suomi/Finland	No of cases	0	0	0	0	0	0	1	0	0	0	0	0	0
	%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%	0%	0%
United Kingdom	No of cases	240	97	183	347	579	887	799	99	44	30	13	3	1
	%	7%	3%	6%	10%	17%	27%	24%	3%	1%	1%	0%	0%	0%
Total EU 15	**No of cases**	**287**	**128**	**222**	**426**	**861**	**1 402**	**1 744**	**770**	**380**	**208**	**92**	**27**	**1**
	%	**4%**	**2%**	**3%**	**7%**	**13%**	**21%**	**27%**	**12%**	**6%**	**3%**	**1%**	**0.4%**	**0.02%**
Česká Republika	No of cases	0	0	0	0	0	0	4	1	4	1	1	6	0
	%	0%	0%	0%	0%	0%	0%	24%	6%	24%	6%	6%	35%	0%
Polska	No of cases	0	0	0	2	0	2	2	7	3	3	0	1	0
	%	0%	0%	0%	6%	0%	6%	6%	22%	9%	9%	0%	3%	0%
Slovenija	No of cases	0	0	0	0	0	0	1	1	0	1	1	1	0
	%	0%	0%	0%	0%	0%	0%	20%	20%	0%	20%	20%	20%	0%
Slovensko	No of cases	0	0	1	0	0	0	9	4	1	0	1	2	2
	%	0%	0%	5%	0%	0%	0%	45%	20%	5%	0%	5%	10%	10%
New MS	**No of cases**	**0**	**0**	**1**	**2**	**0**	**2**	**16**	**13**	**8**	**5**	**3**	**10**	**2**
	%	**0%**	**0%**	**1%**	**3%**	**0%**	**3%**	**22%**	**18%**	**11%**	**7%**	**4%**	**14%**	**3%**

Charts B17 to B21: Year of birth distribution of positive cases detected in 2001, 2002, 2003 or 2004

Chart B17

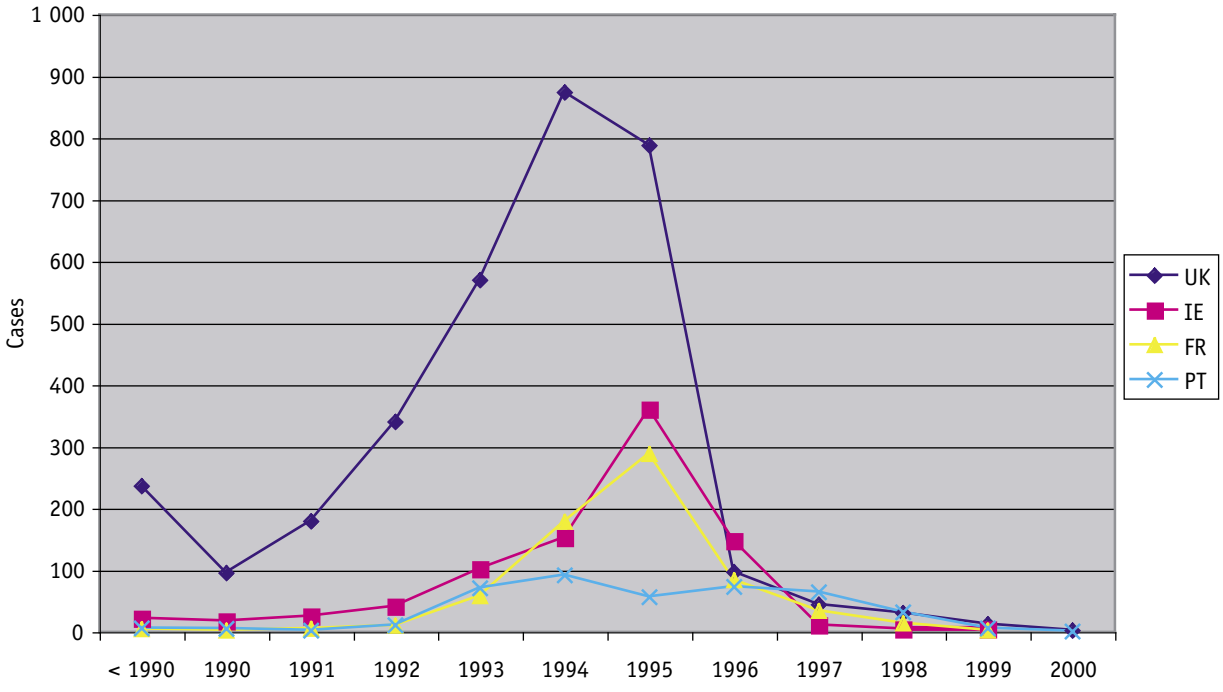


Chart B18

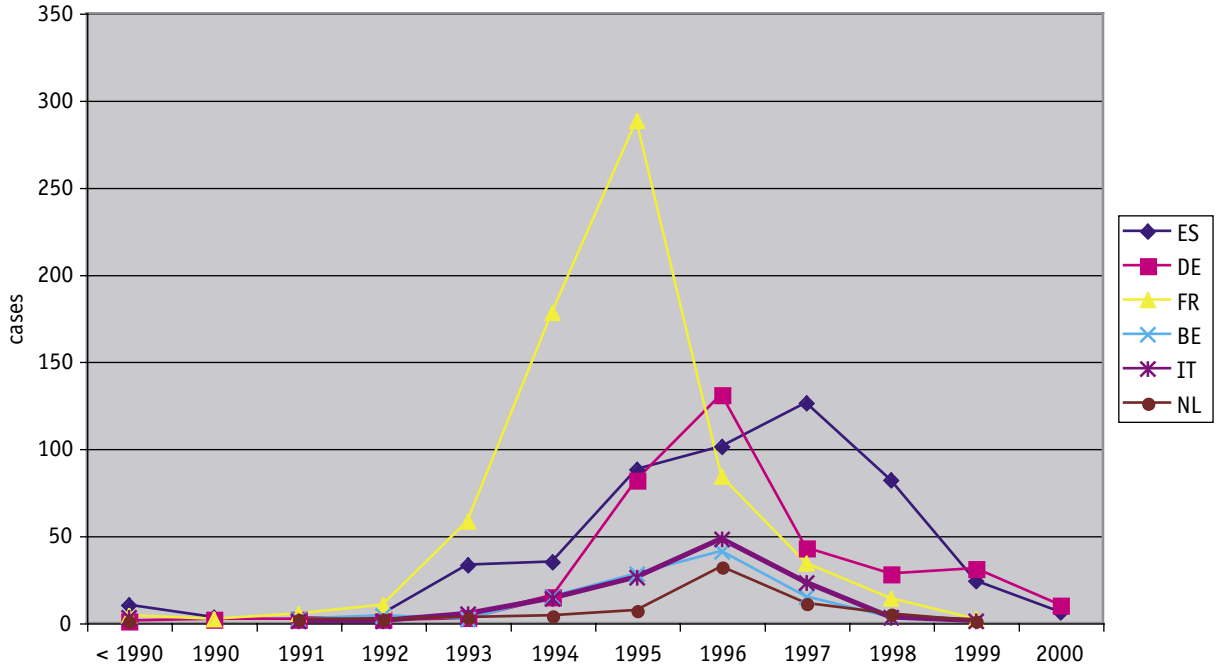


Chart B19

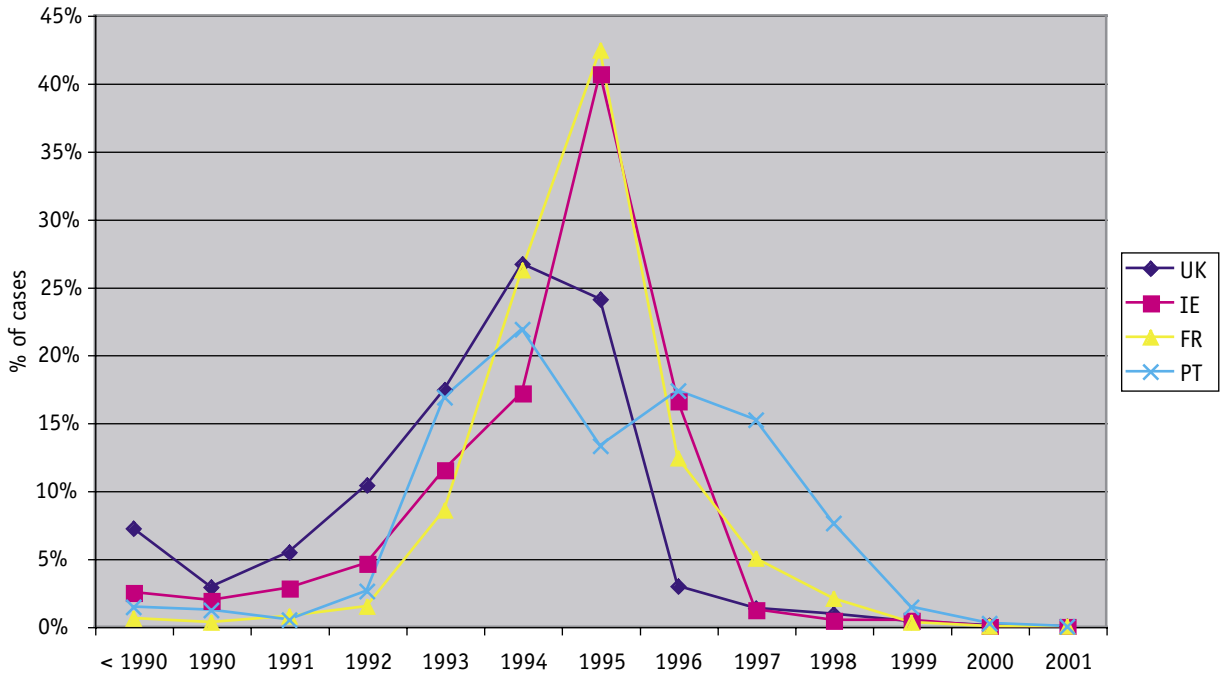


Chart B20

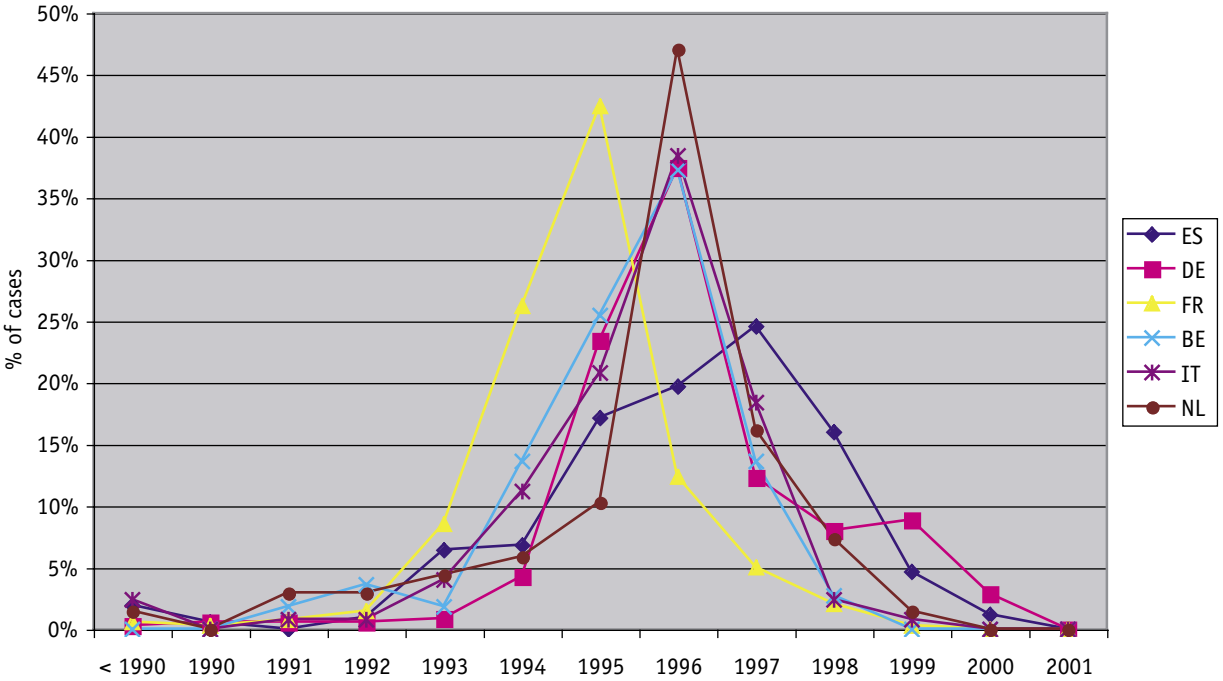
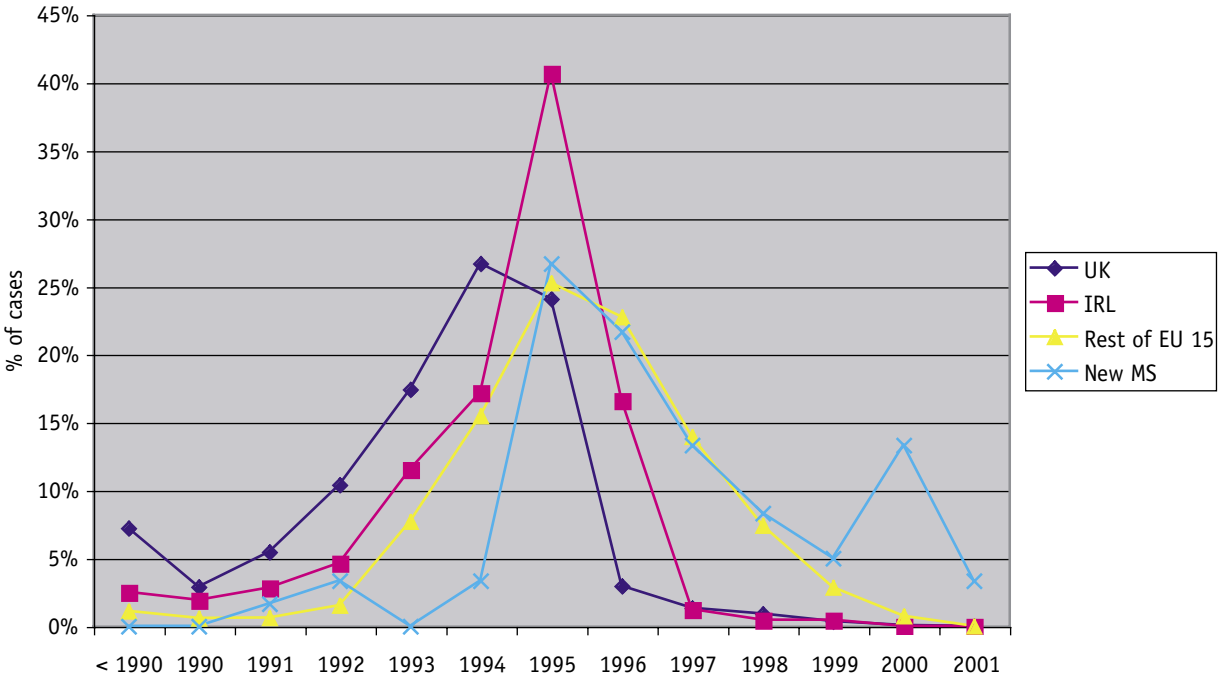


Chart B21



Comments on the year of birth distribution of positive animals

Table B20 and Charts B17 to B21 only take account of cases detected since 2001 and does not include cases detected before 2001 in particular in the United Kingdom, Portugal, Ireland and France. However, differences between Member States with regard to the year of birth with the highest % of positive cases may be an indication of differences in the period of exposure to the agent and by the effectiveness of measures to prevent transmission of the agent, in particular the feed ban. In several Member States the peak of exposure seems to be very well defined, representing almost half of the positive cases detected (France and Ireland: 1995; Germany, Belgium, Italy and the Netherlands: 1996).

The UK figures are not fully representative as the testing programme in healthy slaughtered animals is different for animals born pre-August 1996.

4.6 Prevalence of BSE in different age categories

Table B21: **Extrapolated age (months) distribution of all tested cattle**

Reported as	BE	DK	DE	EL	ES	FR	IE	IT	LU	NL	AT	PT	FI	SV	UK	EU 15
< 24	1 151	1 419	370 828	Na	2 685	0	0	1 708	1	225	15	2	793	1 129	133	380 669
24-35	34 268	37 511	532 916	Na	63 273	445 314	231 404	145 560	3 276	49 766	23 285	8 366	18 844	5 826	39 715	1 644 119
36-47	78 263	65 454	370 509	Na	61 788	601 164	91 101	110 997	5 878	100 199	29 382	12 463	28 094	6 066	71 685	1 637 681
48-59	77 961	60 102	323 170	Na	68 693	395 926	45 244	112 927	3 336	95 863	25 315	14 680	26 885	6 251	99 485	1 360 402
60-71	61 457	45 788	268 111	Na	65 073	324 754	40 909	99 676	2 055	87 085	24 009	13 724	20 803	5 407	99 966	1 162 543
72-83	46 886	30 660	210 810	Na	57 970	268 102	40 850	80 367	1 129	69 366	22 353	12 235	13 970	4 032	95 485	956 577
84-95	31 541	18 798	155 873	Na	49 281	220 217	39 687	61 841	588	51 520	19 511	10 841	8 269	2 493	79 663	751 366
96-107	21 231	11 954	0	Na	35 917	171 169	0	47 070	1	33 968	17 222	8 947	0	0	33 012	381 118
108-119	12 735	6 364	0	Na	28 173	130 572	0	33 677	0	20 402	13 412	7 182	0	0	20 137	272 953
120-131	7 513	3 447	0	Na	26 076	97 075	0	24 949	0	10 510	9 574	5 620	0	0	17 254	202 152
132-143	4 160	1 948	0	Na	18 327	71 775	0	18 356	0	5 747	6 800	4 218	0	0	9 941	141 330
144-155	2 329	1 122	0	Na	14 900	52 925	0	13 739	0	2 998	4 416	3 057	0	0	8 963	104 477
156 & >	2 856	1 314	0	Na	52 179	112 779	0	32 271	0	2 767	6 746	13 686	0	0	13 614	238 249
96 & >	0	0	297 931	Na	33 381	0	211 172	0	367	7 116	0	0	9 991	3 008	0	562 966
> 24	0	0	0	Na	0	0	0	0	0	0	3 678	0	0	0	0	3 678
Unknown	10 888	517	2 719	Na	0	0	549	1 620	0	0	0	0	0	1 915	12 543	30 751
Total	393 239	286 398	2 532 867	Na	577 716	2 891 772	700 916	784 758	16 631	537 532	205 718	115 021	127 649	36 127	601 596	9 831 031

Table B21 (cont.): **Extrapolated age (months) distribution of all tested cattle**

Reported as	CZ	EE	CY	LV	LT	HU	MT	PL	SI	SK
< 24	98	19	36	61	29	46	2	Na	161	Na
24-35	31 518	2 493	1 070	2 102	5 426	9 950	225	Na	7 178	Na
36-47	38 407	3 767	1 189	3 287	5 080	17 576	341	Na	6 090	Na
48-59	36 183	3 751	1 137	2 910	4 402	17 426	988	Na	5 243	Na
60-71	28 303	3 436	1 056	2 888	4 496	14 414	468	Na	4 950	Na
72-83	21 051	3 349	761	3 207	4 760	11 418	128	Na	4 774	Na
84-95	15 316	2 862	927	2 855	4 436	8 088	35	Na	3 987	Na
96-107	10 997	2 407	664	2 587	5 151	5 961	2	Na	3 681	Na
108-119	7 495	1 793	327	2 461	4 937	4 155	0	Na	3 096	Na
120-131	5 179	1 149	115	2 102	4 823	2 699	0	Na	2 204	Na
132-143	2 850	754	45	1 636	2 154	1 762	0	Na	1 518	Na
144-155	1 518	566	8	1 445	2 144	1 020	0	Na	1 067	Na
156 & >	1 958	682	16	2 035	2 665	1 760	0	Na	1 684	Na
96 & >	0	0	0	0	0	0	0	Na	0	Na
Unknown	0	3	0	0	0	0	98	Na	59	Na
Total	**200 873**	**27 031**	**7 351**	**29 576**	**50 503**	**96 275**	**2 287**	**Na**	**45 692**	**Na**

Table B22: **Extrapolated (months) age distribution of tested risk animals**

Reported as	BE	DK	DE	EL	ES	FR	IE	IT	LU	NL	AT	PT	FI	SV	UK	EU 15
< 24	904	1 050	6 050	Na	946	0	0	400	1	41	14	0	616	1 088	60	11 591
24-35	7 160	8 553	50 093	Na	12 676	41 452	13 660	18 173	620	12 760	2 316	4 064	4 773	4 809	31 407	215 295
36-47	6 872	7 492	38 060	Na	11 862	46 015	8 899	16 962	1 013	9 931	1 858	3 821	3 264	4 158	28 708	191 167
48-59	5 604	6 713	35 120	Na	11 912	36 529	6 804	17 092	684	9 544	1 561	4 115	3 530	4 076	28 244	173 890
60-71	4 613	5 810	31 941	Na	11 572	30 578	6 774	15 331	405	9 695	1 575	3 831	2 963	3 738	28 515	159 439
72-83	3 736	3 938	25 507	Na	10 147	25 610	7 103	11 801	223	8 212	1 427	3 225	2 011	2 756	27 630	134 681
84-95	2 615	2 327	17 845	Na	8 048	20 757	6 567	8 669	107	6 045	1 225	2 899	1 074	1 680	24 227	104 801
96-107	1 887	1 418	0	Na	5 884	15 914	0	6 226	1	1 093	1 009	2 326	0	0	20 197	56 302
108-119	1 231	757	0	Na	4 596	12 263	0	4 168	0	600	781	1 921	0	0	17 348	43 834
120-131	706	382	0	Na	4 095	9 215	0	3 004	0	266	525	1 601	0	0	15 089	34 955
132-143	391	236	0	Na	2 794	6 989	0	2 021	0	148	390	1 254	0	0	8 567	22 825
144-155	255	145	0	Na	2 400	5 483	0	1 478	0	81	269	991	0	0	7 686	18 807
156 & >	347	203	0	Na	8 124	15 318	0	3 275	0	94	525	4 891	0	0	11 963	44 765
96 & >	0	0	31 551	Na	3 588	0	35 275	0	0	7 090	0	0	1 249	2 033	0	80 786
> 24	0	0	0	Na	0	0	0	0	0	0	3 678	0	0	0	0	3 678
Unknown	394	484	732	Na	0	0	218	96	0	0	0	0	0	1 451	7 803	11 178
Total	36 715	39 508	236 899	Na	98 644	266 123	85 300	108 696	3 054	65 600	17 153	34 939	19 480	25 789	257 444	1 307 994

Table B22 (cont.): **Extrapolated (months) age distribution of tested risk animals**

Reported as	CZ	EE	CY	LV	LT	HU	MT	PL	SI	SK
< 24	54	18	26	29	15	24	0	Na	85	Na
24-35	16 207	877	340	209	494	3 286	41	Na	1 334	Na
36-47	12 183	872	222	202	349	2 496	34	Na	1 333	Na
48-59	12 271	828	181	172	323	2 341	102	Na	1 226	Na
60-71	9 492	734	166	158	300	2 041	62	Na	1 233	Na
72-83	6 715	713	134	155	281	1 637	15	Na	1 193	Na
84-95	4 645	598	167	138	200	1 022	7	Na	960	Na
96-107	3 218	467	130	128	253	691	0	Na	776	Na
108-119	1 915	279	66	115	218	413	0	Na	616	Na
120-131	1 256	149	24	87	203	269	0	Na	394	Na
132-143	670	95	4	57	159	169	0	Na	239	Na
144-155	327	65	1	43	113	110	0	Na	189	Na
156 & >	559	75	2	64	89	260	0	Na	262	Na
96 & >	0	0	0	0	0	0	0	Na	0	Na
Unknown	0	1	0	0	0	0	36	Na	59	Na
Total	69 512	5 771	1 463	1 557	2 997	14 759	297	Na	9 899	Na

Table B23: **Extrapolated age (months) distribution of tested healthy slaughtered animals**

Reported as	BE	DK	DE	EL	ES	FR	IE	IT	LU	NL	AT	PT	FI	SV	UK	EU 15
< 24	227	360	364 691	Na	1 628	0	0	1 298	0	178	1	0	177	38	28	368 784
24-35	27 076	28 937	482 370	Na	50 559	403 835	212 935	127 294	2 656	37 004	20 968	4 275	14 071	1 013	8 257	1 423 266
36-47	71 361	57 952	331 904	Na	49 763	555 121	81 869	93 919	4 864	90 266	27 524	8 612	24 829	1 906	42 885	1 445 160
48-59	72 313	53 376	287 433	Na	56 530	359 356	37 923	95 683	2 652	86 214	23 753	10 521	23 355	2 169	71 159	1 184 639
60-71	56 793	39 968	235 629	Na	53 086	294 061	33 684	84 222	1 650	77 303	22 434	9 771	17 840	1 665	71 375	1 001 108
72-83	43 076	26 717	184 920	Na	47 522	242 298	33 274	68 439	906	61 109	20 926	8 787	11 959	1 276	67 793	820 009
84-95	28 868	16 457	137 761	Na	41 069	199 274	32 702	53 085	480	45 446	18 286	7 774	7 195	813	55 392	645 129
96-107	19 322	10 512	0	Na	29 994	155 084	0	40 810	0	32 875	16 213	6 438	0	0	12 767	324 295
108-119	12 127	5 605	0	Na	23 565	118 130	0	29 488	0	19 802	12 631	5 146	0	0	2 747	229 371
120-131	6 804	3 065	0	Na	21 971	87 816	0	21 923	0	10 244	9 049	3 899	0	0	2 126	166 959
132-143	3 769	1 711	0	Na	15 530	64 772	0	16 326	0	5 599	6 410	2 869	0	0	1 371	118 380
144-155	2 074	977	0	Na	12 495	47 430	0	12 251	0	2 917	4 147	2 013	0	0	1 265	85 578
156 & >	2 509	1 107	0	Na	44 045	97 457	0	28 980	0	2 673	6 221	8 677	0	0	1 633	193 314
96 & >	0	0	266 063	Na	29 763	0	174 388	0	367	0	0	0	8 742	974	0	480 297
Unknown	10 494	33	1 943	Na	0	0	285	1 524	0	0	0	0	0	464	4 706	19 449
Total	356 813	246 777	2 292 714	Na	477 520	2 624 634	607 060	675 242	13 575	471 630	188 563	78 782	108 168	10 318	343 504	8 505 738

Table B23 (cont.): **Extrapolated age (months) distribution of tested healthy slaughtered animals**

Reported as	CZ	EE	CY	LV	LT	HU	MT	PL	SI	SK
< 24	33	1	10	31	14	1	2	Na	63	Na
24-35	15 308	1 616	730	1 893	4 932	6 656	184	Na	5 842	Na
36-47	25 951	2 895	967	3 085	4 731	15 070	307	Na	4 756	Na
48-59	23 533	2 923	956	2 738	4 079	15 078	886	Na	4 016	Na
60-71	18 610	2 702	890	2 730	4 196	12 371	406	Na	3 717	Na
72-83	14 197	2 636	627	3 051	4 479	9 779	113	Na	3 577	Na
84-95	10 618	2 264	760	2 717	4 236	7 064	28	Na	3 024	Na
96-107	7 723	1 940	534	2 459	4 898	5 267	2	Na	2 904	Na
108-119	5 566	1 514	261	2 346	4 719	3 739	0	Na	2 480	Na
120-131	3 918	1 000	91	2 015	4 620	2 430	0	Na	1 810	Na
132-143	2 180	659	41	1 579	1 995	1 593	0	Na	1 278	Na
144-155	1 191	501	7	1 402	2 031	910	0	Na	878	Na
156 & >	1 398	607	14	1 971	2 576	1 496	0	Na	1 422	Na
96 & >	0	0	0	0	0	0	0	Na	0	Na
Unknown	0	2	0	0	0	0	62	Na	0	Na
Total	**130 226**	**21 260**	**5 888**	**28 017**	**47 506**	**81 454**	**1 990**	**Na**	**35 767**	**Na**

Table B24: **Extrapolated age (months) distribution of tested BSE suspects**

Reported as	BE	DK	DE	EL	ES	FR	IE	IT	LU	NL	AT	PT	FI	SV	UK	EU 15
< 24	13	0	30	Na	2	0	Na	1	0	0	0	2	0	3	4	56
24-35	29	3	432	Na	6	10	Na	3	0	1	1	1	0	4	14	504
36-47	27	3	355	Na	2	20	Na	5	1	2	0	3	1	2	29	451
48-59	34	5	275	Na	7	14	Na	1	0	4	1	8	0	6	29	384
60-71	13	2	239	Na	9	9	Na	2	0	8	0	15	0	4	28	330
72-83	24	1	182	Na	17	5	Na	3	0	1	0	9	0	0	25	267
84-95	13	3	131	Na	13	13	Na	3	1	3	0	14	0	0	26	220
96-107	8	1	0	Na	2	9	Na	1	0	0	0	8	0	0	47	76
108-119	6	0	0	Na	1	4	Na	0	0	0	0	7	0	0	42	60
120-131	2	0	0	Na	3	6	Na	2	0	0	0	10	0	0	39	62
132-143	0	0	0	Na	2	2	Na	1	0	0	0	3	0	0	3	11
144-155	0	0	0	Na	3	2	Na	0	0	0	0	1	0	0	12	18
156 & >	0	0	0	Na	4	2	Na	1	0	0	0	4	0	0	18	29
96 & >	0	0	254	Na	4	0	Na	0	0	0	0	0	0	1	0	259
Unknown	0	0	44	Na	0	0	Na	0	0	0	0	0	0	0	1	45
Total	169	18	1 942	Na	75	96	Na	23	2	19	2	85	1	20	317	2 772

Table B24 (cont.): **Extrapolated age (months) distribution of tested BSE suspects**

Reported as	CZ	EE	CY	LV	LT	HU	MT	PL	SI	SK
< 24	0	0	0	1	0	21	0	Na	10	Na
24-35	0	0	0	0	0	8	0	Na	2	Na
36-47	0	0	0	0	0	10	0	Na	0	Na
48-59	0	0	0	0	0	7	0	Na	1	Na
60-71	0	0	0	0	0	2	0	Na	0	Na
72-83	0	0	0	0	0	2	0	Na	3	Na
84-95	0	0	0	0	0	2	0	Na	3	Na
96-107	0	0	0	0	0	3	0	Na	1	Na
108-119	0	0	0	0	0	3	0	Na	0	Na
120-131	0	0	0	0	0	0	0	Na	0	Na
132-143	0	0	0	0	0	0	0	Na	1	Na
144-155	0	0	0	0	0	0	0	Na	0	Na
156 & >	0	0	0	0	0	4	0	Na	0	Na
96 & >	0	0	0	0	0	0	0	Na	0	Na
Unknown	0	0	0	0	0	0	0	Na	0	Na
Total	**0**	**0**	**0**	**1**	**0**	**62**	**0**	**Na**	**21**	**Na**

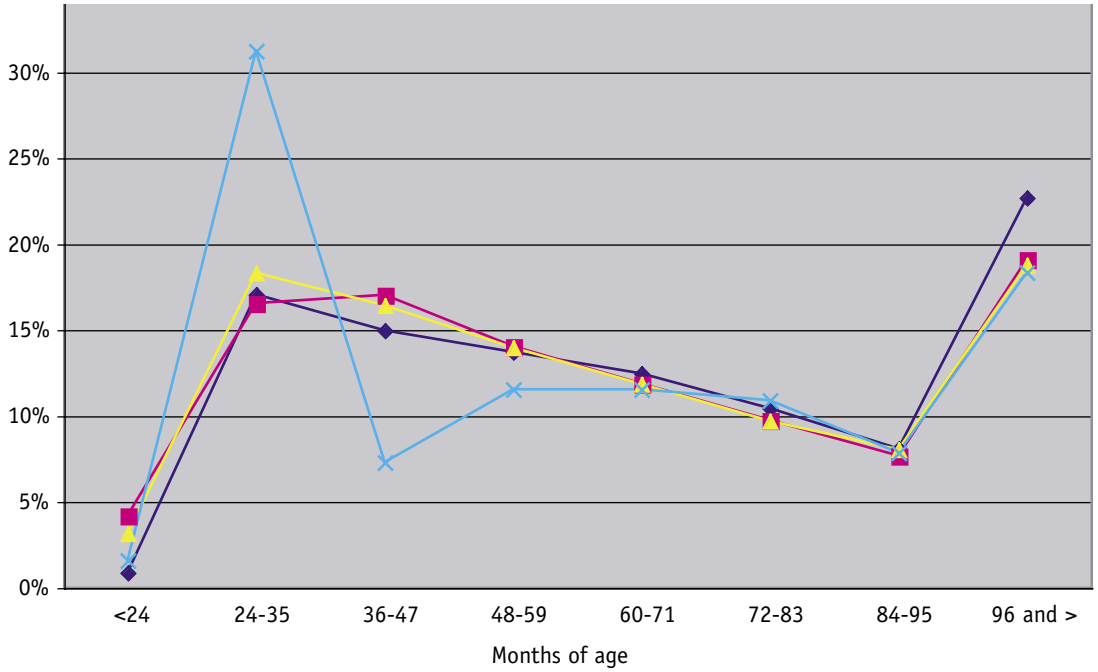
Table B25: **Extrapolated age (months) distribution of tested animals culled in the frame of BSE eradication**

Reported as	BE	DK	DE	EL	ES	FR	IE	IT	LU	NL	AT	PT	FI	SV	UK	EU 15
< 24	7	9	57	Na	109	0	0	9	0	6	0	0	0	0	41	238
24-35	3	18	21	Na	32	17	4 809	90	0	1	0	26	0	0	37	5 054
36-47	3	7	190	Na	161	8	333	111	0	0	0	27	0	0	63	903
48-59	10	8	342	Na	244	27	517	151	0	101	0	36	0	0	53	1 489
60-71	38	8	302	Na	406	106	451	121	0	79	0	107	0	0	48	1 666
72-83	50	4	201	Na	284	189	473	124	0	44	0	214	0	0	37	1 620
84-95	45	11	136	Na	151	173	418	84	0	26	0	154	0	0	18	1 216
96-107	14	23	0	Na	37	162	0	33	0	0	0	175	0	0	1	445
108-119	1	2	0	Na	11	175	0	21	0	0	0	108	0	0	0	318
120-131	1	0	0	Na	7	38	0	20	0	0	0	110	0	0	0	176
132-143	0	1	0	Na	1	12	0	8	0	0	0	92	0	0	0	114
144-155	0	0	0	Na	2	10	0	10	0	0	0	52	0	0	0	74
156 & >	0	4	0	Na	6	2	0	15	0	0	0	114	0	0	0	141
96 & >	0	0	63	Na	26	0	1 509	0	0	26	0	0	0	0	0	1 624
Unknown	0	0	0	Na	0	0	46	0	0	0	0	0	0	0	33	79
Total	172	95	1 312	Na	1 477	919	8 556	797	0	283	0	1 215	0	0	331	15 157

Table B25 (cont.): **Extrapolated age (months) distribution of tested animals culled in the frame of BSE eradication**

Reported as	CZ	EE	CY	LV	LT	HU	MT	PL	SI	SK
< 24	11	0	0	0	0	0	0	Na	3	Na
24-35	3	0	0	0	0	0	0	Na	0	Na
36-47	273	0	0	0	0	0	0	Na	1	Na
48-59	379	0	0	0	0	0	0	Na	0	Na
60-71	201	0	0	0	0	0	0	Na	0	Na
72-83	139	0	0	1	0	0	0	Na	1	Na
84-95	53	0	0	0	0	0	0	Na	0	Na
96-107	56	0	0	0	0	0	0	Na	0	Na
108-119	14	0	0	0	0	0	0	Na	0	Na
120-131	5	0	0	0	0	0	0	Na	0	Na
132-143	0	0	0	0	0	0	0	Na	0	Na
144-155	0	0	0	0	0	0	0	Na	0	Na
156 & >	1	0	0	0	0	0	0	Na	0	Na
96 & >	0	0	0	0	0	0	0	Na	0	Na
Unknown	0	0	0	0	0	0	0	Na	0	Na
Total	**1 135**	**0**	**0**	**1**	**0**	**0**	**0**	**Na**	**5**	**Na**

Chart B22: Extrapolated mean age distribution of cattle tested in different target groups in the EU



Risk animals	1%	18%	17%	15%	13%	10%	8%	20%
Healthy Sl.	0%	15%	19%	15%	12%	10%	8%	21%
Suspects	5%	15%	13%	16%	11%	10%	11%	20%
BSE culling	1%	4%	10%	14%	13%	17%	12%	29%

Chart B23: Extrapolated age distribution in risk animals tested in some major Member States

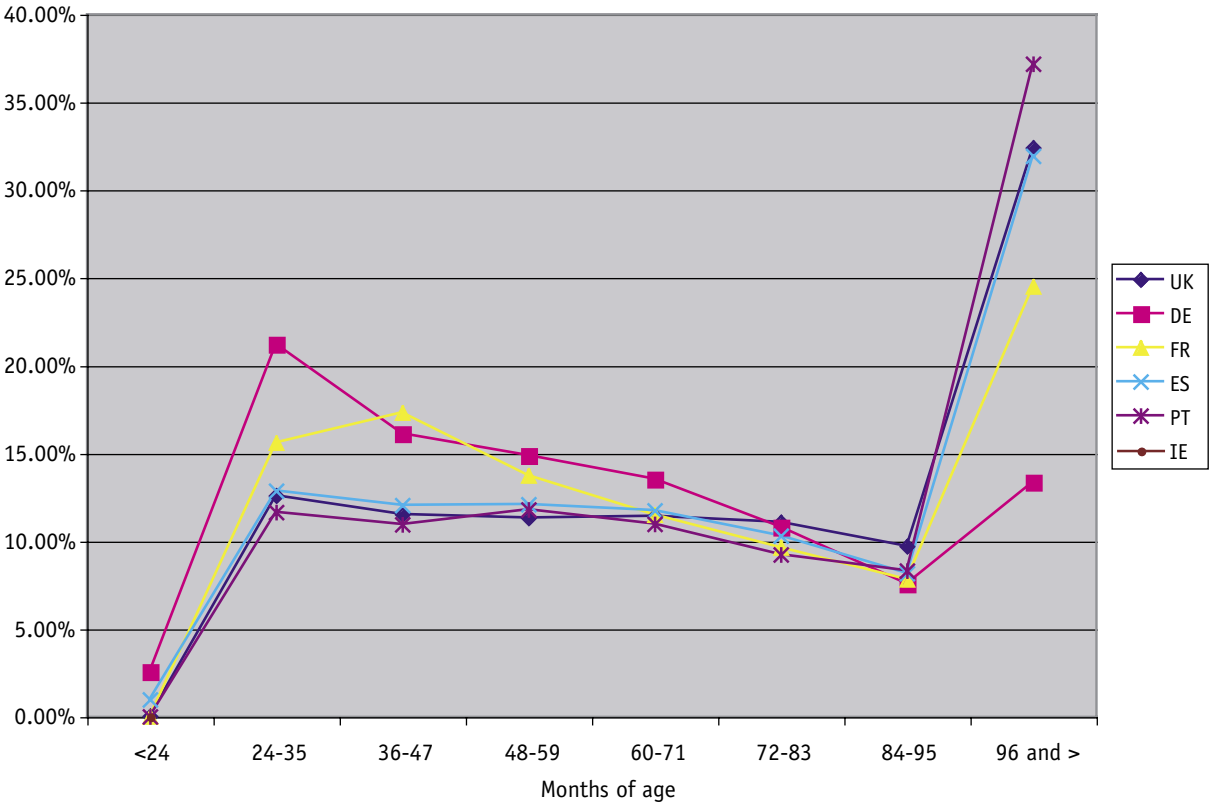


Chart B24: **Extrapolated age distribution in healthy slaughtered cattle tested in some major Member States**

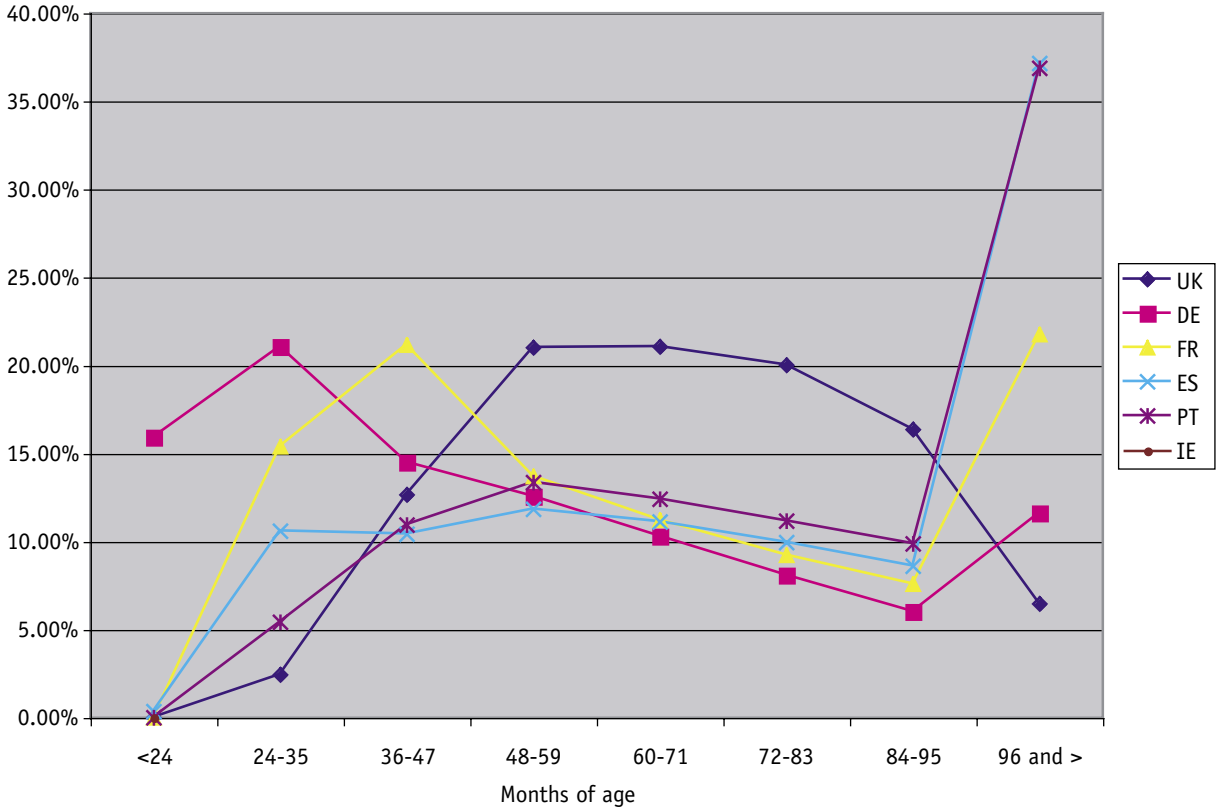


Chart B25: **Prevalence of BSE per target group in cattle of different age in the EU**

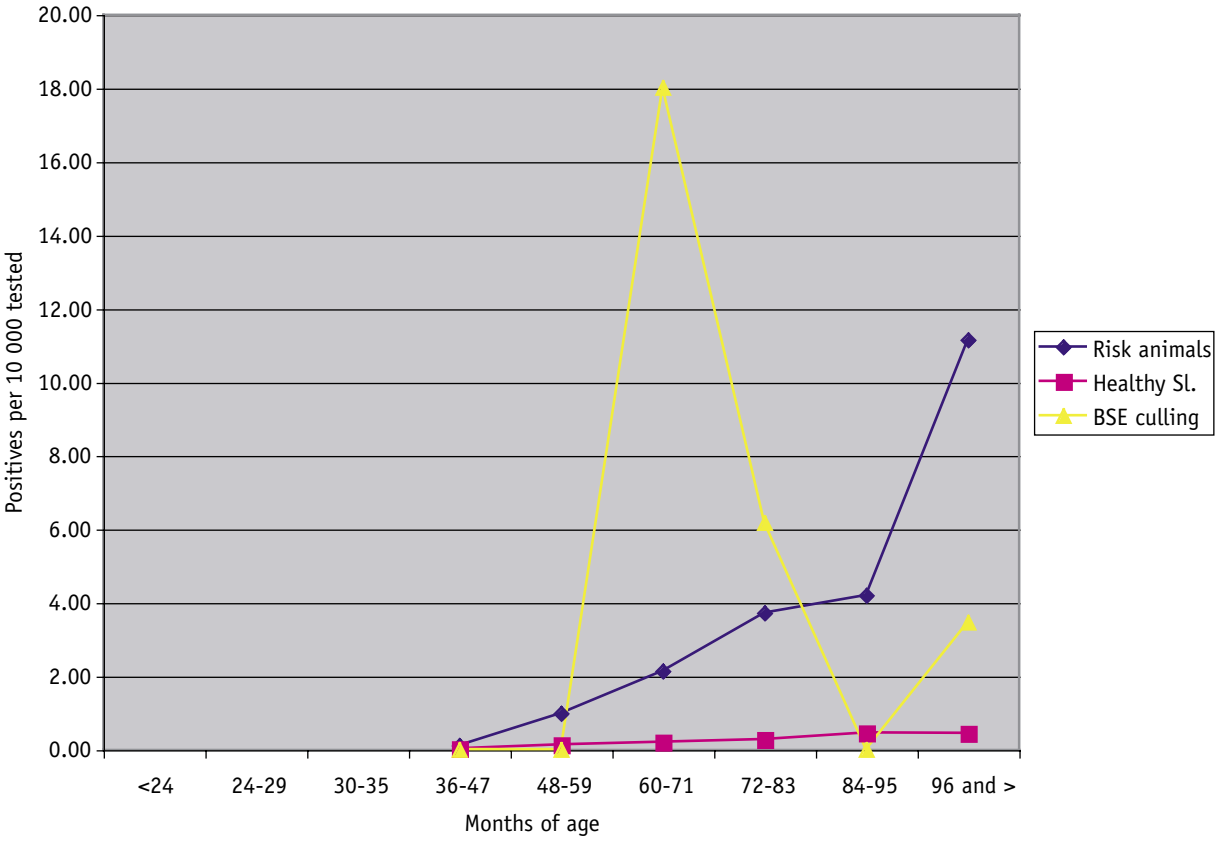


Table B26: **Prevalence of BSE in cattle (positive cases per 10 000 tests) of different age: total population**

Reported as	BE	DK	DE	ES	FR	IE	IT	NL	PT	UK	EU 15	CZ	PL	SI	SK
< 24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	Na	0.00	Na
24-35	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	Na	0.00	Na
36-47	0.00	0.00	0.05	0.32	0.00	0.00	0.00	0.00	0.80	0.00	0.03	0.00	Na	0.00	Na
48-59	0.00	0.00	0.56	1.31	0.00	0.22	0.09	0.00	0.00	0.70	0.26	0.83	Na	1.91	Na
60-71	0.16	0.00	0.48	4.61	0.18	0.73	0.00	0.00	8.02	0.60	0.60	0.35	Na	0.00	Na
72-83	0.64	0.00	0.43	7.76	0.15	0.73	0.12	0.29	13.08	0.63	0.93	0.95	Na	2.09	Na
84-95	1.59	0.00	0.83	4.67	0.45	2.27	0.49	0.39	15.68	1.13	1.21	0.00	Na	0.00	Na
96-107	0.47	0.00	0.00	3.34	0.35	0.00	0.64	0.29	10.06	11.21	2.76	0.91	Na	0.00	Na
108-119	0.00	0.00	0.00	2.48	0.84	0.00	0.00	0.00	15.32	33.27	4.76	0.00	Na	0.00	Na
120-131	1.33	0.00	0.00	1.15	1.03	0.00	0.00	0.00	24.91	40.57	5.74	0.00	Na	0.00	Na
132-143	0.00	0.00	0.00	2.18	0.14	0.00	0.00	0.00	18.97	43.26	5.09	0.00	Na	0.00	Na
144-155	0.00	0.00	0.00	0.67	0.38	0.00	0.00	3.34	3.27	32.36	3.83	0.00	Na	0.00	Na
156 & >	0.00	7.61	0.00	0.19	0.09	0.00	0.00	0.00	2.19	38.93	2.90	0.00	Na	0.00	Na
96 & >															
Unknown															

Table B27: **Prevalence of BSE in cattle (positive cases per 10 000 tests) of different age: risk animals**

Reported as	BE	DK	DE	ES	FR	IE	IT	NL	PT	UK	EU 15	CZ	PL	SI	SK
< 24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	Na	0.00	Na
24-35	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	Na	0.00	Na
36-47	0.00	0.00	0.26	0.84	0.00	0.00	0.00	0.00	0.00	0.00	0.10	0.00	Na	0.00	Na
48-59	0.00	0.00	2.28	3.36	0.00	1.47	0.00	0.00	0.00	1.42	0.98	2.44	Na	8.16	Na
60-71	0.00	0.00	2.19	15.55	0.65	1.48	0.00	0.00	13.05	0.35	2.13	1.05	Na	0.00	Na
72-83	2.68	0.00	1.18	25.62	1.17	0.00	0.00	1.22	31.01	2.17	3.71	1.49	Na	8.38	Na
84-95	3.82	0.00	1.68	16.15	1.45	9.14	3.46	0.00	34.49	2.06	4.20	0.00	Na	0.00	Na
96-107	0.00	0.00	0.00	8.50	1.26	0.00	4.82	0.00	21.50	11.39	10.83	0.00	Na	0.00	Na
108-119	0.00	0.00	0.00	8.70	6.52	0.00	0.00	0.00	31.23	23.63	18.29	0.00	Na	0.00	Na
120-131	0.00	0.00	0.00	4.88	7.60	0.00	0.00	0.00	49.97	24.52	17.74	0.00	Na	0.00	Na
132-143	0.00	0.00	0.00	7.16	0.00	0.00	0.00	0.00	63.80	35.02	21.47	0.00	Na	0.00	Na
144-155	0.00	0.00	0.00	4.17	3.65	0.00	0.00	0.00	0.00	31.23	17.02	0.00	Na	0.00	Na
156 & >	0.00	49.26	0.00	0.00	0.65	0.00	0.00	0.00	4.09	37.62	11.84	0.00	Na	0.00	Na
96 & >															
Unknown															

Table B28: **Prevalence of BSE in cattle (positive cases per 10 000 tests) of different age: healty slaughtered animals**

Reported as	BE	DK	DE	ES	FR	IE	IT	NL	PT	UK	EU 15	CZ	PL	SI	SK
< 24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	Na	0.00	Na
24-35	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	Na	0.00	Na
36-47	0.00	0.00	0.03	0.20	0.00	0.00	0.00	0.00	1.16	0.00	0.02	0.00	Na	0.00	Na
48-59	0.00	0.00	0.31	0.71	0.00	0.00	0.10	0.00	0.00	0.28	0.14	0.00	Na	0.00	Na
60-71	0.18	0.00	0.21	1.32	0.14	0.00	0.00	0.00	3.07	0.00	0.20	0.00	Na	0.00	Na
72-83	0.00	0.00	0.27	2.10	0.04	0.30	0.15	0.16	4.55	0.00	0.28	0.70	Na	0.00	Na
84-95	1.04	0.00	0.65	1.22	0.25	0.31	0.00	0.44	3.86	0.18	0.45	0.00	Na	0.00	Na
96-107	0.52	0.00		1.67	0.13		0.00	0.30	6.21	0.78	0.62	1.29	Na	0.00	Na
108-119	0.00	0.00		0.85	0.17		0.00	0.00	3.89	14.56	0.65	0.00	Na	0.00	Na
120-131	1.47	0.00		0.00	0.11		0.00	0.00	7.69	32.93	1.02	0.00	Na	0.00	Na
132-143	0.00	0.00		1.29	0.00		0.00	0.00	0.00	14.59	0.68	0.00	Na	0.00	Na
144-155	0.00	0.00		0.00	0.00		0.00	3.43	4.97	0.00	0.23	0.00	Na	0.00	Na
156 & >	0.00	0.00		0.23	0.00		0.00	0.00	1.15	12.25	0.41	0.00	Na	0.00	Na
96 & >			0.04			0.17									
Unknown															

Table B29: **Prevalence of BSE in cattle (positive cases per 10 000 tests) of different age: culled bovine animals**

Reported as	BE	DK	DE	ES	FR	IE	IT	NL	PT	UK	EU 15	CZ	PL	SI	SK
< 24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	Na	0.00	Na
24-35	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	Na	0.00	Na
36-47	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	Na	0.00	Na
48-59	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	Na	0.00	Na
60-71	0.00	0.00	0.00	0.00	0.00	22.17	0.00	0.00	186.92	0.00	18.01	0.00	Na	0.00	Na
72-83	0.00	0.00	49.75	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.17	0.00	Na	0.00	Na
84-95	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	Na	0.00	Na
96-107	0.00		57.14	0.00	0.00		0.00	0.00	0.00	0.00	22.47	0.00	Na	0.00	Na
108-119	0.00		0.00	0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	Na	0.00	Na
120-131	0.00		0.00	0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	Na	0.00	Na
132-143	0.00		0.00	0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	Na	0.00	Na
144-155	0.00		0.00	0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	Na	0.00	Na
156 & >	0.00		0.00	0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	Na	0.00	Na
96 & >		0.00				0.00									
Unknown															

Table B30: **Prevalence of BSE in cattle (positive cases per 10 000 tests) of different age: BSE suspects**

Reported as	BE	DK	DE	ES	FR	IE	IT	NL	PT	UK	EU 15	CZ	PL	SI	SK
< 24	0	0	0	0	0	Na	0	0	0	0	0	0	Na	0	Na
24-35	0	0	0	0	0	Na	0	0	0	0	0	0	Na	0	Na
36-47	0	0	0	0	0	Na	0	0	0	0	0	0	Na	0	Na
48-59	0	0	36	1 429	0	Na	0	0	0	345	78	0	Na	0	Na
60-71	0	0	42	5 556	0	Na	0	0	667	1 786	394	0	Na	0	Na
72-83	833	0	0	5 294	0	Na	0	0	2 222	0	562	0	Na	0	Na
84-95	769	0	76	3 846	1 539	Na	0	0	2 857	1 154	818	0	Na	0	Na
96-107	0	0		10 000	2 222	Na	0	0	0	2 766	3 026	0	Na	0	Na
108-119	0	0		10 000	2 500	Na	0	0	4 286	5 238	6 000	0	Na	0	Na
120-131	0	0		3 333	3 333	Na	0	0	3 000	6 667	5 968	0	Na	0	Na
132-143	0	0		0	5 000	Na	0	0	0	36 667	13 636	0	Na	0	Na
144-155	0	0		0	0	Na	0	0	0	4 167	3 333	0	Na	0	Na
156 & >	0	0		0	0	Na	0	0	0	3 333	2 759	0	Na	0	Na
96 & >															
Unknown															

Chart B26: **BSE prevalence (positive per 10 000 cattle tested) in healthy slaughtered cattle in Member States with more than 10 positive cases in 2004**

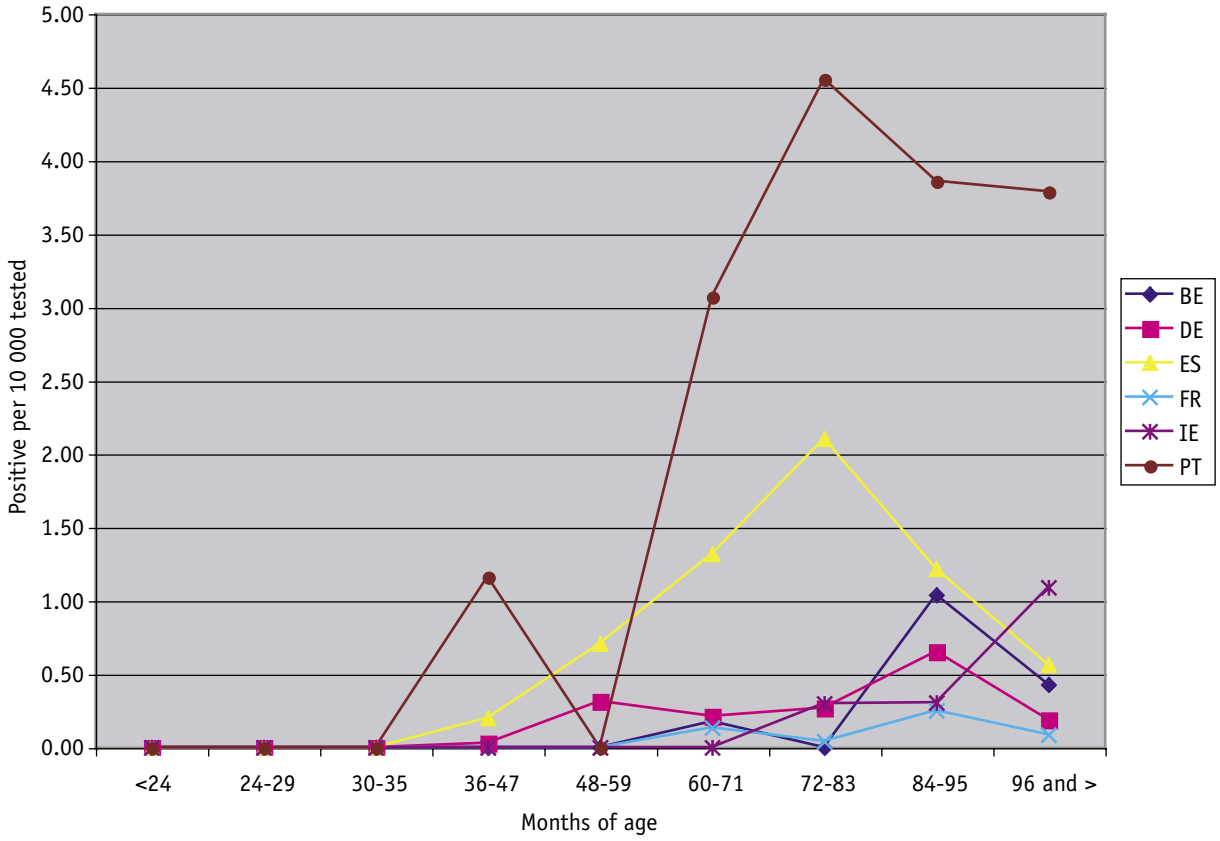


Chart B27: **BSE prevalence (positive/10 000 cattle tested) in healthy slaughtered cattle in the EU**

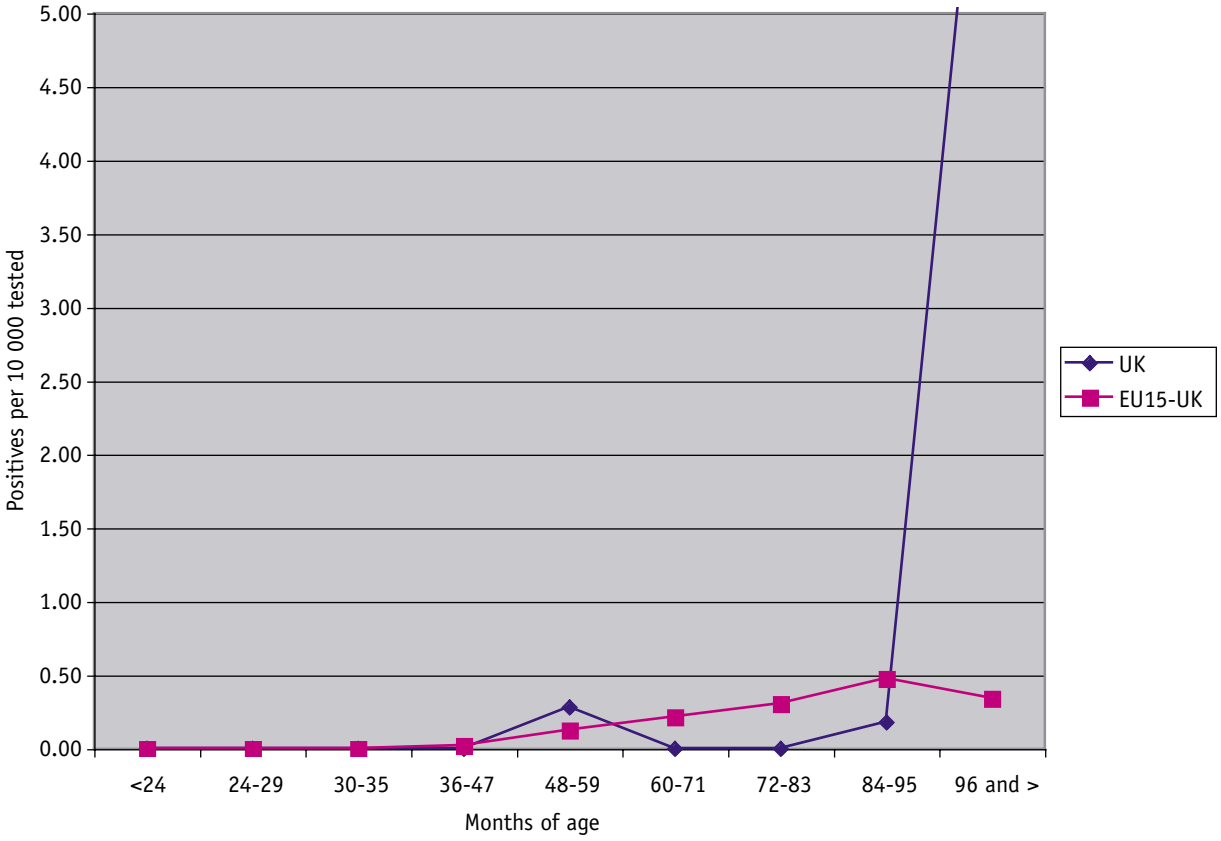


Chart B28: **BSE prevalence (positive per 10 000 cattle tested) in risk animals in Member States with more than 10 positive case in 2004**

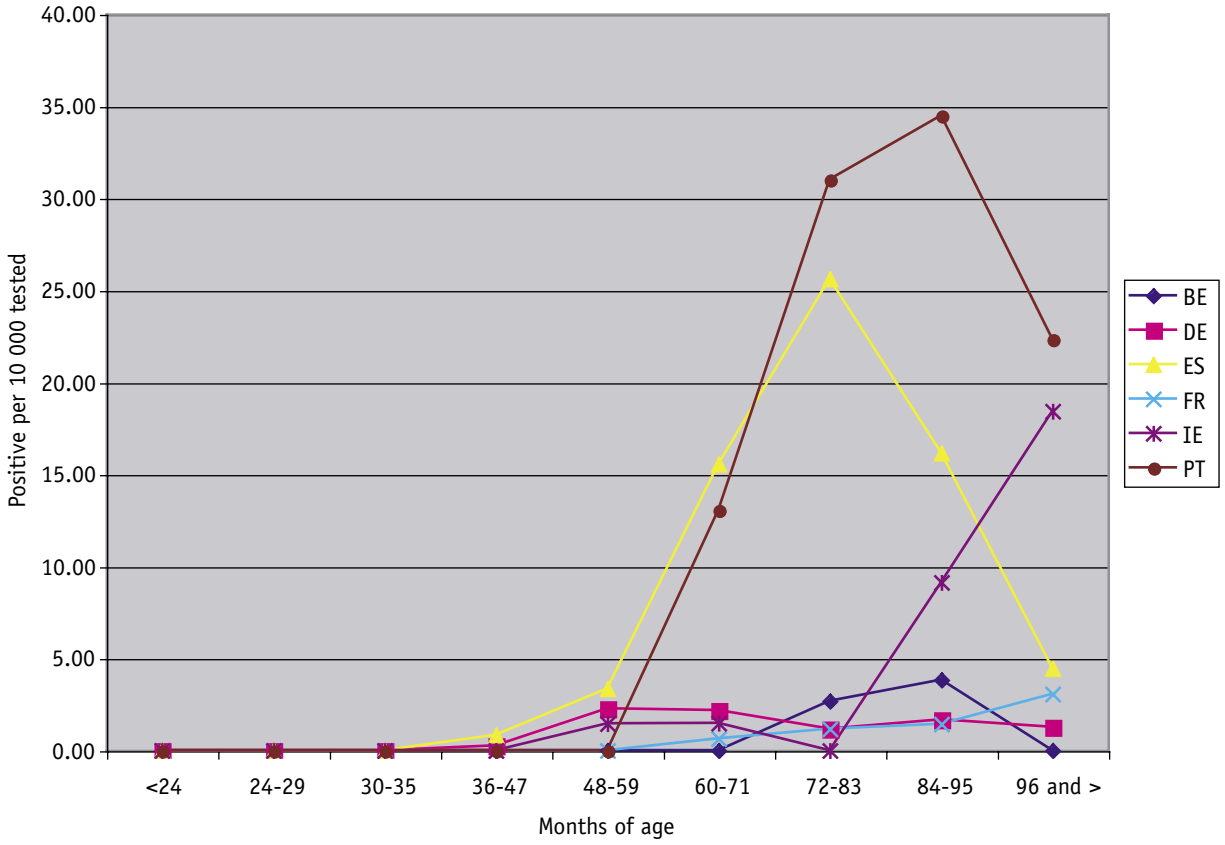
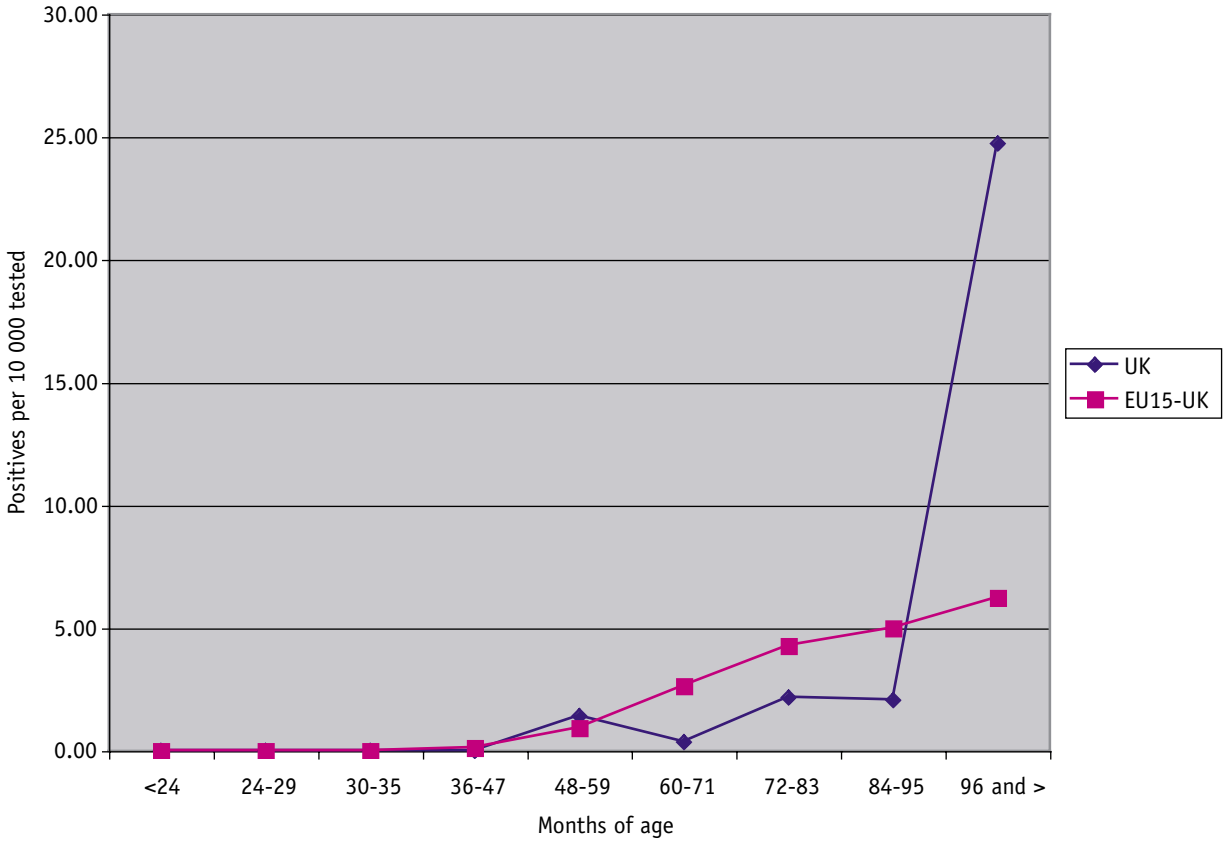
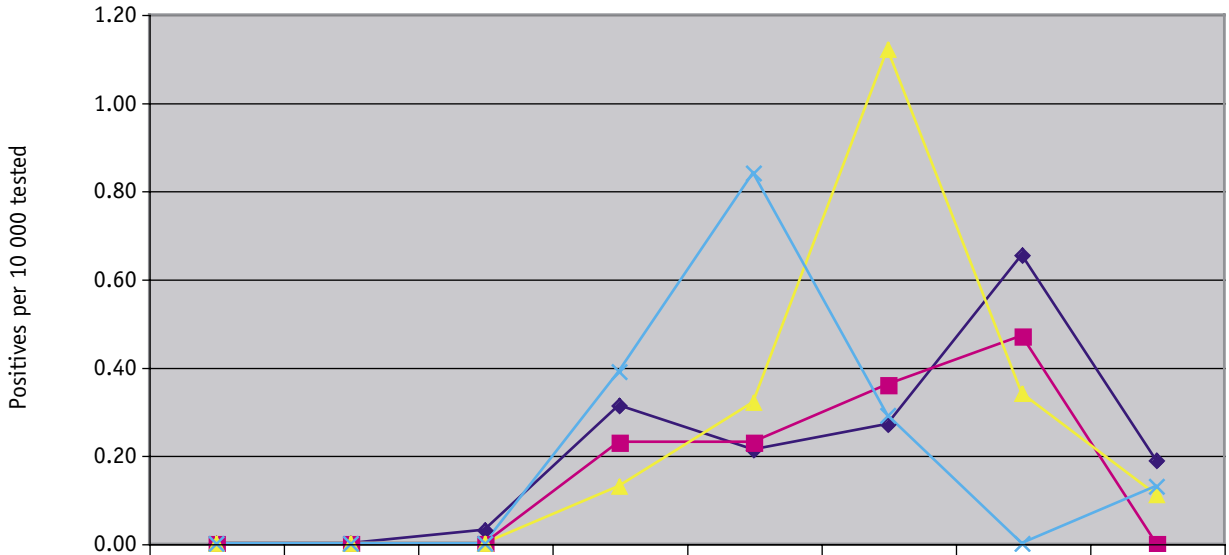


Chart B29: **BSE prevalence (positive per 10 000 cattle tested) in risk animals in the EU**



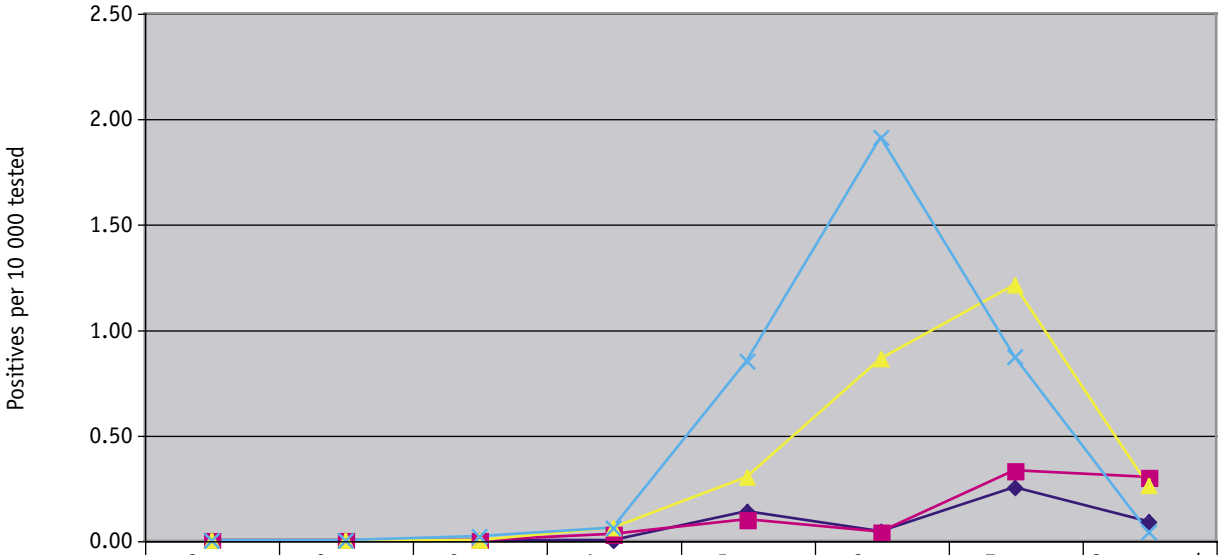
Charts B30: Comparison of the prevalence of BSE in healthy slaughtered cattle of different age in 2001, 2002, 2003 and 2004

Deutschland



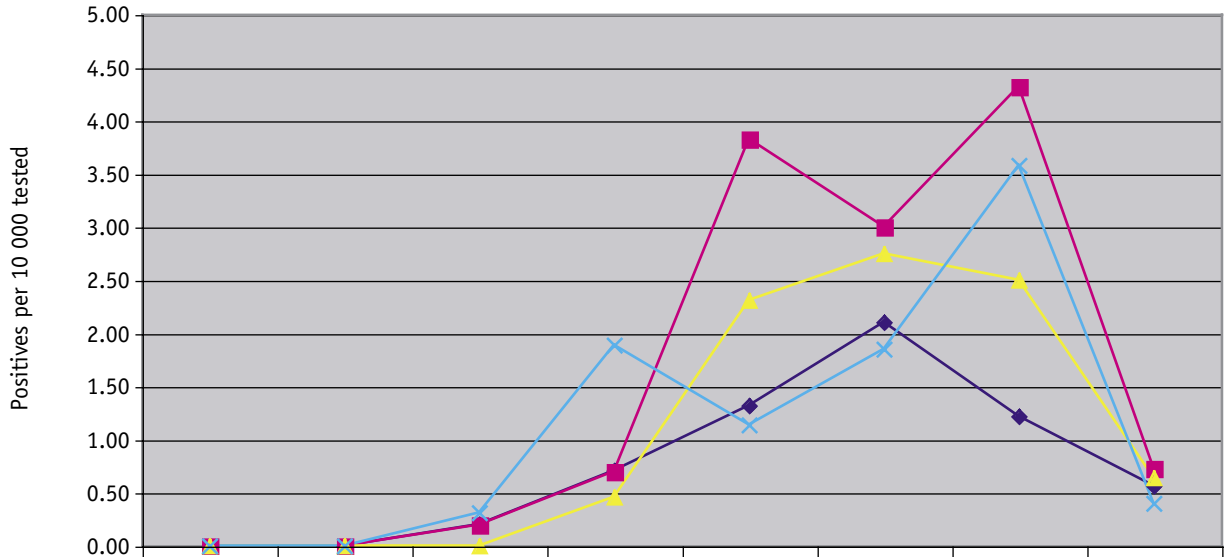
	<2 years	2 years	3 years	4 years	5 years	6 years	7 years	8 years and >
2004	0.00	0.00	0.03	0.31	0.21	0.27	0.65	0.19
2003	0.00	0.00	0.00	0.23	0.23	0.36	0.47	0.00
2002	0.00	0.00	0.00	0.13	0.32	1.12	0.34	0.11
2001	0.00	0.00	0.00	0.39	0.84	0.29	0.00	0.13

France



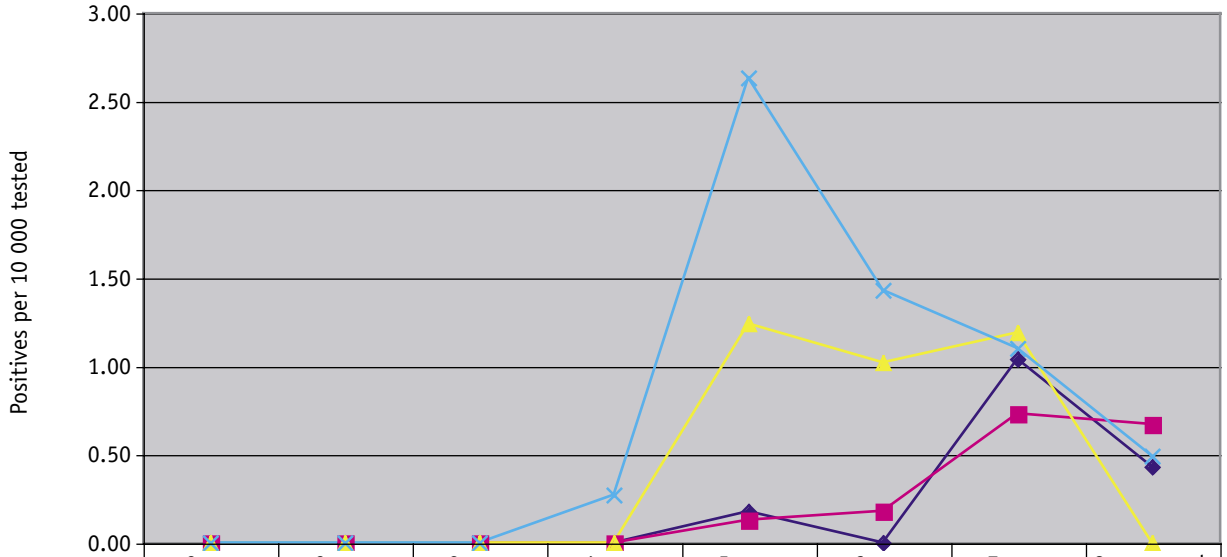
	<2 years	2 years	3 years	4 years	5 years	6 years	7 years	8 years and >
2004	0.00	0.00	0.00	0	0.14	0.04	0.25	0.09
2003	0.00	0.00	0.00	0.03	0.10	0.04	0.33	0.30
2002	0.00	0.00	0.00	0.06	0.30	0.86	1.21	0.26
2001	0.00	0.00	0.02	0.06	0.85	1.91	0.87	0.04

España



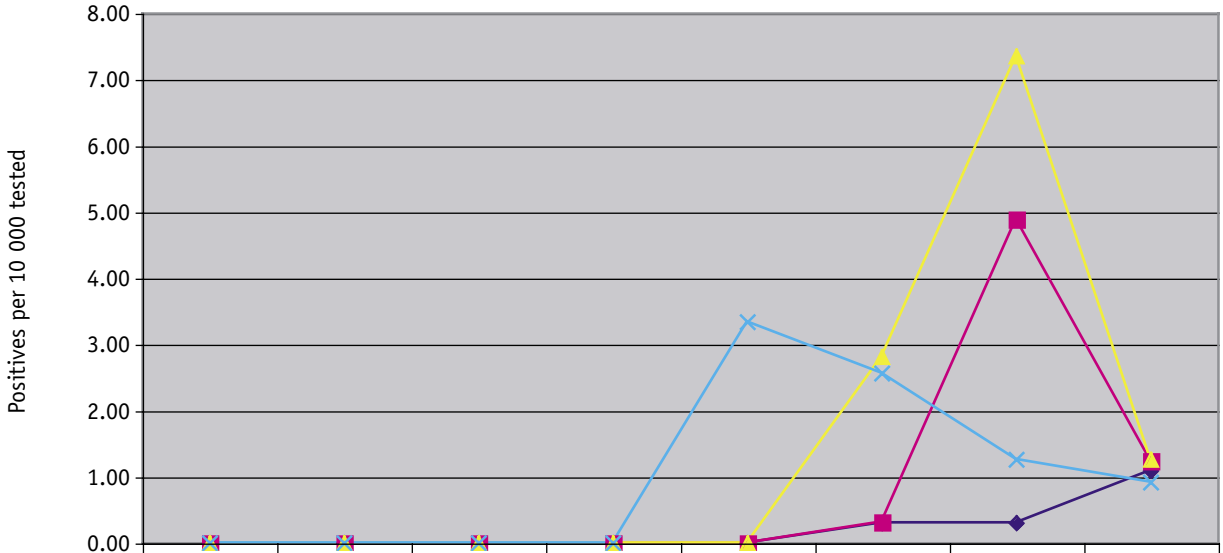
	<2 years	2 years	3 years	4 years	5 years	6 years	7 years	8 years and >
2004	0.00	0.00	0.20	0.71	1.32	2.10	1.22	0.56
2003	0.00	0.00	0.20	0.70	3.83	3.00	4.32	0.73
2002	0.00	0.00	0.00	0.46	2.31	2.75	2.50	0.64
2001	0.00	0.00	0.31	1.89	1.14	1.85	3.58	0.40

België/Belgique



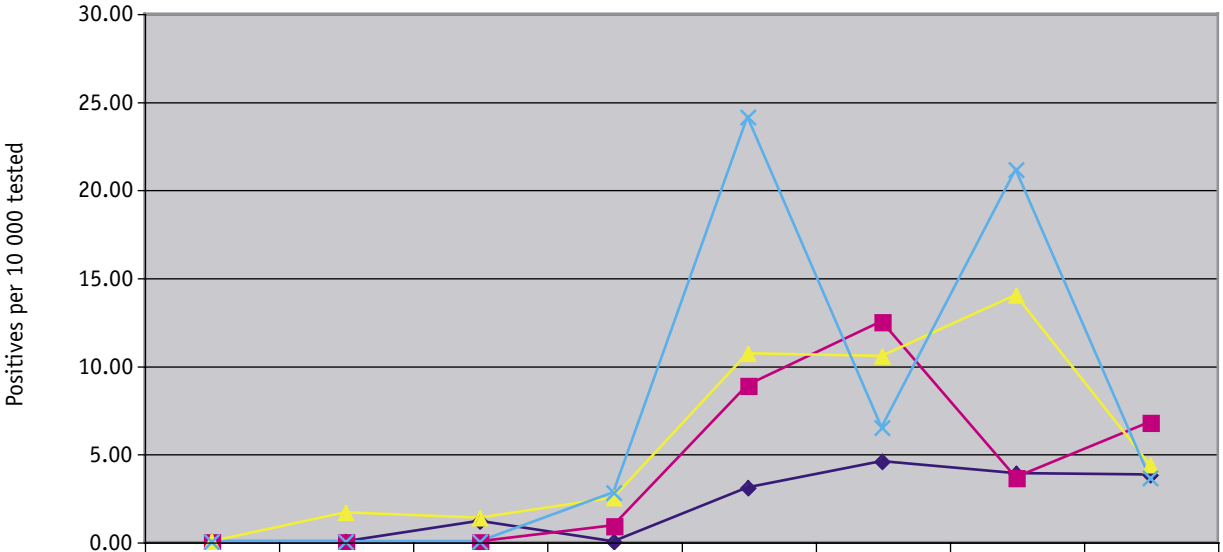
	<2 years	2 years	3 years	4 years	5 years	6 years	7 years	8 years and >
2004	0.00	0.00	0.00	0.00	0.18	0.00	1.04	0.43
2003	0.00	0.00	0.00	0.00	0.13	0.18	0.73	0.67
2002	0.00	0.00	0.00	0.00	1.24	1.02	1.19	0.00
2001	0.00	0.00	0.00	0.27	2.63	1.43	1.1	0.49

Ireland



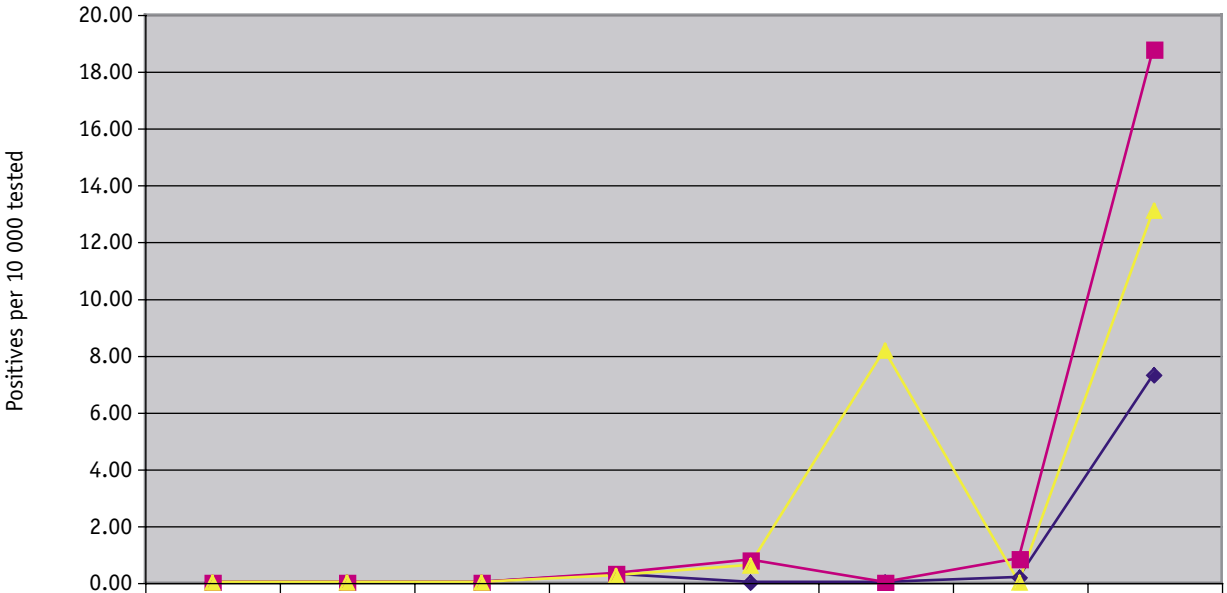
	<2 years	2 years	3 years	4 years	5 years	6 years	7 years	8 years and >
2004	0.00	0.00	0.00	0.00	0.00	0.30	0.31	1.09
2003	0.00	0.00	0.00	0.00	0.00	0.32	4.89	1.24
2002	0.00	0.00	0.00	0.00	0.00	2.81	7.35	1.26
2001	0.00	0.00	0.00	0.00	3.34	2.56	1.26	0.92

Portugal



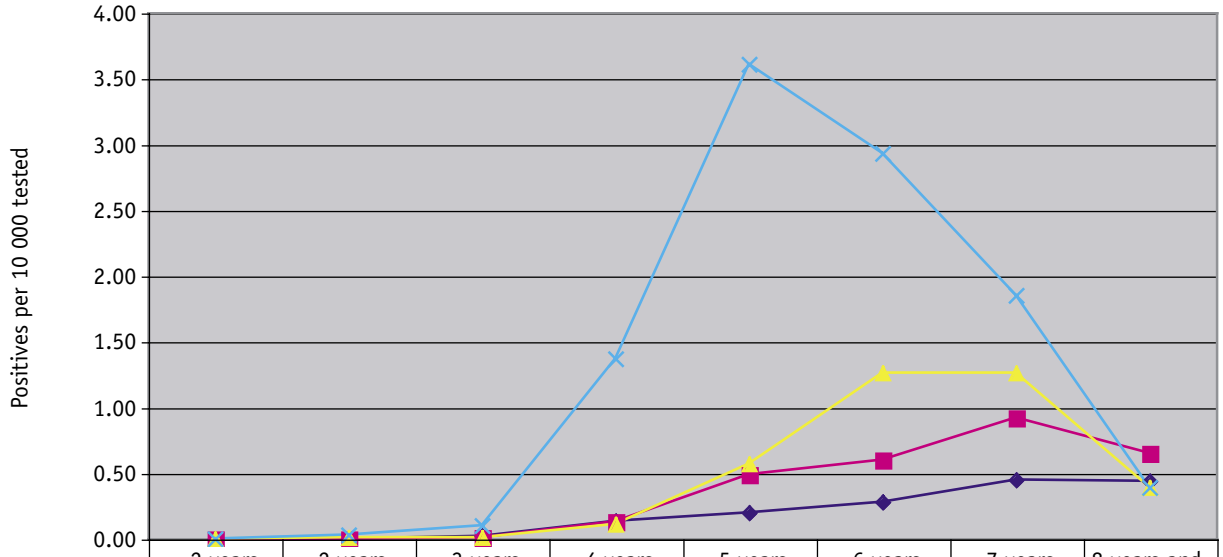
	<2 years	2 years	3 years	4 years	5 years	6 years	7 years	8 years and >
2004	0.00	0.00	1.16	0.00	30.7	4.55	3.86	3.79
2003	0.00	0.00	0.00	0.90	8.89	12.50	3.63	6.77
2002	0.00	1.64	1.34	2.48	10.67	10.52	14.00	4.36
2001	0.00	0.00	0.00	2.78	24.10	6.47	21.13	3.62

United Kingdom



	<2 years	2 years	3 years	4 years	5 years	6 years	7 years	8 years and >
2004	0.00	0.00	0.00	0.28	0.00	0.00	0.18	7.30
2003	0.00	0.00	0.00	0.31	0.79	0.00	0.84	18.78
2002	0.00	0.00	0.00	0.24	0.60	8.17	0.00	13.09

EU 15



	<2 years	2 years	3 years	4 years	5 years	6 years	7 years	8 years and >
2004	0.00	0.00	0.02	0.14	0.20	0.28	0.45	0.44
2003	0.00	0.00	0.01	0.13	0.49	0.60	0.92	0.65
2002	0.00	0.01	0.01	0.11	0.57	1.26	1.26	0.39
2001	0.00	0.03	0.10	1.37	3.61	2.93	1.85	0.39

Comments on the prevalence of BSE in different age groups

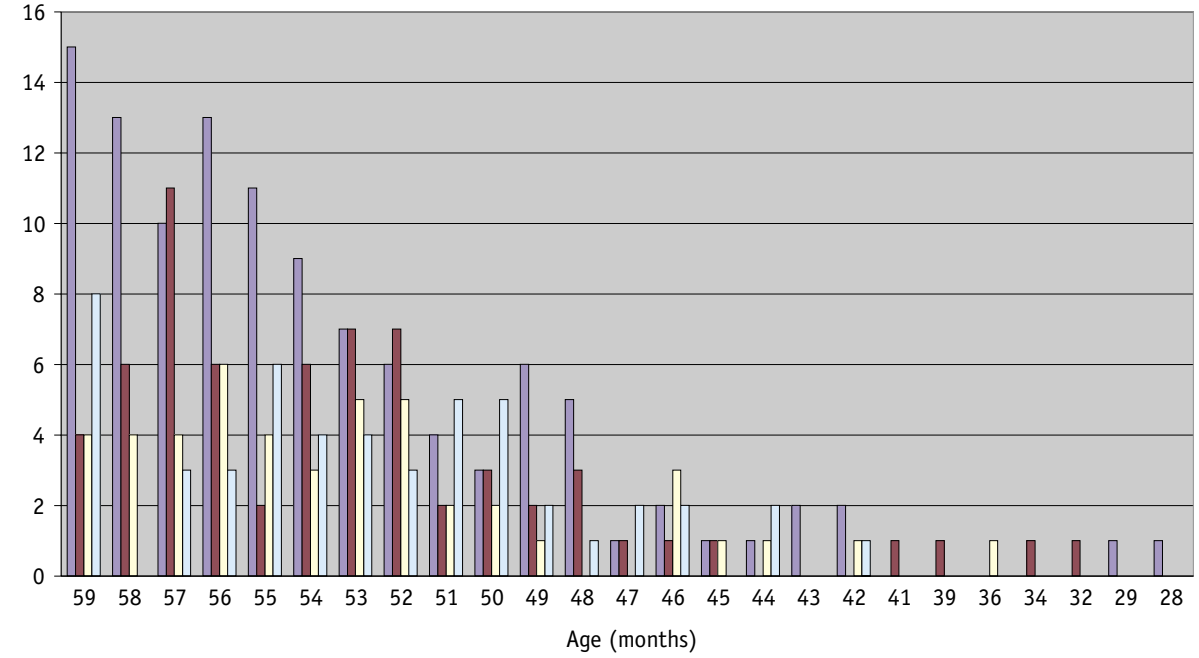
In the United Kingdom, the testing of healthy slaughtered cattle was concentrated on above 42 months old cattle born after the reinforced feed ban was considered effective (August 1996). A high number of tested young cattle may decrease the overall prevalence of BSE and the prevalence in a target group. Therefore differences in prevalence of BSE between Member States should be compared within the same age and target group.

Tables B22 to B25 allow a comparison between Member States within a particular target and age group and is illustrated in Charts B26 to B29. However, the results should be interpreted with caution if the number of positive cases within a target and age group is limited.

Charts B30 illustrates the evolution over one year of the prevalence per age group in healthy slaughtered bovine animals. It indicates a lower prevalence in young animals.

4.7 BSE in young bovine animals

Chart B31: Number of positive cases below 60 months of age in the EU



	59	58	57	56	55	54	53	52	51	50	49	48	47	46	45	44	43	42	41	39	36	34	32	29	28
2001	15	13	10	13	11	9	7	6	4	3	6	5	1	2	1	1	2	2						1	1
2002	4	6	11	6	2	6	7	7	2	3	2	3	1	1	1				1	1		1	1		
2003	4	4	4	6	4	3	5	5	2	2	1			3	1	1		1			1				
2004	8		3	3	6	4	4	3	5	5	2	1	2	2		2		1							

Table B31: BSE cases prevalence in cattle born in 1996 or later, detected in 2001, 2002, 2003 or 2004

	Cattle Population ≥ 2 years old	Prevalence (cases per 1 Mio cattle ≥ 2 years old) of cattle born in					
	(x 1000)	1996	1997	1998	1999	2000	2001
Belgique/België	1 410	29.1	10.6	2.1	0.0	0.0	0.0
Danmark	772	7.8	2.6	2.6	0.0	0.0	0.0
Deutschland	5 998	21.8	7.2	4.7	5.2	1.7	0.0
Ellas	337	3.0	0.0	0.0	0.0	0.0	0.0
España	3 407	29.6	37.0	24.1	7.1	1.8	0.0
France	10 477	8.0	3.2	1.3	0.2	0.0	0.0
Ireland	3 046	48.3	3.6	1.3	1.3	0.0	0.0
Italia	2 861	16.8	8.0	1.1	0.4	0.0	0.0
Luxembourg	93	10.8	0.0	0.0	0.0	0.0	0.0
Nederland	1 730	18.5	6.4	2.9	0.6	0.0	0.0
Österreich	963	1.0	0.0	0.0	0.0	0.0	0.0
Portugal	812	89.9	78.8	39.4	7.4	1.2	0.0
United Kingdom	4 870	19.9	9.0	6.2	2.5	0.4	0.0
EU 15 total 2001	39 700	6.2	1.1	0.1	0.0	0.0	0.0
EU 15 total 2002	39 000	7.0	2.3	0.8	0.2	0.0	0.0
EU 15 total 2003	37 823	4.3	4.1	1.9	0.6	0.0	0.0
EU 15 total 2004	37 831	2.1	2.3	2.5	1.3	0.5	0.0
Česká Republika	654	1.5	6.1	1.5	1.5	6.1	0.0
Polska	3 067	2.3	1.0	1.0	0.0	0.3	0.0
Slovenija	202	5.0	0.0	5.0	5.0	5.0	0.0
Slovensko	270	14.8	3.7	0.0	3.7	7.4	7.4

Evolution 2001-2002 Evolution 2002-2003 Evolution 2003-2004

Chart B32: **Prevalence (cases/1 Mio cattle pop. ≥ 2years old) detected in 2001, 2002, 2003 or 2004 and born in 1996**

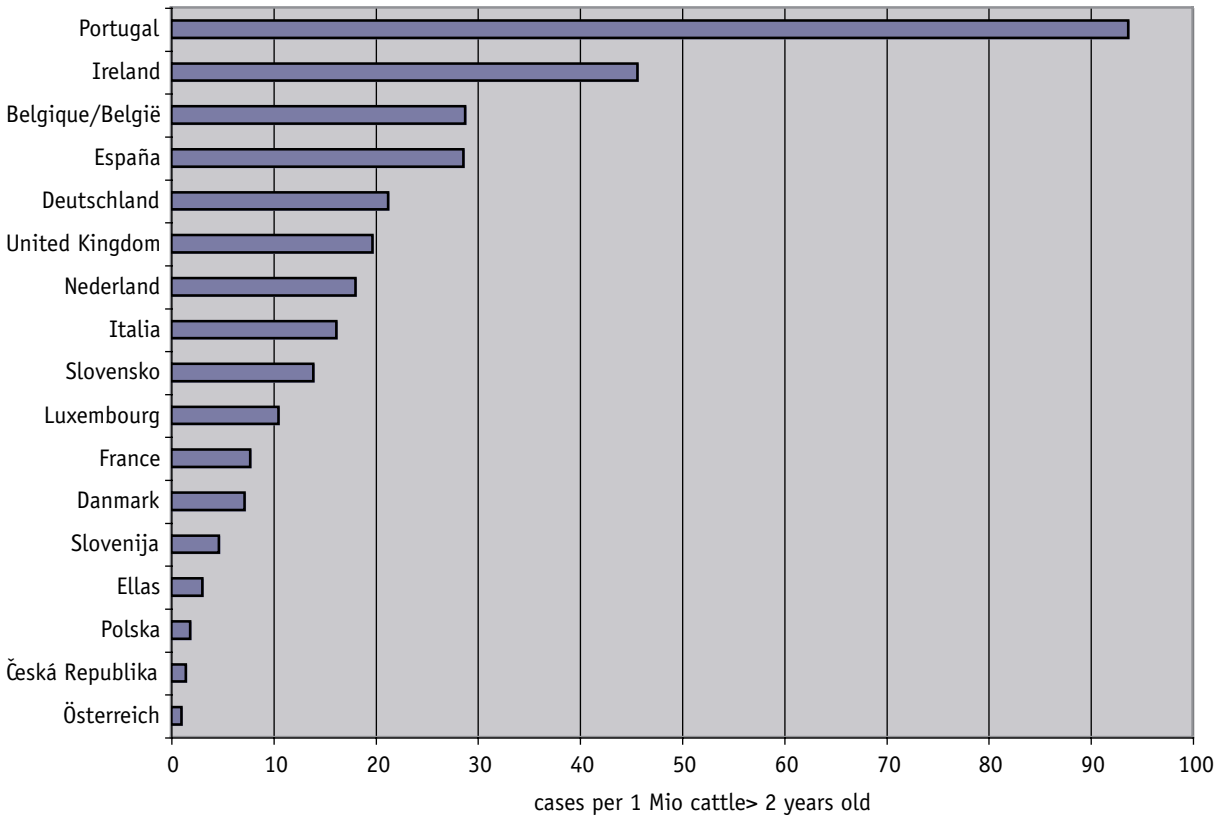


Chart B33: **Prevalence (cases/1 Mio cattle pop. ≥ 2 years old) detected in 2001, 2002, 2003 or 2004 and born in 1997**

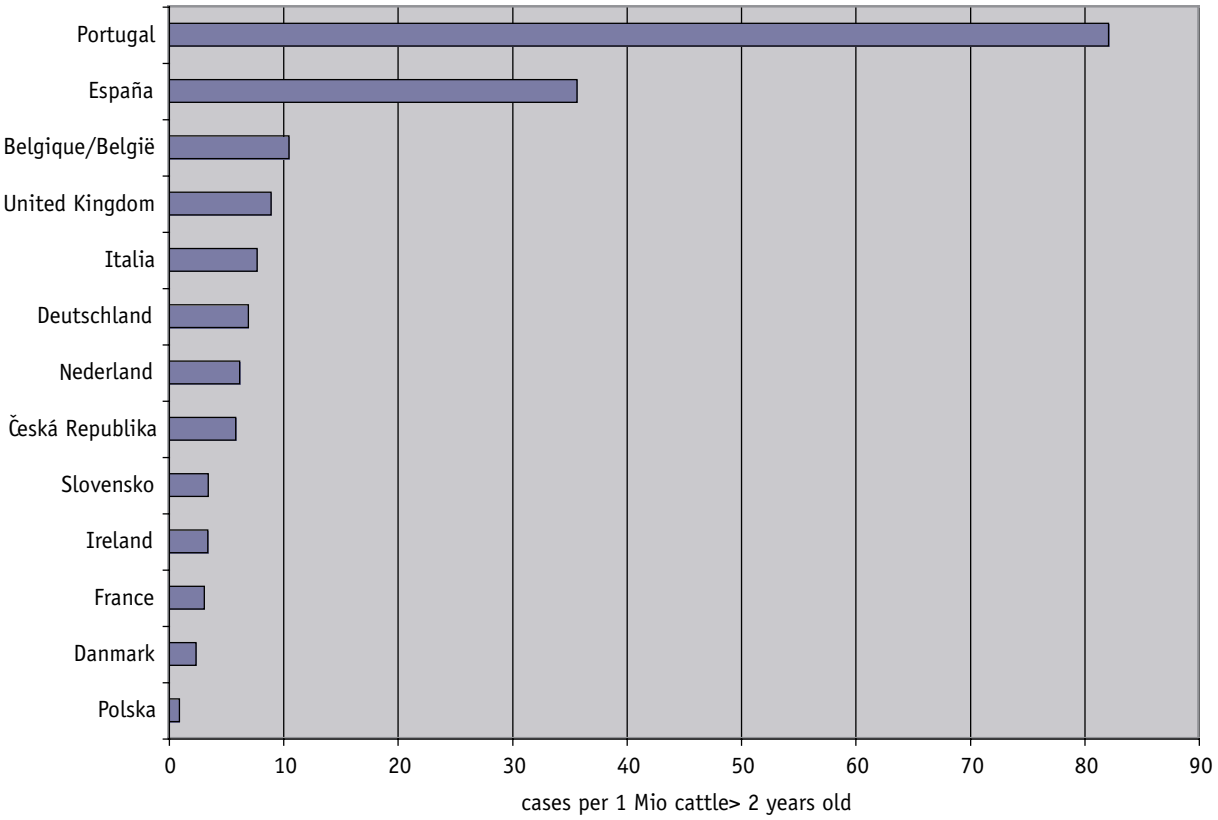


Chart B34: **Prevalence (cases/1 Mio cattle pop. ≥ 2 years old) detected in 2001, 2002, 2003 or 2004 and born in 1998**

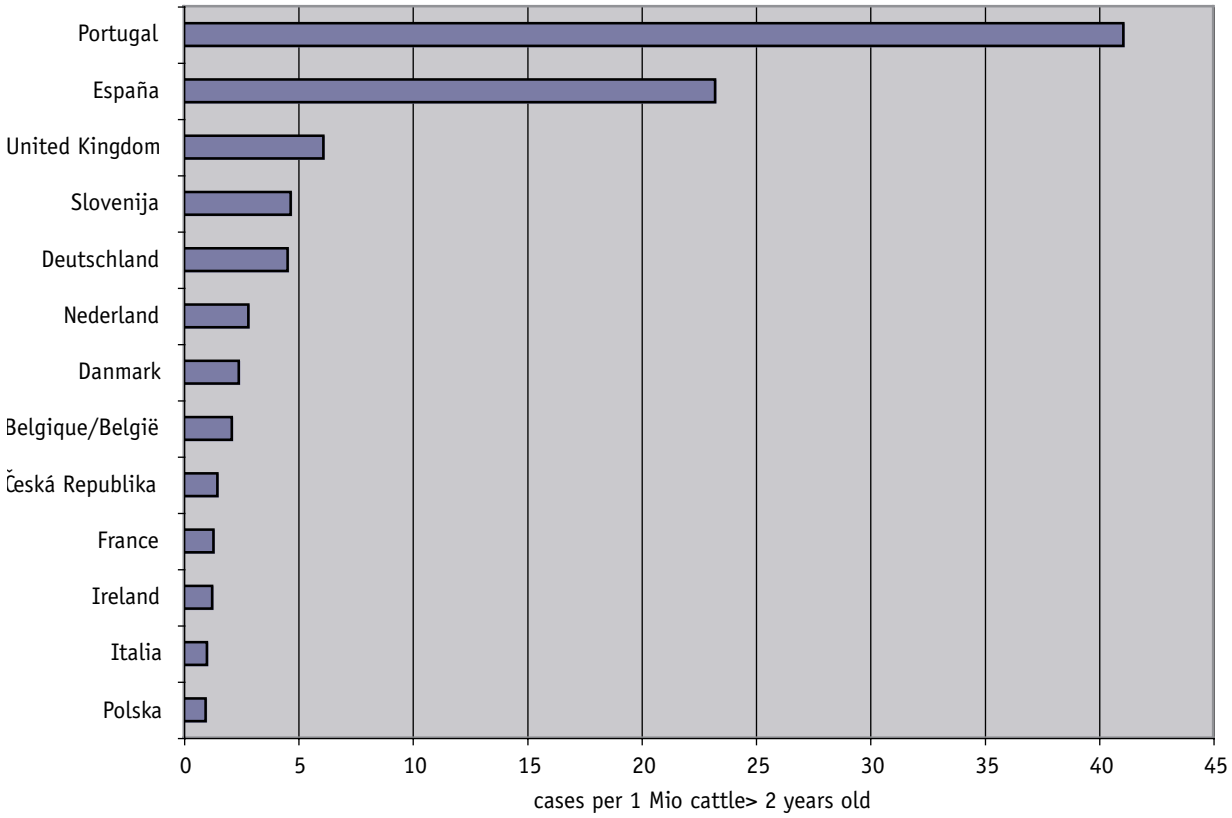


Chart B35: **Prevalence (cases/1 Mio cattle pop. ≥ 2 years old) detected in 2001, 2002, 2003 or 2004 and born in 1999**

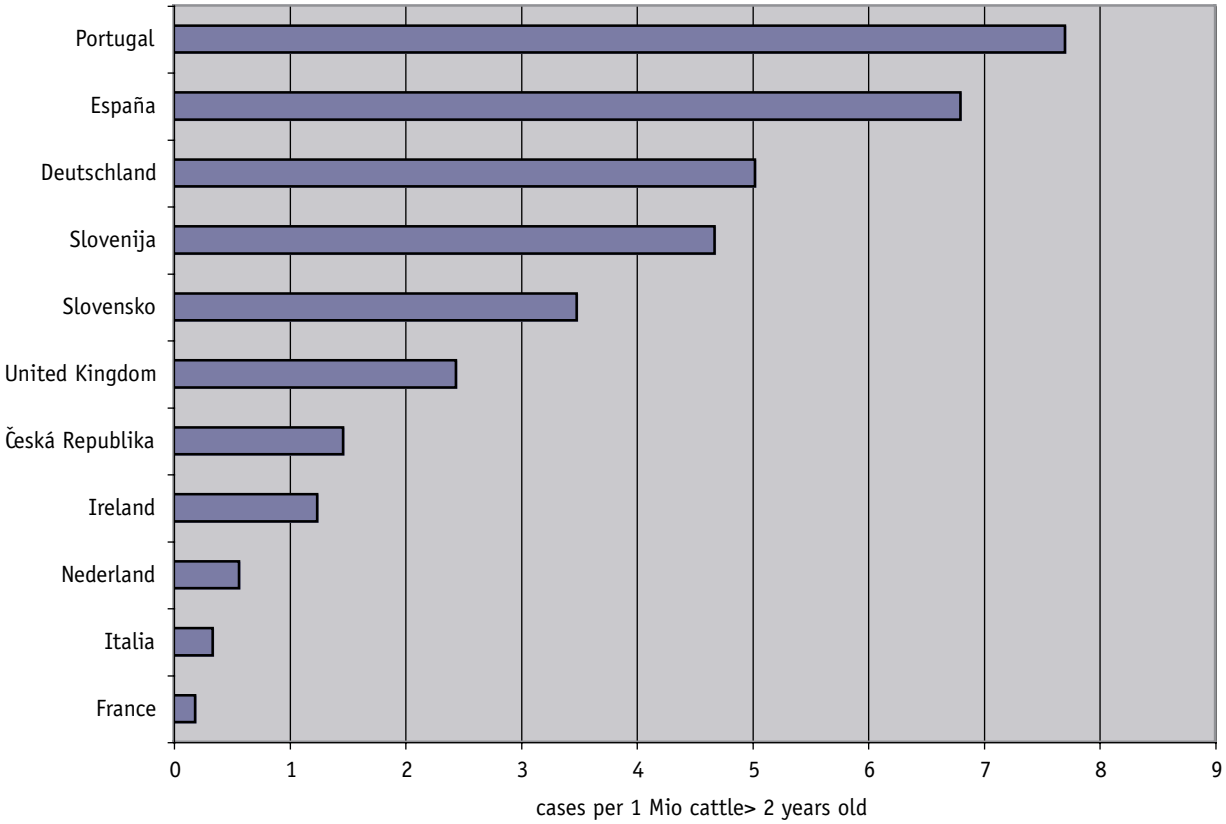


Chart B36: **Prevalence (cases/10 000 tested) detected in 2002, 2003 or 2004 between 24 and 47 months of age**

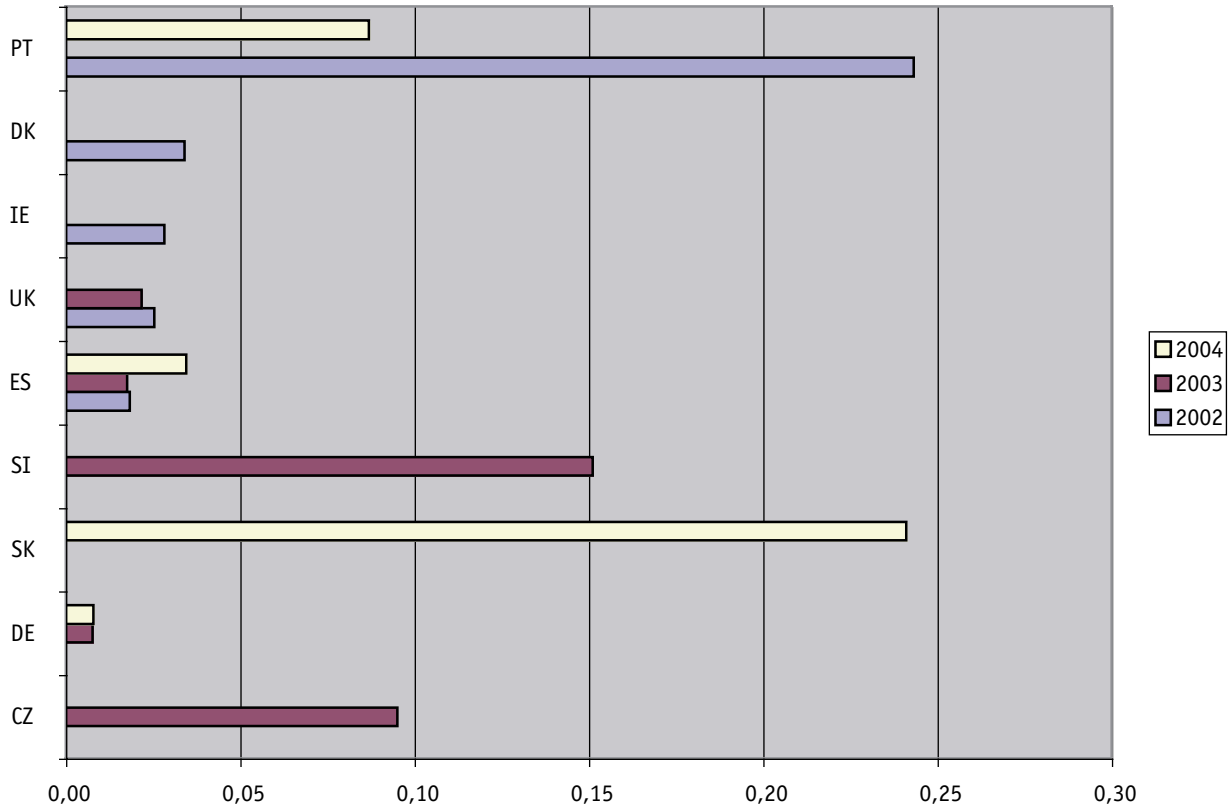


Chart B37: **Prevalence (cases/10 000 tested) detected in 2002, 2003 or 2004 between 48 and 59 months of age**

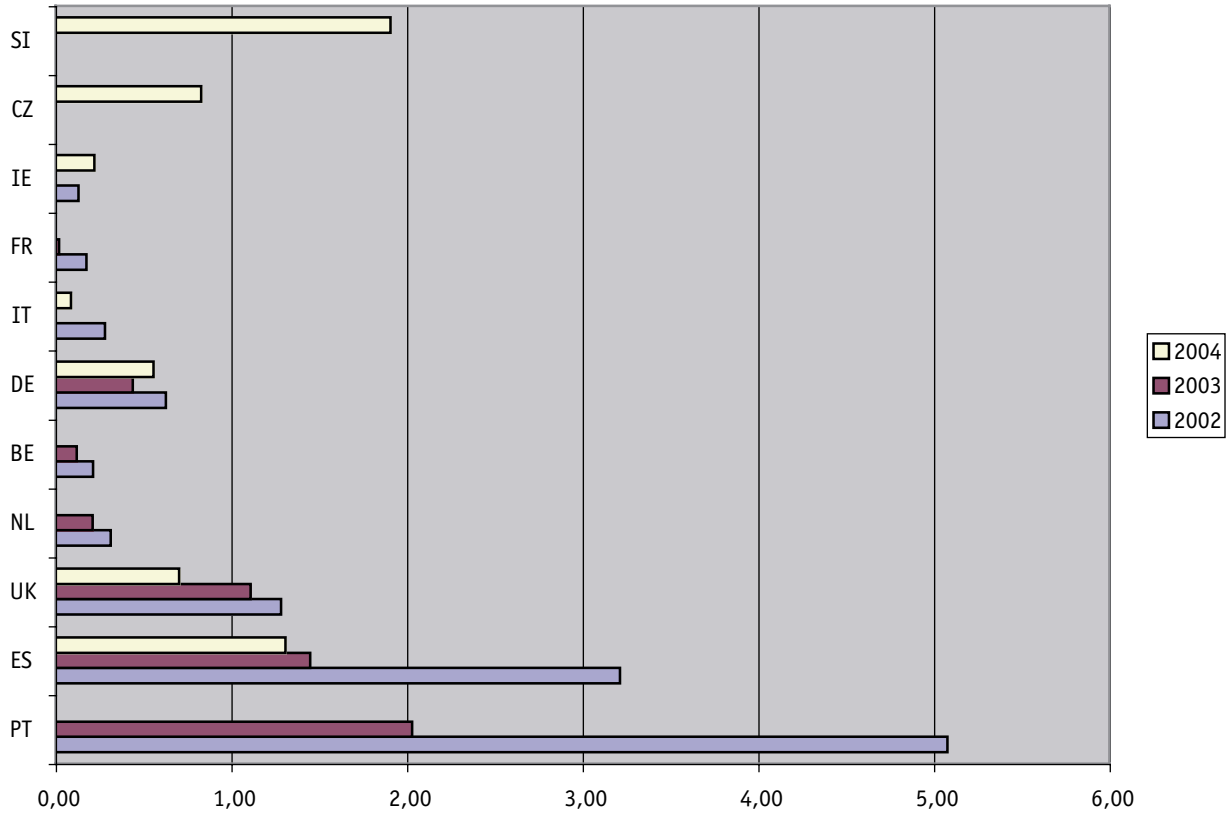


Table B32: **Age and date of birth distribution in cases born in 1996 or later reported since the beginning of 2001 until March 2005 in the EU**

	Age (months)													
	24-29	30-35	36-41	42-47	48-53	54-59	60-65	66-71	72-77	78-83	84-89	90-95	96-101	102-107
1996	0	0	0	1	10	55	113	159	137	116	76	65	34	9
1997	0	0	0	6	27	40	57	78	73	50	32	18	0	0
1998	2	0	0	3	22	26	44	56	44	11	0	0	0	0
1999	0	2	2	6	19	27	22	7	0	0	0	0	0	0
2000	0	0	1	7	12	8	0	0	0	0	0	0	0	0
2001	0	0	0	2	0	0	0	0	0	0	0	0	0	0

Underestimated figures because the monitoring was more limited before July 2001

Provisional figure which still may increase by future monitoring

Chart B38: **Age pattern of positive cases born since 1996 and detected since 2001 in the EU**

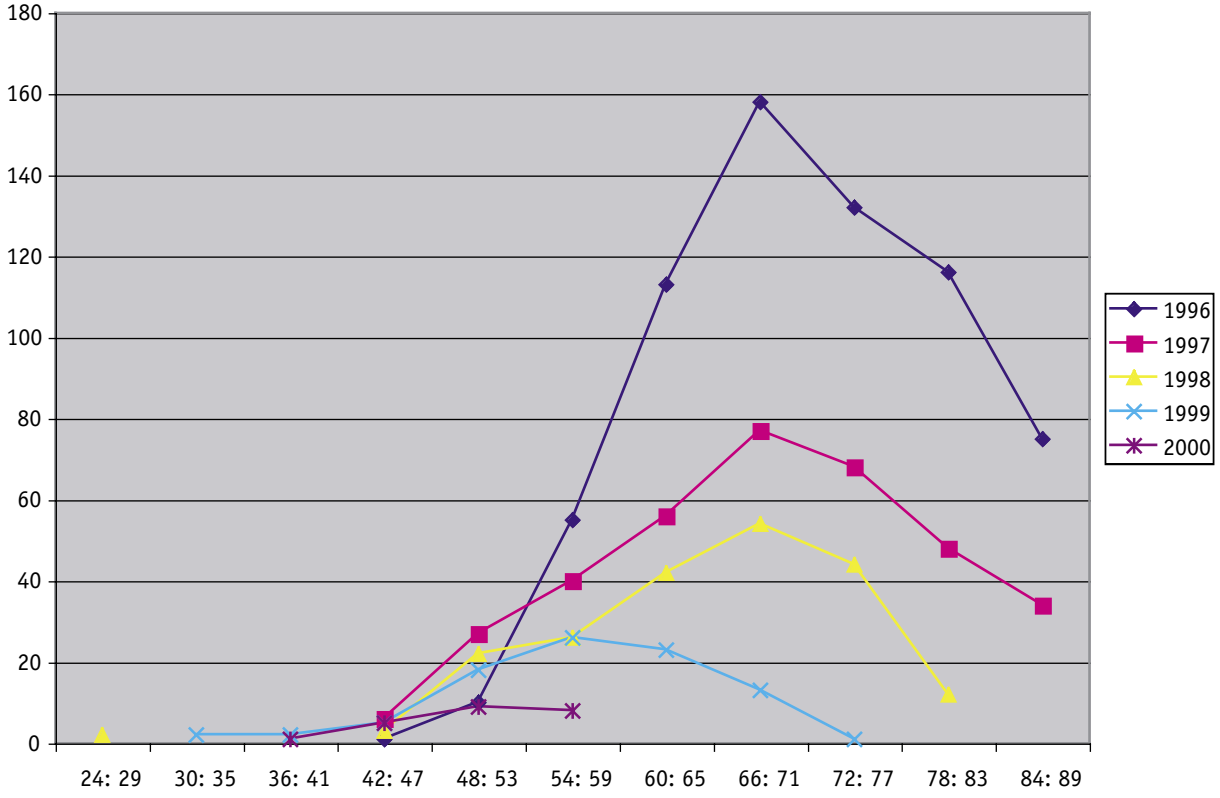


Table B33: **Details on positive cases < 48 months detected in 2004 in the EU**

Age (months)	Member State	Target group	Date of birth
42	Slovakia (New MS)	Healthy slaughtered	1/02/2001
44	Spain (EU 15)	Fallen Stock	11/05/2000
44	Slovakia (New MS)	Healthy slaughtered	1/01/2001
46	Germany (EU 15)	Healthy slaughtered	14/06/2000
46	Germany (EU 15)	Fallen Stock	16/06/2000
47	Portugal (EU 15)	Healthy slaughtered	26/04/2000
47	Spain (EU 15)	Healthy slaughtered	13/12/2000

In 2002 and 2001, respectively 7 and 10 cases below 48 months were detected in the EU 15 (2003: 4 cases in EU 15).

Comments on BSE in young animals

Comparisons in this section should be interpreted with caution since the number of cases born after 1996 is rather low. However, the decreasing prevalence by date of birth in Table B31 may be an indication of the effectiveness of measures to prevent BSE infection in cattle in certain Member States in the period 1996 to 1999.

Although the total prevalence in the UK is slightly underestimated due to the differences in the monitoring programme, the prevalence in the UK in cattle born in 1996 or later can be compared with other Member States. It seems to be similar to several other MS.

5. Summary of TSE testing in ovine and caprine animals during 2004

The information is extracted directly from the monthly reports since January 2002. The monthly information is often updated and/or corrected by the Member States in subsequent reports. The information shown in the following summaries is updated according to the information received on 13 June 2005.

5.1 Sampling

Table SR1: **Number of tests performed in ovine animals per target group**

	Healthy slaughtered	Risk animals	Suspects	Culling	Others or unspecified	Total
Belgique/België	39	1 516	32	333	0	1 920
Česká Republika	55	896	7	78	0	1 036
Danmark	91	5 253	5	0	0	5 349
Deutschland	15 628	65 488	57	4 134	0	85 307
Ellas	6 508	2 098	132	153	0	8 891
España	15 051	10 799	40	1 890	0	27 780
Eesti	354	56	0	0	0	410
France	12 456	12 125	38	10 276	0	34 895
Ireland	10 686	9 632	26	1 463	0	21 807
Italia	16 839	4 931	13	2 690	96	24 569
Kypros	0	330	1 830	0	0	2 160
Latvija	22	15	0	0	0	37
Lietuva	194	40	0	0	0	234
Luxembourg	125	299	0	0	0	424
Magyarország	1 385	4 545	35	0	0	5 965
Malta	43	129	0	0	0	172
Nederland	8 949	10 137	5	1 012	0	20 103
Österreich	446	2 052	0	0	79	2 577
Polska	349	318	0	0	0	667
Portugal	42 753	1 470	1	0	0	44 224
Slovenija	140	857	9	51	0	1 057
Slovensko	1 155	661	5	17	0	1 838
Suomi/Finland	501	802	2	37	0	1 342
Sverige	166	2 985	3	63	0	3 217
United Kingdom	11 304	5 091	427	0	0	16 822
EU 25	145 239	142 525	2 667	22 197	175	312 803
Bulgaria	924	221	0	0	0	1 145
Norway	10 462	3 367	16	620	0	14 465

Table SR2: **Number of tests performed in caprine animals per target group**

	Healthy slaughtered	Risk animals	Suspects	Culling	Unknown	Total
Belgique/België	0	178	94	0	0	272
Česká Republika	9	76	1	0	0	86
Danmark	26	1 294	0	0	0	1 320
Deutschland	783	4 882	19	58	0	5 742
Ellas	1 662	1 476	52	438	0	3 628
España	1 534	2 132	1	11	0	3 678
Eesti	0	0	0	0	0	0
France	68	5 477	5	1 373	0	6 923
Ireland	0	1	0	0	0	1
Italia	2 025	1 490	5	112	22	3 654
Kypros	0	507	828	0	0	1 335
Latvija	0	1	0	0	0	1
Lietuva	0	4	0	0	0	4
Luxembourg	67	10	0	0	0	77
Magyarország	132	187	13	0	0	332
Malta	5	29	0	0	0	34
Nederland	28	577	0	15	0	620
Österreich	55	289	1	0	13	358
Polska	0	0	0	0	0	0
Portugal	7 106	181	0	0	0	7 287
Slovenija	5	250	6	0	0	261
Slovensko	0	5	0	0	0	5
Suomi/Finland	20	241	0	0	0	261
Sverige	0	88	1	0	0	89
United Kingdom	90	50	7	0	0	147
EU 25	13 615	19 425	1 033	2 007	35	36 115
Bulgaria	686	38	0	0	0	724
Norway	131	170	3	0	0	304

5.2 Positive cases

Map 2: **European Countries where TSE was reported in 2004**

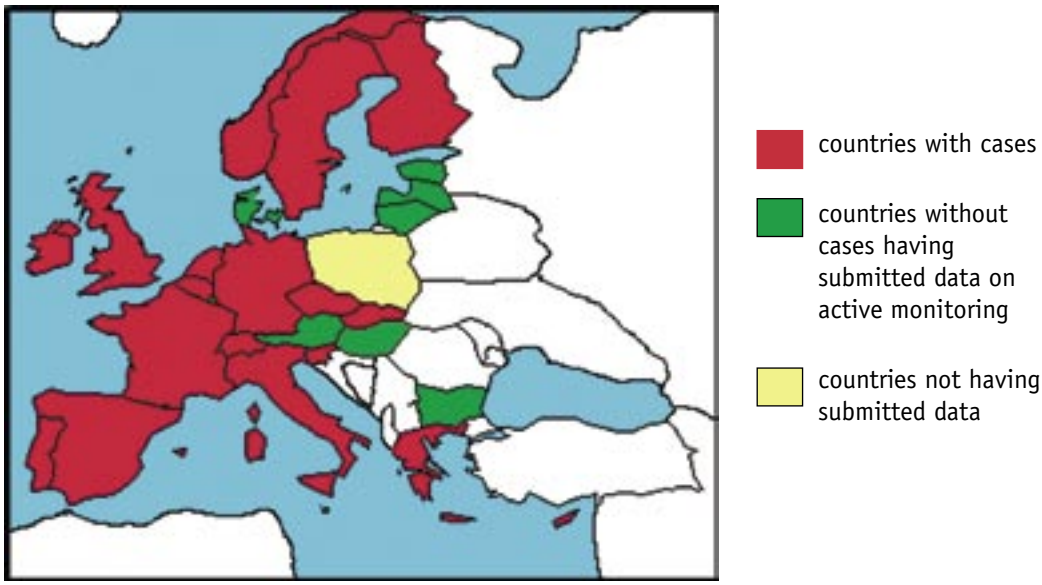


Table SR3: Total positives detected in ovine and caprine animals

	Sheep				Goats				Number of herds
	Total tests	Positive cases			Total tests	Positive cases			
		primary	secondary	total		primary	secondary	total	
Belgique/België	1 920	4	7	11	272	0	0	0	4
Česká Republika	1 036	0	9	9	86	0	0	0	1
Danmark	5 349	0	0	0	1 320	0	0	0	0
Deutschland	85 307	43	57	100	5 742	0	0	0	43
Ellas	8 891	48	23	71	3 628	13	2	15	48
España	27 780	20	28	48	3 678	0	0	0	15
Eesti	410	0	0	0	0	0	0	0	0
France	34 895	59	400	459	6 923	4	23	27	63
Ireland	21 807	55	46	101	1	0	0	0	27
Italia	24 569	24	115	139	3 654	2	0	2	23
Kypros*	2 160	1 208	0	1 208	1 335	354	0	354	
Latvija	37	0	0	0	1	0	0	0	0
Lietuva	234	0	0	0	4	0	0	0	0
Luxembourg	424	0	0	0	77	0	0	0	0
Magyarország	5 965	0	0	0	332	0	0	0	0
Malta	172	0	0	0	34	0	0	0	0
Nederland	20 103	39	66	105	620	0	0	0	39
Österreich	2 577	0	0	0	358	0	0	0	0
Polska	667	0	0	0	0	0	0	0	0
Portugal	44 224	36	0	36	7 287	0	0	0	28
Slovenija	1 057	1	10	11	261	0	0	0	1
Slovensko	1 838	19	12	31	5	0	0	0	19
Suomi/Finland	1 342	1	0	1	261	0	0	0	1
Sverige	3 217	2	0	2	89	0	0	0	2
United Kingdom	16 822	142	189	331	147	0	0	0	142
EU 25	312 803	1 701	962	2 663	35 968	373	25	398	456
Bulgaria	1 145	0	0	0	724	0	0	0	0
Norway	14 465	15	1	16	304	0	0	0	15

*: no differentiation between primary and secondary cases

Chart SR1: **Number of TSE cases per month in sheep in the EU15**

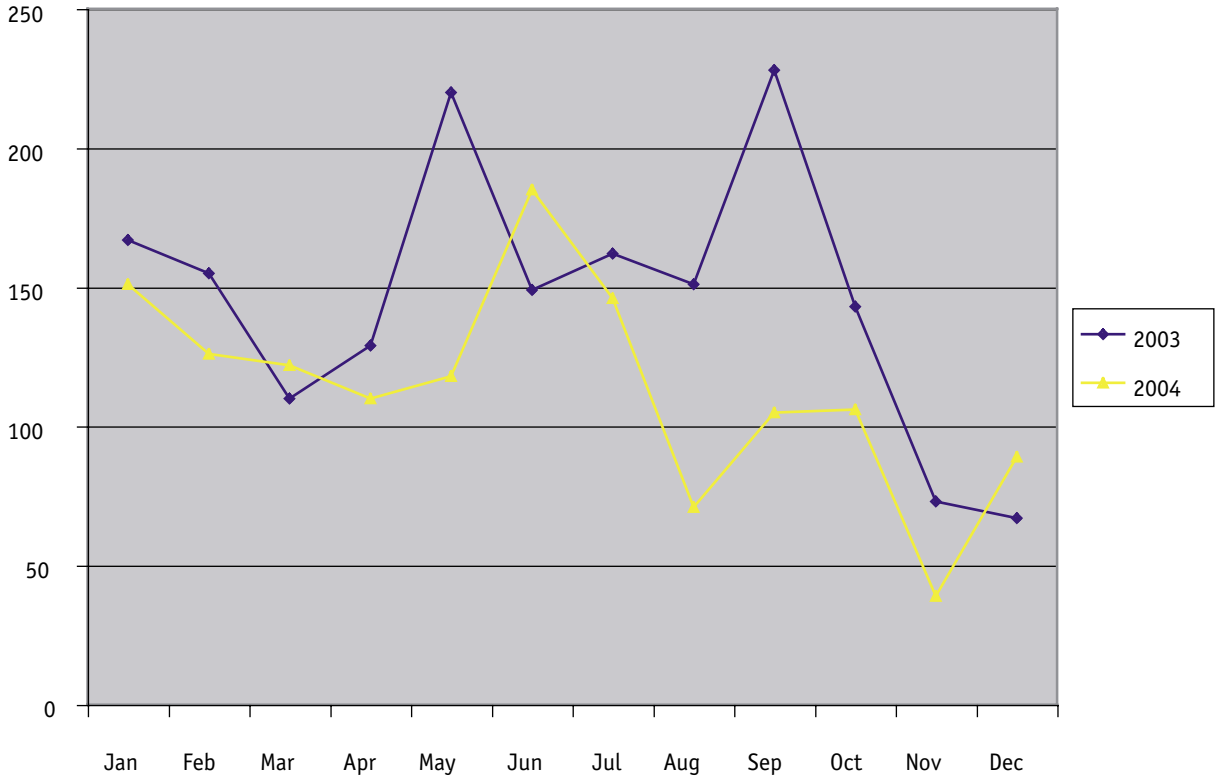


Chart SR2: **Percentage of cases per target group in sheep in the EU15**

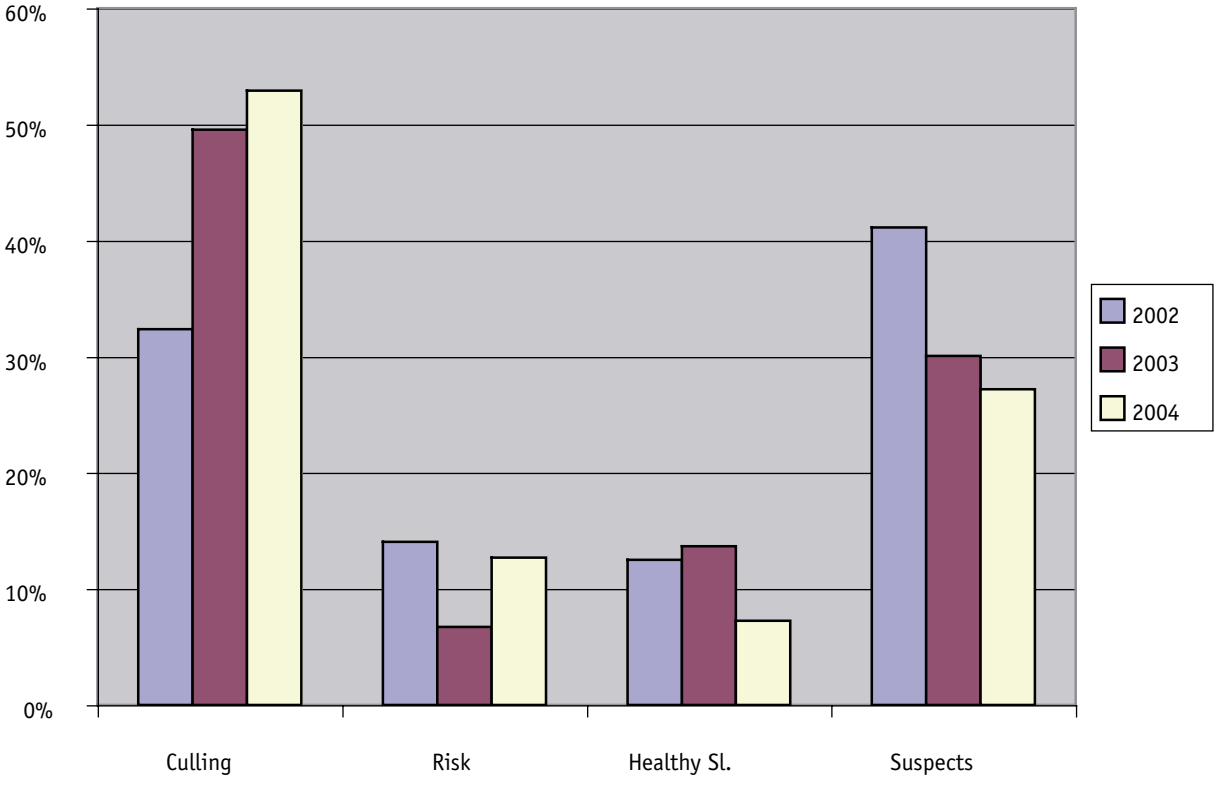


Table SR4: Positives detected by active monitoring and passive surveillance (suspects) in ovine and caprine animals

	Sheep				Goats			
	Popul. x 1 000*	Positives		% detected by act. monitoring	Popul. x 1 000*	Positives		% detected by act. monitoring
		Act. Mon.	Suspects			Act. Mon.	Suspects	
Belgique/België	146	11	0	100%	26	0	0	
Česká Republika	115	9	0	100%	13	0	0	
Danmark	88	0	0		10	0	0	
Deutschland	2 138	100	0	100%	170	0	0	
Ellas	9 241	44	27	62%	5 185	2	13	13%
España	23 461	43	5	90%	3 007	0	0	
Eesti	42	0	0		3	0	0	
France	8 898	444	15	97%	1 218	24	3	89%
Ireland	4 556	88	13	87%	9	0	0	
Italia	8 106	127	12	91%	978	2	0	100%
Kypros	260	55	1153	5%	368	29	325	8%
Latvija	39	0	0		15	0	0	
Lietuva	22	0	0		27	0	0	
Luxembourg	7	0	0		3	0	0	
Magyarország**	1 397	0	0		74	0	0	
Malta	14	0	0		6	0	0	
Nederland	1 450	105	0	100%	300	0	0	
Österreich	327	0	0		56	0	0	
Polska	311	0	0		192	0	0	
Portugal	3541	36	0	100%	546	0	0	
Slovenija	119	11	0	100%	23	0	0	
Slovensko	321	27	4	87%	39	0	0	
Suomi/Finland	72	1	0	100%	5	0	0	
Sverige	456	2	0	100%	5	0	0	
United Kingdom	24 711	21	310	6%	92	0	0	
EU	89 838	1124	1539	42%	12 370	57	341	14%
Bulgaria	1692	0	0		718	0	0	
Norway	928	13	3	81%	46	0	0	

*: Eurostat December 2004

**: 1 scrapie case was detected in a healthy slaughtered sheep imported directly from Romania

5.3 Testing by target group

Table SR5: Positives in healthy slaughtered ovine and caprine animals

	Sheep				Goats			
	Total tests	Total positives	Ratio* 2004	Ratio* 2003	Total tests	Total positives	Ratio* 2004	Ratio* 2003
Belgique/België	39	1	256.4	0.0	0	0		0.0
Česká Republika	55	0	0.0	23.5	9	0	0.0	0.0
Danmark	91	0	0.0	0.0	26	0	0.0	0.0
Deutschland	15 628	1	0.6	4.5	783	0	0.0	0.0
Ellas	6 508	4	6.1	21.7	1 662	0	0.0	14.0
España	15 051	7	4.7	3.8	1 534	0	0.0	1.5
Eesti	354	0	0.0		0	0		
France	12 456	20	16.1	10.3	68	0	0.0	3.6
Ireland	10 686	5	4.7	1.7	0	0		
Italia	16 839	8	4.8	4.0	2 025	1	4.9	5.5
Kypros**	0	0			0	0		866.1
Latvija	22	0	0.0		0	0		
Lietuva	194	0	0.0		0	0		
Luxembourg	125	0	0.0	0.0	67	0	0.0	0.0
Magyarország***	1 385	0	0.0		132	0	0.0	
Malta	43	0	0.0		5	0	0.0	
Nederland	8 949	13	14.5	21.3	28	0	0.0	0.0
Österreich	446	0	0.0	0.0	55	0	0.0	0.0
Polska	349	0	0.0		0	0		
Portugal****	42 753	26	6.1	5.6	7 106	0	0.0	0.0
Slovenija	140	0	0.0	0.0	5	0	0.0	0.0
Slovensko	1 155	5	43.3	2.5	0	0		0.0
Suomi/Finland	501	0	0.0	0.0	20	0	0.0	0.0
Sverige	166	0	0.0	3.9	0	0		0.0
United Kingdom	11 304	9	8.0	6.2	90	0	0.0	52.4
EU 25	145 239	107	7.4	7.1	13 615	1	0.7	7.3
Bulgaria	924	0	0.0	0.0	686	0	0.0	0.0
Norway	10 462	8	7.6	1.5	131	0	0.0	0.0

*: cases per 10 000 tests

**: see footnote at Table SR6

***: 1 scrapie case was detected in a healthy slaughtered sheep directly imported from Romania

****: in addition 8 scrapie cases were detected in imported sheep

Chart SR3: **Mean prevalence of positives in healthy slaughtered ovine animals in affected Member States during the years 2002 to 2004.**

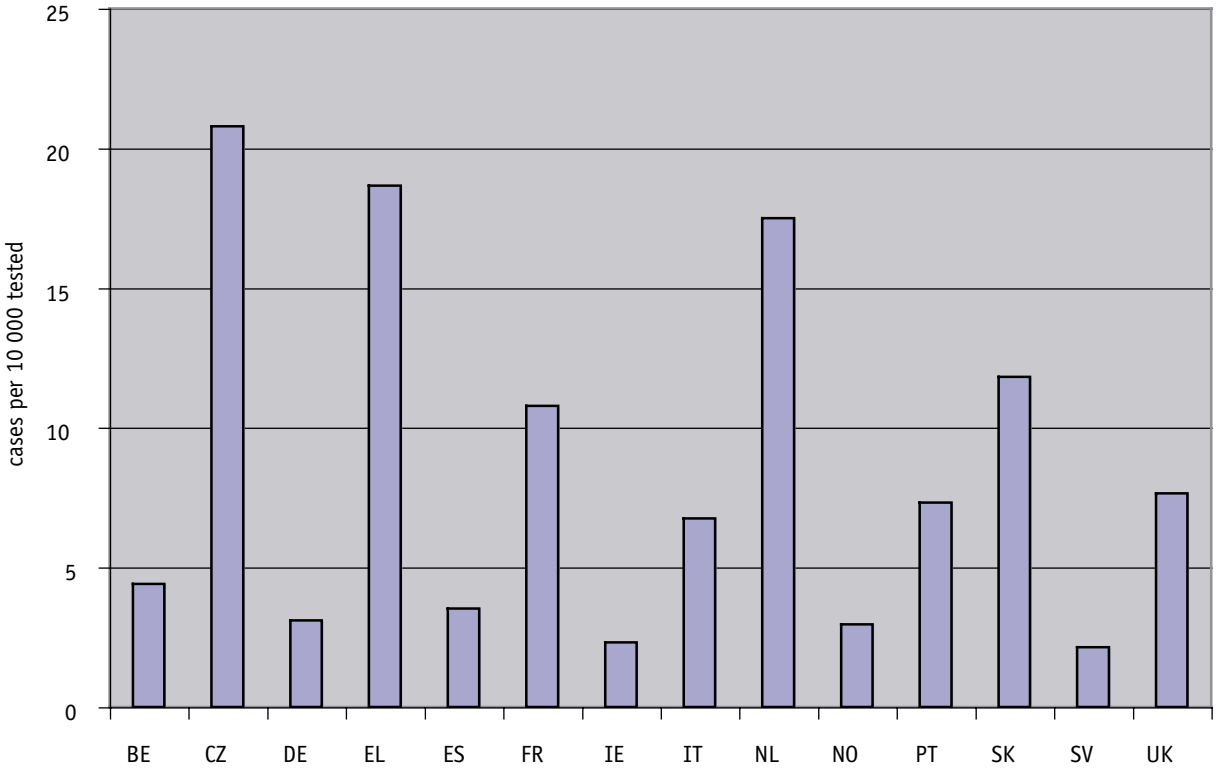


Chart SR4: **Mean prevalence of positives in risk ovine animals (fallen stock) in affected Member States during the years 2002 to 2004 (CY: fallen stock and healthy slaughtered animals).**

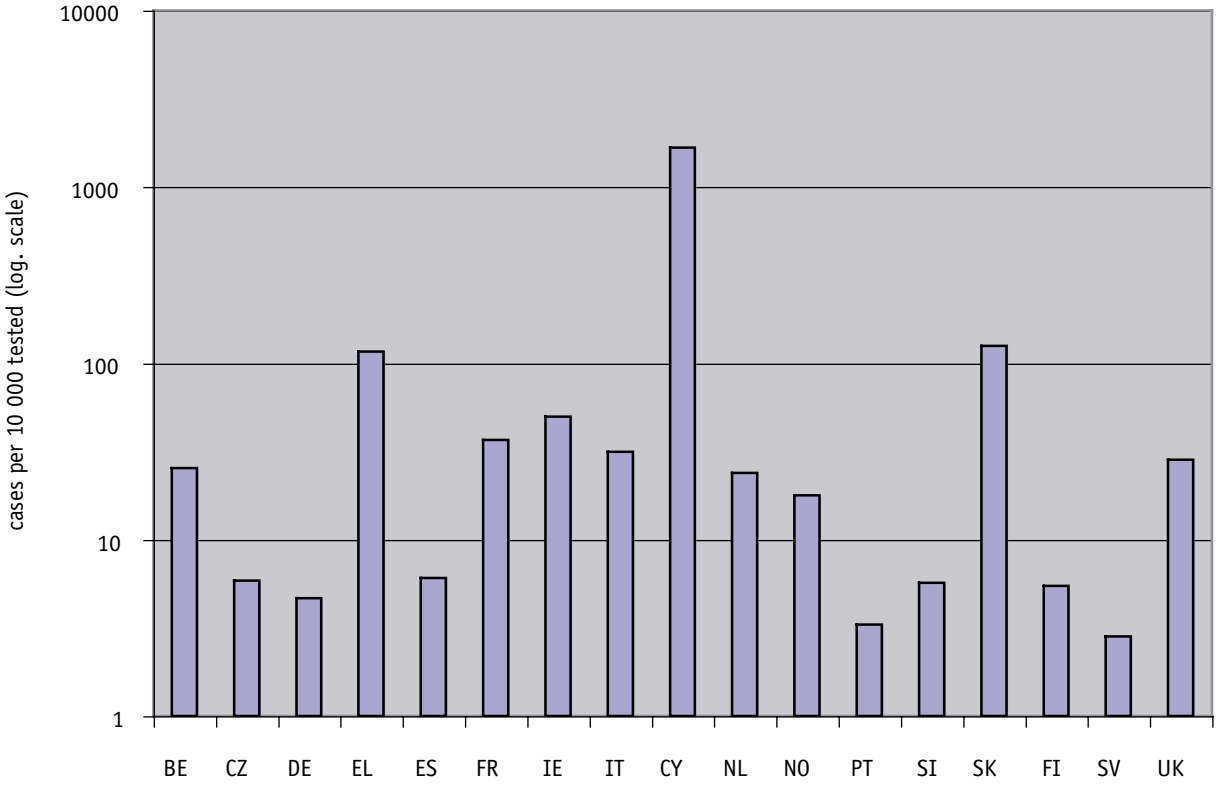


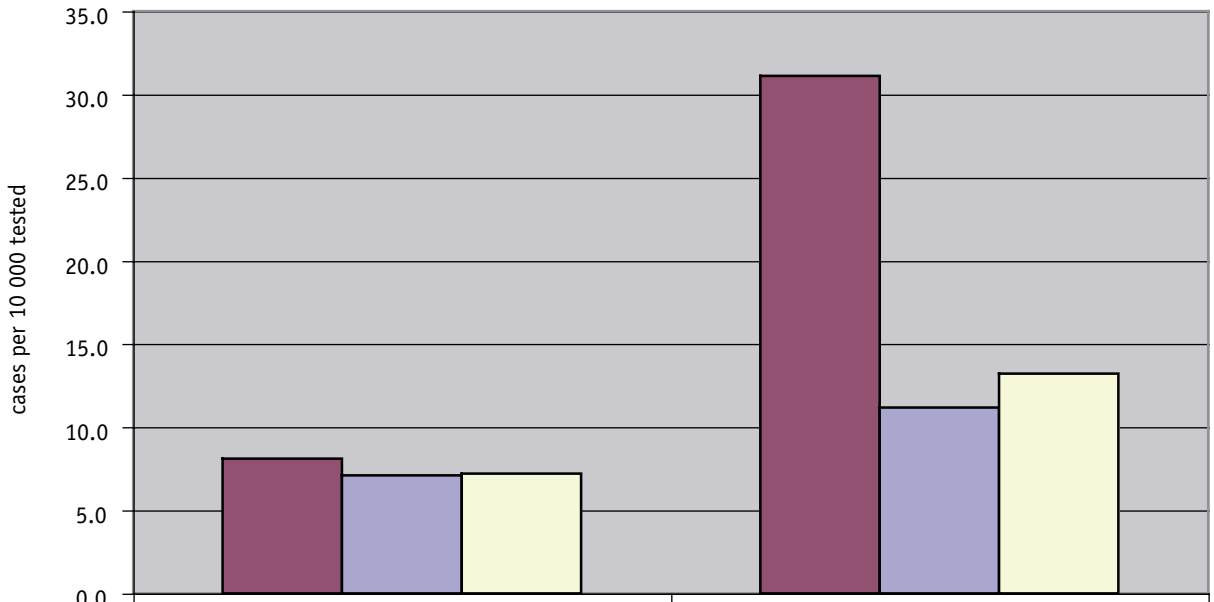
Table SR6: Positives in risk ovine and caprine animals (mainly fallen stock)

	Sheep				Goats			
	Total tests	Total positives	Ratio* 2004	Ratio* 2003	Total tests	Total positives	Ratio* 2004	Ratio* 2003
Belgique/België	1 516	3	19.8	40.3	178	0	0.0	0.0
Česká Republika	896	2	22.3	0.0	76	0	0.0	0.0
Danmark	5 253	0	0.0	0.0	1 294	0	0.0	0.0
Deutschland	65 488	42	6.4	2.7	4 882	0	0.0	0.0
Ellas	2 098	17	81.0	163.9	1 476	0	0.0	0.0
España	10 799	8	7.4	6.2	2 132	0	0.0	0.0
Eesti	56	0	0.0		0	0		
France	12 125	24	19.8	17.9	5 477	1	1.8	5.0
Ireland	9 632	37	38.4	63.2	1	0	0.0	0.0
Italia	4 931	4	8.1	25.9	1 490	1	6.7	0.0
Kypros**	330	55	1 666.7		507	29	572.0	1 746.0
Latvija	15	0	0.0		1	0	0.0	
Lietuva	40	0	0.0		4	0	0.0	
Luxembourg	299	0	0.0	0.0	10	0	0.0	0.0
Magyarország	4 545	0	0.0		187	0	0.0	
Malta	129	0	0.0		29	0	0.0	
Nederland	10 137	26	25.6	15.0	577	0	0.0	0.0
Österreich	2 052	0	0.0	0.0	289	0	0.0	0.0
Polska	318	0	0.0		0	0		
Portugal	1 470	2	13.6	0.0	181	0	0.0	0.0
Slovenija	857	1	11.7	0.0	250	0	0.0	0.0
Slovensko	661	10	151.3	46.7	5	0	0.0	0.0
Suomi/Finland	802	1	12.5	0.0	241	0	0.0	0.0
Sverige	2 985	2	6.7	0.0	88	0	0.0	0.0
United Kingdom	5 091	12	23.6	25.4	50	0	0.0	0.0
EU 25	142 525	246	17.3	10.9	19 425	31	16.0	7.7
Bulgaria	221	0	0.0	0.0	38	0	0.0	0.0
Norway	3 367	4	11.9	23.8	170	0	0.0	0.0

*: cases per 10 000 tests

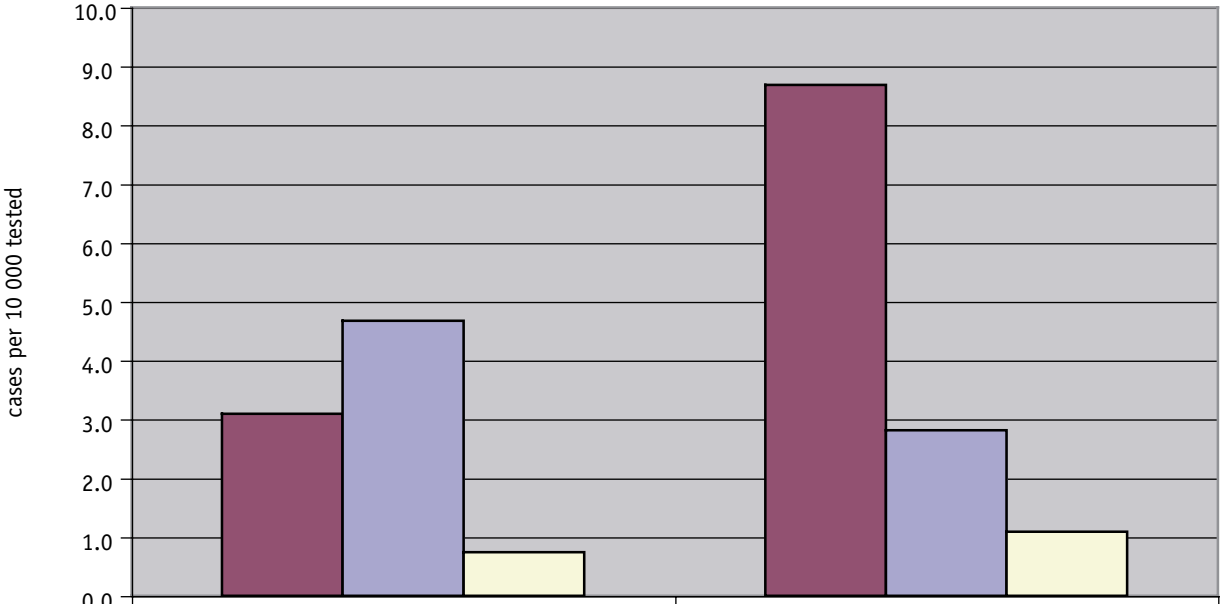
**: fallen stock and healthy slaughtered animals

Chart SR5: **Prevalence of TSE in healthy slaughtered and risk (fallen stock) sheep in the EU 15 in 2002, 2003 and 2004**



	Healthy Slaughter	Fallen Stock
2002	8.1	31.1
2003	7.1	11.2
2004	7.2	13.3

Chart SR6: **Prevalence of TSE in healthy slaughtered and risk (fallen stock) goats in the EU 15 in 2002, 2003 and 2004**



	Healthy Slaughter	Fallen Stock
2002	3.1	8.7
2003	4.7	2.8
2004	0.7	1.1

Table SR7: Positives in suspect ovine and caprine animals

	Sheep				Goats			
	Total tests	Total positives	Ratio* 2004	Ratio* 2003	Total tests	Total positives	Ratio* 2004	Ratio* 2003
Belgique/België	32	0	0.0	0.0	94	0	0.0	0.0
Česká Republika	7	0	0.0		1	0	0.0	
Danmark	5	0	0.0	0.0	0	0		0.0
Deutschland	57	0	0.0	0.0	19	0	0.0	0.0
Ellas	132	27	2 045.5	3 374.2	52	13	2 500.0	3 571.4
España	40	5	1 250.0	2 456.1	1	0	0.0	0.0
Eesti	0	0			0	0		
France	38	15	3 947.4	5 942.0	5	3	6 000.0	0.0
Ireland	26	13	5 000.0	3 636.4	0	0		
Italia	13	12	9 230.8	9 473.7	5	0	0.0	5 000.0
Kypros	1 830	1 153	6 300.5		828	325	3 925.1	4 752.7
Latvija	0	0			0	0		
Lietuva	0	0			0	0		
Luxembourg	0	0			0	0		
Magyarország	35	0	0.0		13	0	0.0	
Malta	0	0			0	0		
Nederland	5	0	0.0	1 967.2	0	0		
Österreich	0	0		0.0	1	0	0.0	
Polska	0	0			0	0		
Portugal	1	0	0.0		0	0		
Slovenija	9	0	0.0	0.0	6	0	0.0	
Slovensko	5	4	8 000.0	10 000.0	0	0		
Suomi/Finland	2	0	0.0		0	0		
Sverige	3	0	0.0	800.0	1	0	0.0	0.0
United Kingdom	427	310	7 260.0	7 750.5	7	0	0.0	
EU 25	2 667	1 539	5 770.5	4 157.7	1 033	341	3 301.1	4 269.1
Bulgaria	0	0			0	0		
Norway	16	3	1 875.0	666.7	3	0	0.0	0.0

*: cases per 10 000 tests

Table SR8: **Positives in ovine and caprine animals, culled in the frame of TSE eradication and including animals additionally tested on infected herds before culling measures were applied.**

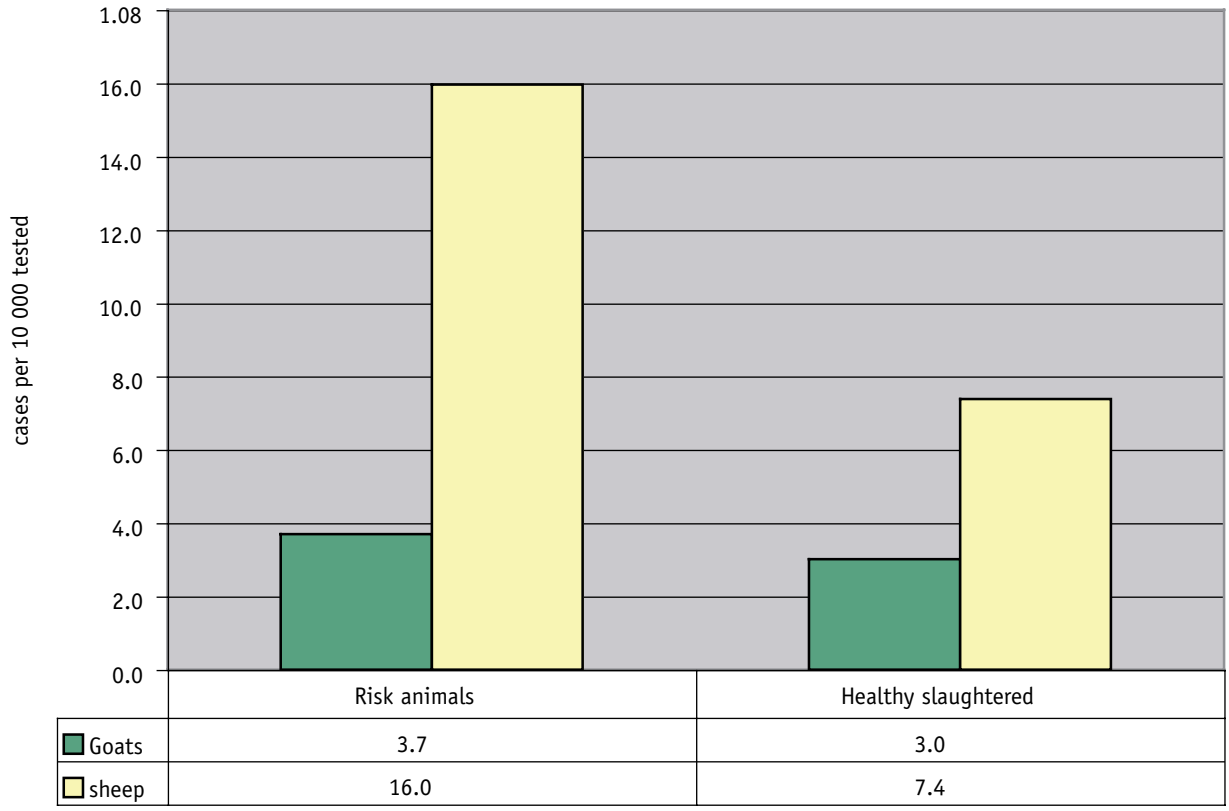
	Sheep				Goats			
	Total tests	Total positives	Ratio* 2004	Ratio* 2003	Total tests	Total positives	Ratio* 2004	Ratio* 2003
Belgique/België	333	7	210.2	0.0	0	0		
Česká Republika	78	7	897.4	6875.0	0	0		0.0
Danmark	0	0			0	0		
Deutschland	4 134	57	137.9	2.9	58	0	0.0	0.0
Ellas	153	23	1 503.3	296.6	438	2	45.7	0.0
España	1 890	28	148.1	146.9	11	0	0.0	0.0
Eesti	0	0			0	0		
France	10 276	400	389.3	387.3	1373	23	167.5	21.9
Ireland	1 463	46	314.4	117.6	0	0		
Italia	2 690	115	427.5	398.2	112	0	0.0	117.2
Kypros	0	0			0	0		
Latvija	0	0			0	0		
Lietuva	0	0			0	0		
Luxembourg	0	0			0	0		
Magyarország	0	0			0	0		
Malta	0	0			0	0		
Nederland	1 012	66	652.2	0.0	15	0	0.0	
Österreich	0	0			0	0		
Polska	0	0			0	0		
Portugal	0	0		0.0	0	0		
Slovenija	51	10	1 960.8		0	0		
Slovensko	17	12	7 058.8	0.0	0	0		
Suomi/Finland	37	0	0.0		0	0		0.0
Sverige	63	0	0.0	0.0	0	0		
United Kingdom	0	0			0	0		
EU 25	22 197	771	347.3	287.8	2007	25	124.6	26.3
Bulgaria	0	0			0	0		
Norway	620	1	16.1	9.3	0	0		

*: cases per 10 000 tests

Table SR9: **Number of TSE cases considered as atypical in ovine animals in Countries with TSE cases in 2004**

	Atypical cases No.
Belgique/België	1
Česká Republika	0
Deutschland	32
Ellas	0
España	2
France	11
Ireland	2
Italia	0
Kypros	0
Nederland	1
Portugal	28
Slovenija	0
Slovensko	0
Suomi/Finland	1
Sverige	2
United Kingdom	17
EU 25	97
Norway	14

Chart SR7: **Comparison of prevalence of TSE in healthy slaughtered and risk animals in the EU15 from 2002 to 2004**



Comments on positives cases and target groups

It is difficult to compare the number of samples and TSE cases detected in 2004 and 2003 because the monitoring programme was different, focussing in 2004 on risk animals. In addition, more results from testing in new Member States are included in the 2004 figures. In particular, 45% of TSE cases in sheep and 89% of TSE cases in goats were detected in Cyprus.

About half of the positive cases in sheep and goats outside Cyprus were secondary cases detected by culling in the frame of TSE eradication. The prevalence within infected herds varied however considerably indicating the need for a balanced risk based approach. Most of the other cases were suspects showing clinical signs.

The prevalence in risk sheep was about twice higher than in healthy slaughtered sheep.

Atypical TSE cases were demonstrated in several Member States and represented a considerable percentage of, if not all, TSE cases in this Member State. It should be stressed that there is not yet a harmonised definition about what is an atypical case. In the UK, all atypical cases in Table SR9 were detected by active monitoring, however they are not included in preceding tables with TSE cases in this report as other Member States did.

5.4 Discriminatory testing between BSE and scrapie

Table SR10: **Discriminatory testing on TSE cases confirmed in sheep and goats between 1998 and 2004**

	BE	CZ	DE	EL	ES	FR	IE	IT	CY	NL	PT	SI	SK	FI	SV	UK	NO	Total
SHEEP																		
Nbr. of TSE cases subject to molecular testing*	0	0	36	0	17	451	0	150	0	245	0	1	7	1	6	2 547	45	3 506
Nbr of molecular tests not excluding BSE	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	2	0	3
Nbr. of TSE cases subject to mouse bio-assay	0	0	0	0	0	18	0	7	0	4	0	0	0	0	0	2	1	32
Nbr. of bio-assays excluding BSE	0	0	0	0	0	17	0	7	0	0	0	0	0	0	0	0	1	25
Nbr. of bio-assays indicating BSE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
Nbr. of ongoing bio-assays	0	0	0	0	0	1	0	0	0	4	0	0	0	0	0	2	0	7
Total nbr. of TSE cases subject to discriminatory testing	0	0	36	0	17	451	0	150	0	245	0	1	7	1	6	2 547	45	3 506
% of discriminatory tests not (yet) excluding BSE			**0.0**		**0.0**	**0.2**		**0.0**		**0.0**		**0.0**	**0.0**	**0.0**	**0.0**	**0.1**	**0.0**	**0.1**
% of finalised discriminatory tests indicating BSE			**0.0**		**0.0**	**0.0**		**0.0**		**0.0**		**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**
GOATS																		
Nbr. of TSE cases subject to molecular testing*	0	0	0	0	0	35	0	15	0	5	0	0	0	2	0	0	0	57
Nbr of molecular tests not excluding BSE	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
Nbr. of TSE cases subject to mouse bio-assay	0	0	0	0	0	5	0	4	0	1	0	0	0	0	0	0	0	10
Nbr. of bio-assays excluding BSE	0	0	0	0	0	4	0	4	0	0	0	0	0	0	0	0	0	8
Nbr. of bio-assays indicating BSE	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	**1**
Nbr. of ongoing bio-assays	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
Total nbr. of TSE cases subject to discriminatory testing	0	0	0	0	0	35	0	15	0	5	0	0	0	2	0	0	0	57
% of discriminatory tests not (yet) excluding BSE						**2.9**		**0.0**		**0.0**				**0.0**				**1.8**
% of finalised discriminatory tests indicating BSE						**2.9**		**0.0**		**0.0**				**0.0**				**1.8**

*: Including molecular testing excluding BSE by demonstrating atypical scrapie

Additional information on ongoing mouse bio-assays:

- FR: the sheep sample was considered BSE-like in a discriminatory western blot and ELISA. However the results of these molecular tests are less indicative of BSE than the results of molecular testing of the goat sample that in the meantime was confirmed as BSE by the bio-assay.
- UK: 2 samples of sheep were considered BSE like by immunoblots, but scrapie by immuno-assay and immunohistochemistry. They are now subjected to a mouse bioassay for final BSE exclusion.
- NL, SI, FI: BSE has in the meantime been excluded by molecular tests in all ongoing bio-assays.

In order to evaluate the BSE prevalence in small ruminants the figures on discriminatory testing should be considered in combination with the TSE prevalence.

5.5 Year of birth and age distribution of positive cases

Table SR11: Year of birth distribution of positive cases in ovine animals of known age

		<1997	1997	1998	1999	2000	2001	2002	2003	2004	Unknown	Total*
Belgique/België	No of cases	0	1	0	0	1	2	0	0	0	0	4
	% of known	0%	25%	0%	0%	25%	50%	0%	0%	0%		
Deutschland	No of cases	3	0	1	1	1	1	2	0	0	30	39
	% of known	33%	0%	11%	11%	11%	11%	22%	0%	0%		
Ellas	No of cases	1	0	0	0	10	17	6	0	0	0	34
	% of known	3%	0%	0%	0%	29%	50%	18%	0%	0%		
España	No of cases	2	1	2	4	0	0	1	0	0	5	15
	% of known	5%	16%	16%	26%	16%	3%	0%	0%	0%		
France	No of cases	4	4	5	0	10	9	19	2	0	6	59
	% of known	8%	8%	9%	0%	19%	17%	36%	4%	0%		
Ireland	No of cases	0	2	3	2	6	11	3	4	0	24	55
	% of known	0%	0%	0%	0%	0%	0%	0%	0%	0%		
Italia	No of cases	0	0	2	4	8	3	6	1	0	0	24
	% of known	0%	0%	8%	17%	33%	13%	25%	4%	0%		
Nederland	No of cases	0	0	0	0	0	0	0	0	0	54	54
	% of known	0%	0%	0%	0%	0%	0%	0%	0%	0%		
Portugal	No of cases	2	1	1	0	1	0	0	0	0	23	28
	% of known	40%	20%	20%	0%	20%	0%	0%	0%	0%		
Suomi/Finland	No of cases	1	0	0	0	0	0	0	0	0	0	1
	% of known	100%	0%	0%	0%	0%	0%	0%	0%	0%		
Sverige	No of cases	2	0	0	0	0	0	0	0	0	0	2
	% of known	100%	0%	0%	0%	0%	0%	0%	0%	0%		
United Kingdom	No of cases	4	6	19	32	47	81	57	9	1	92	348
	% of known	2%	2%	7%	13%	18%	32%	22%	4%	0%		
EU 15	No of cases	19	15	33	43	84	124	94	16	1	234	663
	% of known	4%	4%	8%	10%	20%	29%	22%	4%	0%		
Česká Republika	No of cases	0	0	0	0	1	0	5	3	0	0	9
	% of known	0%	0%	0%	0%	11%	0%	56%	33%	0%		
Kypros	No of cases	0	0	0	1	3	7	4	1	0	1	17
	% of known	0%	0%	0%	6%	19%	44%	25%	6%	0%		
Slovenija	No of cases	0	0	0	0	0	1	0	0	0	0	1
	% of known	0%	0%	0%	0%	0%	100%	0%	0%	0%		
Slovensko	No s cases	0	0	0	2	1	8	15	4	0	0	30
	% of known	0%	0%	0%	7%	3%	27%	50%	13%	0%		
nMS	No of cases	0	0	0	3	5	16	24	8	0	1	57
	% of known	0%	0%	0%	5%	9%	29%	43%	14%	0%		
EU 25	No of cases	19	15	33	46	89	140	118	24	1	235	720
	% of known	4%	3%	7%	10%	18%	29%	24%	5%	0%		
Norway	No of cases	3	3	3	4	1	2	0	0	0	0	16
	% of known	19%	19%	19%	25%	6%	13%	0%	0%	0%		

*: Only cases from which additional information (date, of birth, genotype,...) was forwarded.

Chart SR8: **Year of birth distribution of sheep in some Member States**

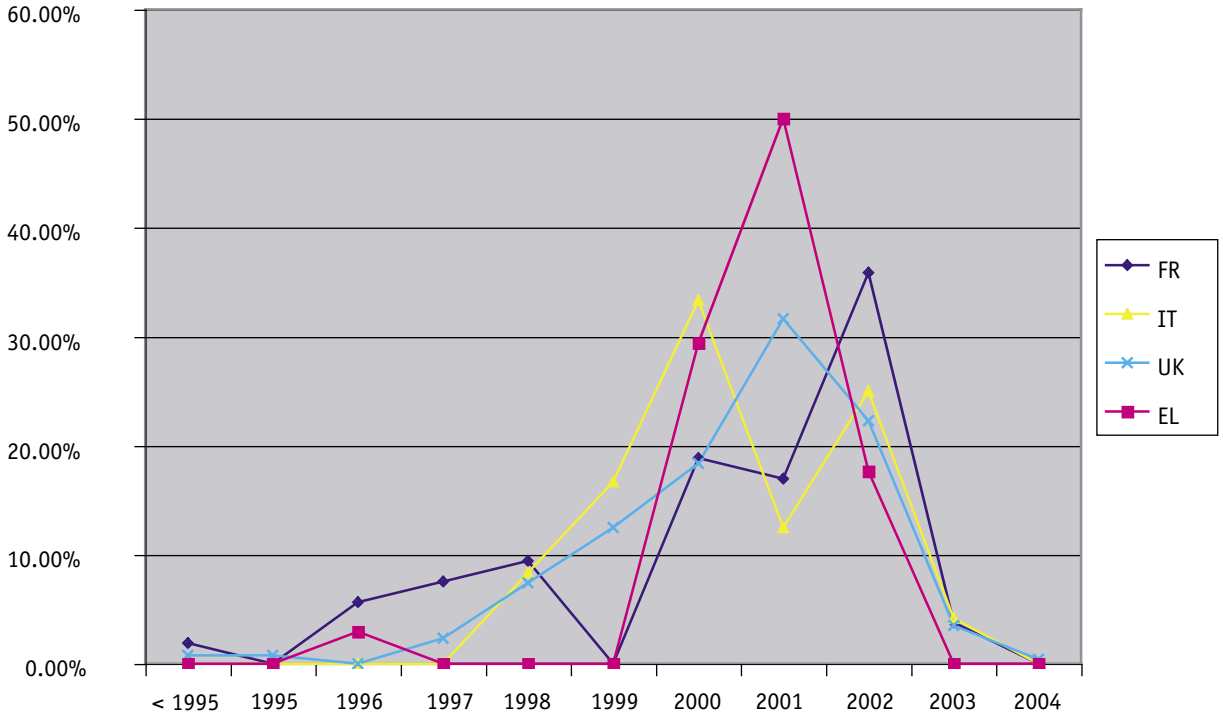


Chart SR9: **Age distribution of positive cases in sheep detected in 2002, 2003 or 2004 in the EU 15, new Member States and Norway**

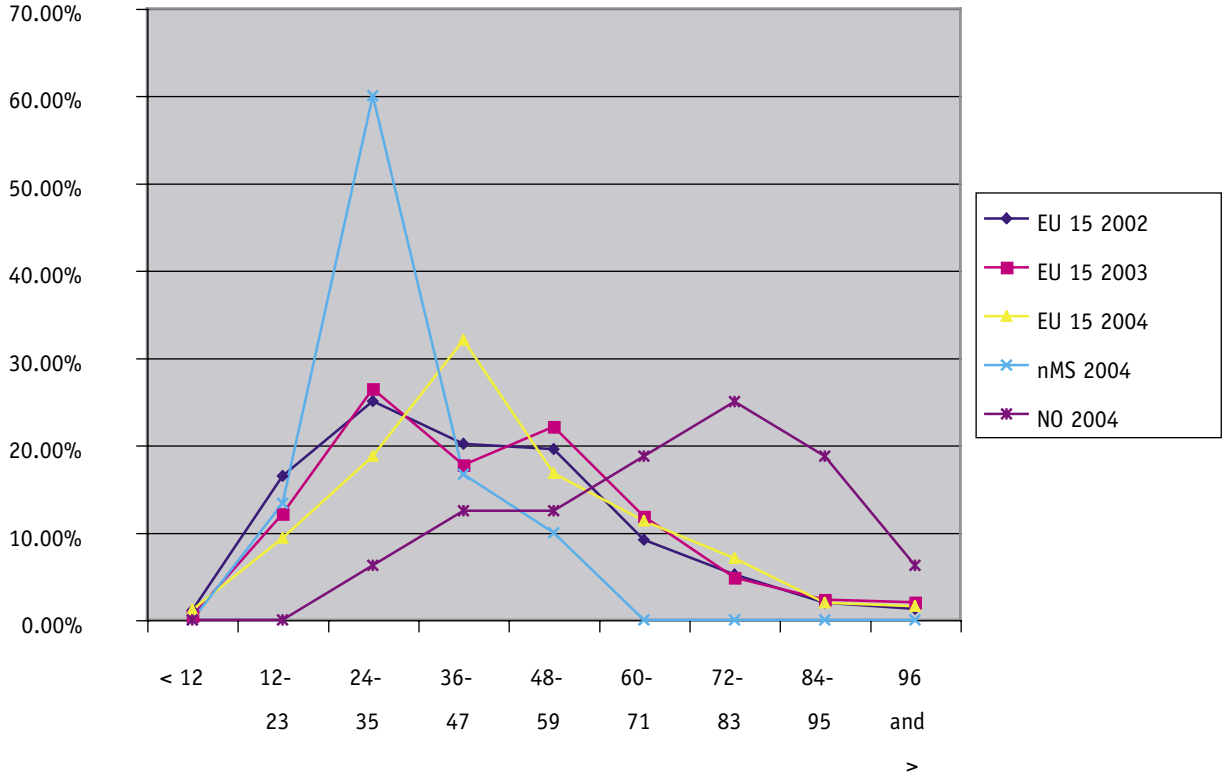


Table SR12: Age distribution of positive cases in 2004 in ovine animals

		Age distribution (months of age at confirmation)										
		<12	12-23	24-35	36-47	48-59	60-71	72-83	84-95	96 and >	Unknown	Total*
Belgique/België	No of cases	0	0	0	3	0	0	1	0	0	0	4
	% of known	0	0%	0%	75%	0%	0%	25%	0%	0%		
Deutschland	No of cases	0	0	2	2	0	1	1	0	3	30	39
	% of known	0%	0%	22%	22%	0%	11%	11%	0%	33%		
Ellas	No of cases	0	2	14	8	9	0	0	1	0	0	34
	% of known	0%	6%	41%	24%	27%	0%	0%	3%	0%		
España	No of cases	0	0	1	0	0	4	2	1	2	5	15
	% of known	0%	0%	10%	0%	0%	40%	20%	10%	20%		
France	No of cases	0	10	14	9	7	1	4	4	4	6	59
	% of known	0%	19%	26%	17%	13%	2%	8%	8%	8%		
Ireland	No of cases	1	6	5	10	3	2	3	1	0	24	55
	% of known	0%	0%	0%	0%	0%	0%	0%	0%	0%		
Italia	No of cases	0	4	4	8	4	3	1	0	0	0	24
	% of known	0%	17%	17%	33%	17%	13%	4%	0%	0%		
Nederland	No of cases	0	0	0	0	0	0	0	0	0	54	54
	% of known	0%	0%	0%	0%	0%	0%	0%	0%	0%		
Portugal	No of cases	0	0	0	0	1	0	1	1	2	23	28
	% of known	0%	0%	0%	0%	20%	0%	20%	20%	40%		
Suomi/Finland	No of cases	0	0	0	0	0	0	0	1	0	0	1
	% of known	0%	0%	0%	0%	0%	0%	0%	100%	0%		
Sverige	No of cases	0	0	0	0	0	0	0	0	2	0	2
	% of known	0%	0%	0%	0%	0%	0%	0%	0%	100%		
United Kingdom	No of cases	3	24	48	82	43	29	18	5	4	92	348
	% of known	1%	9%	19%	32%	17%	11%	7%	2%	2%		
EU 15	**No of cases**	**4**	**46**	**88**	**122**	**67**	**40**	**31**	**14**	**17**	**234**	**663**
	% of known	**1%**	**11%**	**21%**	**28%**	**16%**	**9%**	**7%**	**3%**	**4%**		
Česká Republika	No of cases	0	5	3	0	1	0	0	0	0	0	9
	% of known	0%	56%	33%	0%	11%	0%	0%	0%	0%		
Kypros	No of cases	0	2	3	7	3	1	0	0	0	1	17
	% of known	0%	0%	0%	0%	0%	0%	0%	100%	0%		
Slovenija	No of cases	0	0	1	0	0	0	0	0	0	0	1
	% of known	0%	0%	100%	0%	0%	0%	0%	0%	0%		
Slovensko	No of cases	0	4	18	5	3	0	0	0	0	0	30
	% of known	0%	13%	60%	17%	10%	0%	0%	0%	0%		
nMS	**No of cases**	**0**	**11**	**25**	**12**	**7**	**1**	**0**	**0**	**0**	**1**	**57**
	% of known	**0%**	**20%**	**45%**	**21%**	**13%**	**2%**	**0%**	**0%**	**0%**		
EU 25	**No of cases**	**3**	**35**	**73**	**94**	**50**	**30**	**18**	**5**	**4**	**93**	**405**
	% of known	**1%**	**11%**	**23%**	**30%**	**16%**	**10%**	**6%**	**2%**	**1%**		
Norway	No of cases	0	0	1	2	2	3	4	3	1	0	16
	% of known	0%	0%	6%	13%	13%	19%	25%	19%	6%		

*: Only cases from which additional information (date, of birth, genotype,...) was forwarded.

5.6 Genotyping

The genotypes found in positive cases and by random sampling were grouped in accordance with the NSP classification system used in the United Kingdom for genetic resistance to classical scrapie and BSE:

NSP1	ARR/ARR	Genetically most resistant
NSP2	ARR/ARQ, ARR/ARH, ARR/ AHQ	Genetically resistant
NSP3 (ARQ/ARQ)	ARQ/ARQ	Genetically little resistance (ARQ/ARQ may be scientifically reviewed)
NSP3 (others)	AHQ/AHQ, ARH/ARH, ARH/ ARQ, AHQ/ ARH, AHQ/ARQ	
NSP4	ARR/VRQ	Genetically susceptible
NSP5	ARQ/VRQ, ARH/VRQ, AHQ/VRQ, VRQ/VRQ	Genetically highly susceptible

5.6.1 Genotypes of confirmed TSE cases in accordance with point 7.1 of Chapter A. II of Annex III to the TSE Regulation but excluding TSE cases in animals culled in the frame of TSE eradication.

Table SR13: **Genotype distribution in confirmed TSE cases in the Member States**

	Known genotypes		Distribution of known genotypes					
	Number	% of TSE positives	NSP1	NSP2	NSP3		NSP4	NSP5
					ARQ/ARQ	Others		
Belgique/België	4	100%	25%	0%	0%	0%	0%	75%
Deutschland	76	75%	1%	4%	72%	18%	0%	4%
Ellas	0	0%						
España	12	80%	0%	8%	83%	0%	0%	8%
France	31	53%	0%	7%	55%	7%	0%	32%
Ireland	34	62%	0%	3%	32%	21%	3%	41%
Italia	24	100%	0%	0%	88%	13%	0%	0%
Nederland	53	98%	0%	0%	15%	6%	4%	76%
Portugal	20	71%	25%	30%	35%	10%	0%	0%
Suomi/Finland	1	100%	0%	0%	100%	0%	0%	0%
Sverige	2	100%	0%	100%	0%	0%	0%	0%
United Kingdom	269	74%	2%	2%	15%	8%	8%	66%
EU 15-UK	**257**	**73%**	**3%**	**6%**	**51%**	**12%**	**1%**	**28%**
Česká Republika	2	100%	0%	100%	0%	0%	0%	0%
Kypros*	477	39%		3%	92%			
Slovenija	1	100%	0%	0%	100%	0%	0%	0%
Slovensko	8	27%	0%	13%	75%	13%	0%	0%
nMS except CY	**18**	**32%**	**0%**	**17%**	**44%**	**39%**	**0%**	**0%**
EU 25 except CY	**544**	**69%**	**2%**	**4%**	**33%**	**11%**	**4%**	**46%**
Norway	16	100%	6%	31%	6%	44%	0%	13%

*: the genotypes of 477 cases were indicared as ARQ/ARQ, ARR/ARQ or others

Chart SR10: **Genotype distribution in atypical cases (as indicated by the Member States and including Nor98 cases) compared to other TSE cases detected between 2002 and 2004**

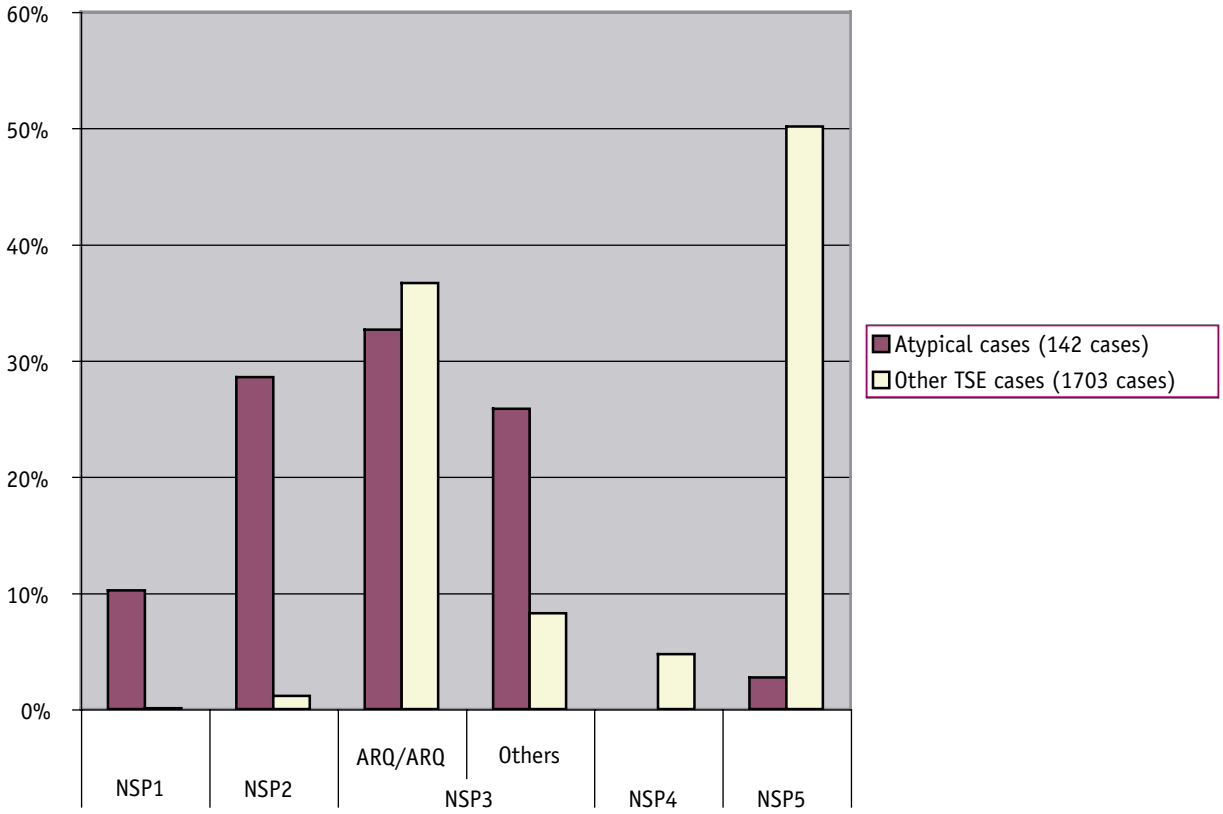


Table SR14: **Age distribution of positive cases per genotype in the EU 15 detected in 2002 to 2004**

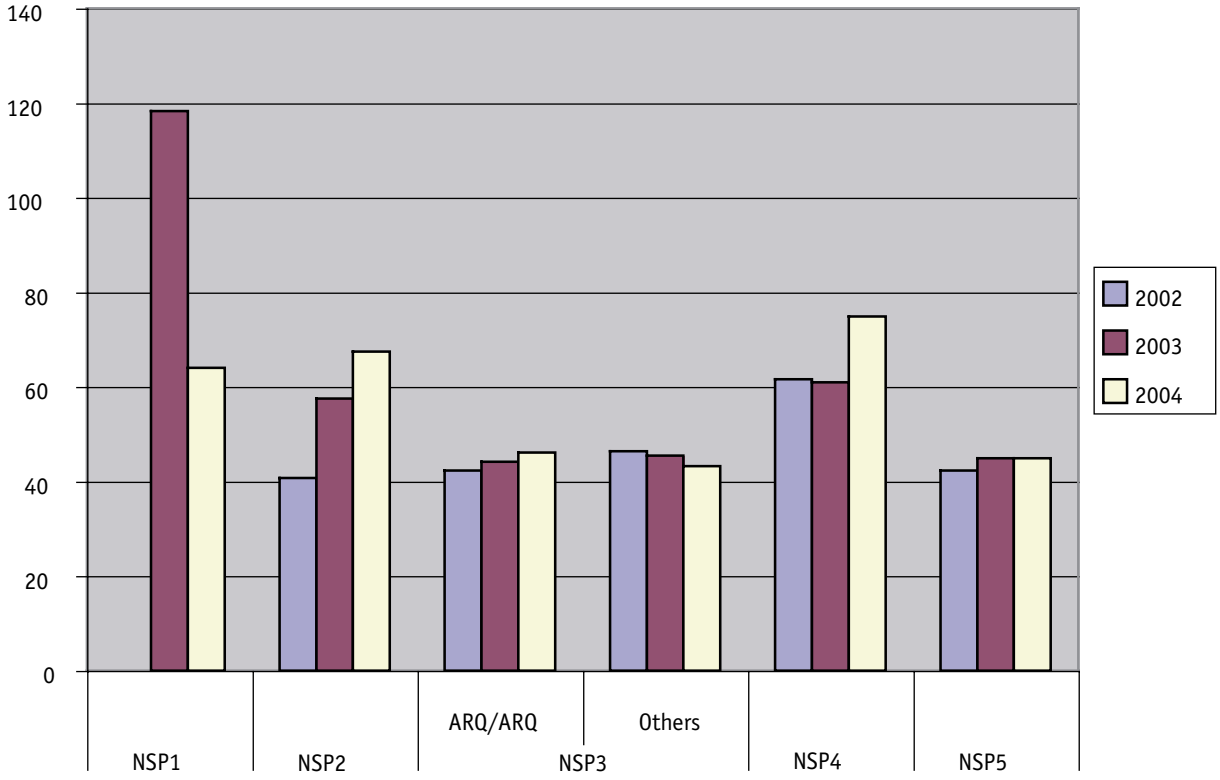
NSP Genotype		Years of age										
		< 1	1	2	3	4	5	6	7	>7	Unknown	Total*
NSP1	cases	0	0	0	1	1	0	0	2	1	10	15
	% of known	0%	0%	0%	20%	20%	0%	0%	40%	20%		
NSP2	cases	0	8	4	2	7	3	7	1	8	19	59
	% of known	0%	20%	10%	5%	18%	8%	18%	3%	20%		
NSP3: ARQ/ARQ	cases	4	63	97	102	80	57	27	11	7	234	682
	% of known	1%	14%	22%	23%	18%	13%	6%	3%	2%		
NSP3: others	cases	2	19	21	15	17	11	7	9	2	67	170
	% of known	2%	18%	20%	15%	17%	11%	7%	9%	2%		
NSP4	cases	0	0	2	4	12	9	5	6	3	41	82
	% of known	0%	0%	5%	10%	29%	22%	12%	15%	7%		
NSP5	cases	1	48	143	168	141	64	29	8	6	266	874
	% of known	0%	8%	24%	28%	23%	11%	5%	1%	1%		
Unknown	cases	10	125	312	228	160	62	37	23	22	210	1 189
Grand Total	**cases**	**17**	**263**	**579**	**520**	**418**	**206**	**112**	**60**	**49**	**847**	**3 071**
	% of known	**1%**	**12%**	**26%**	**23%**	**19%**	**9%**	**5%**	**3%**	**2%**		

*: Only cases from which additional information (date, of birth, genotype,...) was forwarded.

Table SR15: **Average age of positive cases per genotype in the EU 15 in 2002, 2003 and 2004**

Genotype		Mean age (months)			
		2002	2003	2004	mean
NSP1			118.3	64.0	96.6
NSP2		40.7	57.6	67.4	58.1
NSP3	NSP1	42.3	44.1	46.1	43.8
	Others	46.3	45.5	43.2	45.0
NSP4		61.6	60.9	74.9	65.1
NSP5		42.3	44.9	44.9	43.8
Unknown		38.2	39.5	41.7	39.6
Average		41.4	44.1	45.2	43.3

Chart SR11: **Average age of positive cases per genotype in the EU 15 in 2002, 2003 and 2004 (months of age)**



5.6.2 Genotypes in random sampled ovine animals in accordance with point 7.2 of Chapter A.II of Annex III to the TSE Regulation

Table SR16: **Distribution of genotypes in ovine animals in Member States in 2004**

		Distribution of genotypes in random sampled sheep						
		NSP1	NSP2	NSP3		NSP4	NSP5	Total
				ARQ/ARQ	Others			
België/Belgique	No of samples	14	36	15	25	1	6	97
	%	14%	37%	16%	26%	1%	6%	
Danmark	No of samples	20	21	40	8	1	10	100
	%	20%	21%	40%	8%	1%	10%	
Deutschland	No of samples	1 896	2 005	380	184	353	68	4 886
	%	39%	41%	8%	4%	7%	1%	
Ellas	No of samples	0	0	0	0	0	0	0
	%							
España	No of samples	43	198	295	48	6	10	600
	%	7%	33%	49%	8%	1%	2%	
France	No of samples	58	138	59	8	16	15	294
	%	20%	47%	20%	3%	5%	5%	
Ireland	No of samples	107	226	76	41	19	31	500
	%	21%	45%	15%	8%	4%	6%	
Italia	No of samples	162	515	373	76	8	22	1 156
	%	14%	45%	32%	7%	1%	2%	
Luxembourg	No of samples	256	414	84	85	26	19	884
	%	29%	47%	10%	10%	3%	2%	
Nederland	No of samples	275	250	50	6	14	5	600
	%	46%	42%	8%	1%	2%	1%	
Österreich	No of samples	9	38	52	24	0	3	126
	%	7%	30%	41%	19%	0%	2%	
Portugal	No of samples	43	222	138	18	16	18	455
	%	10%	49%	30%	4%	4%	4%	
Suomi/Finland	No of samples	8	27	56	7	0	7	105
	%	8%	26%	53%	7%	0%	7%	
Sverige	No of samples	1	7	82	1	0	14	105
	%	1%	7%	78%	1%	0%	13%	
United Kingdom	No of samples	106	219	74	77	25	29	530
	%	20%	41%	14%	15%	5%	6%	
EU 15 except Ellas	**No of samples**	**2 848**	**3 868**	**1 560**	**549**	**450**	**208**	**9 483**
	Average %	**18%**	**36%**	**30%**	**9%**	**2%**	**5%**	
Česká Republika	No of samples	0	0	0	0	0	0	0
	%							
Eesti	No of samples	12	30	9	5	2	2	60
	%	20%	50%	15%	8%	3%	3%	
Kypros	No of samples	0	0	0	0	0	0	0
	%							
Latvija	No of samples	24	39	33	2	1	3	102
	%	24%	38%	32%	2%	1%	3%	
Lietuva	No of samples	0	0	0	0	0	0	0
	%							
Magyarország	No of samples	109	302	123	40	17	10	601
	%	18%	50%	21%	7%	3%	2%	
Malta	No of samples	0	0	0	0	0	0	0
	%							
Polska	No of samples	0	0	0	0	0	0	0
	%							
Slovenia	No of samples	20	68	90	46	1	22	247
	%	8%	28%	36%	19%	0%	9%	
Slovensko	No of samples	0	0	0	0	0	0	0
	%							
Four nMS	**No of samples**	**165**	**439**	**255**	**93**	**21**	**37**	**1 010**
	Average %	**17%**	**42%**	**26%**	**9%**	**2%**	**4%**	
Norway	No of samples	74	252	108	79	0	115	628
	%	12%	40%	17%	13%	0%	18%	

Chart SR12: **Comparison of the distribution of genotypes by random sampling in the Netherlands, the UK and other MS of the EU 15.**

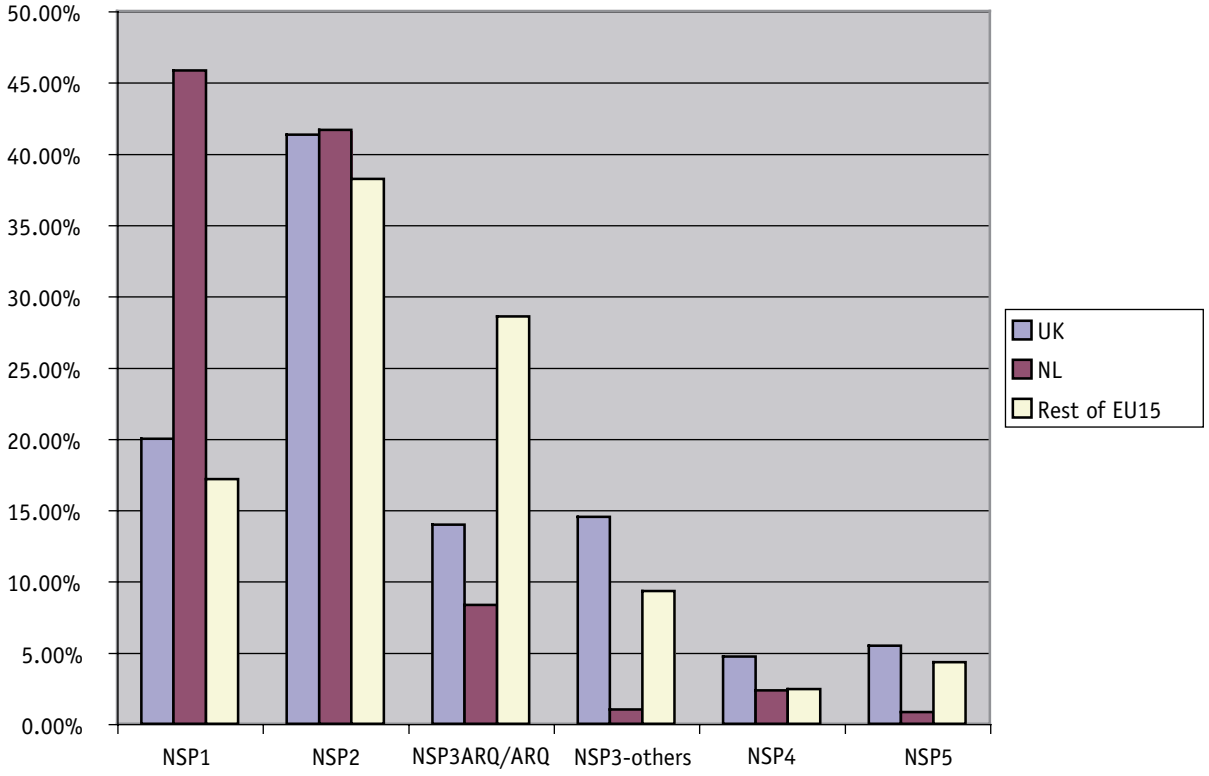


Chart SR13: **Comparison of the distribution of genotypes by random sampling in the Netherlands in 2003 and 2004.**

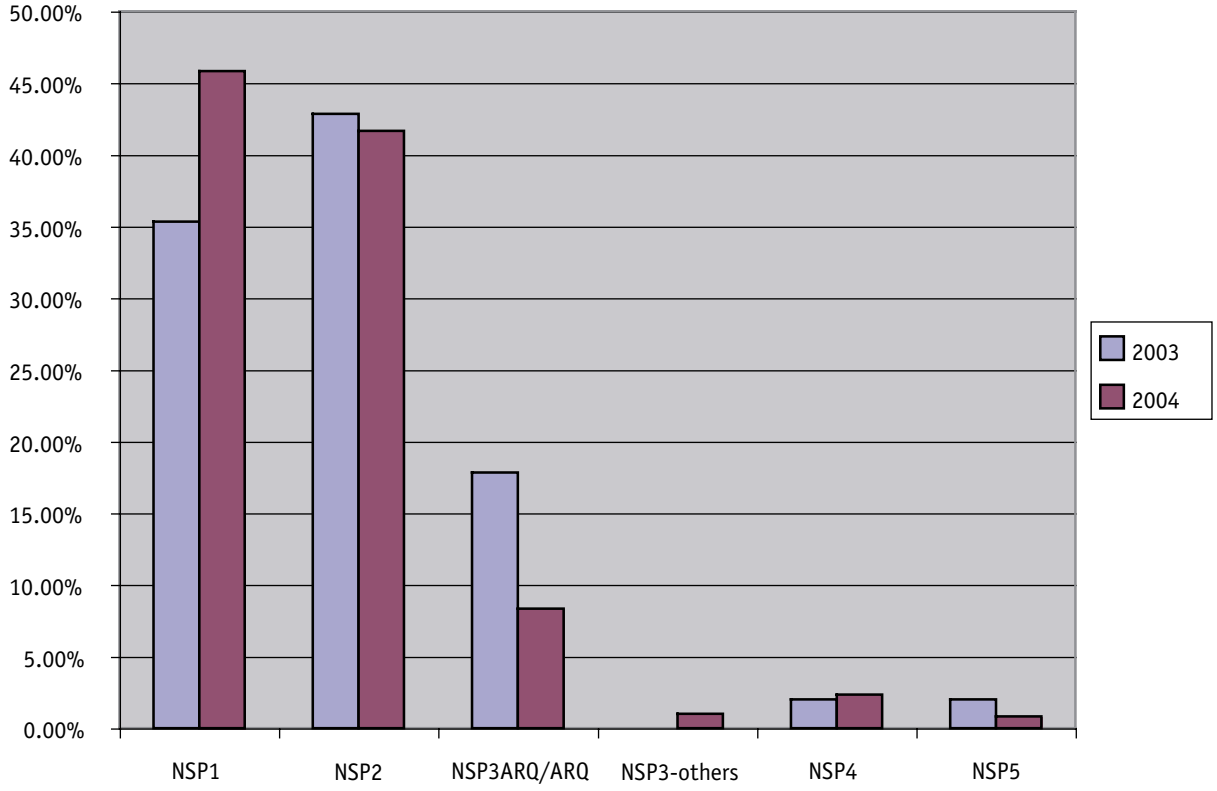


Chart SR14: **Comparison of the distribution of genotypes by random sampling in the UK in 2003 and 2004.**

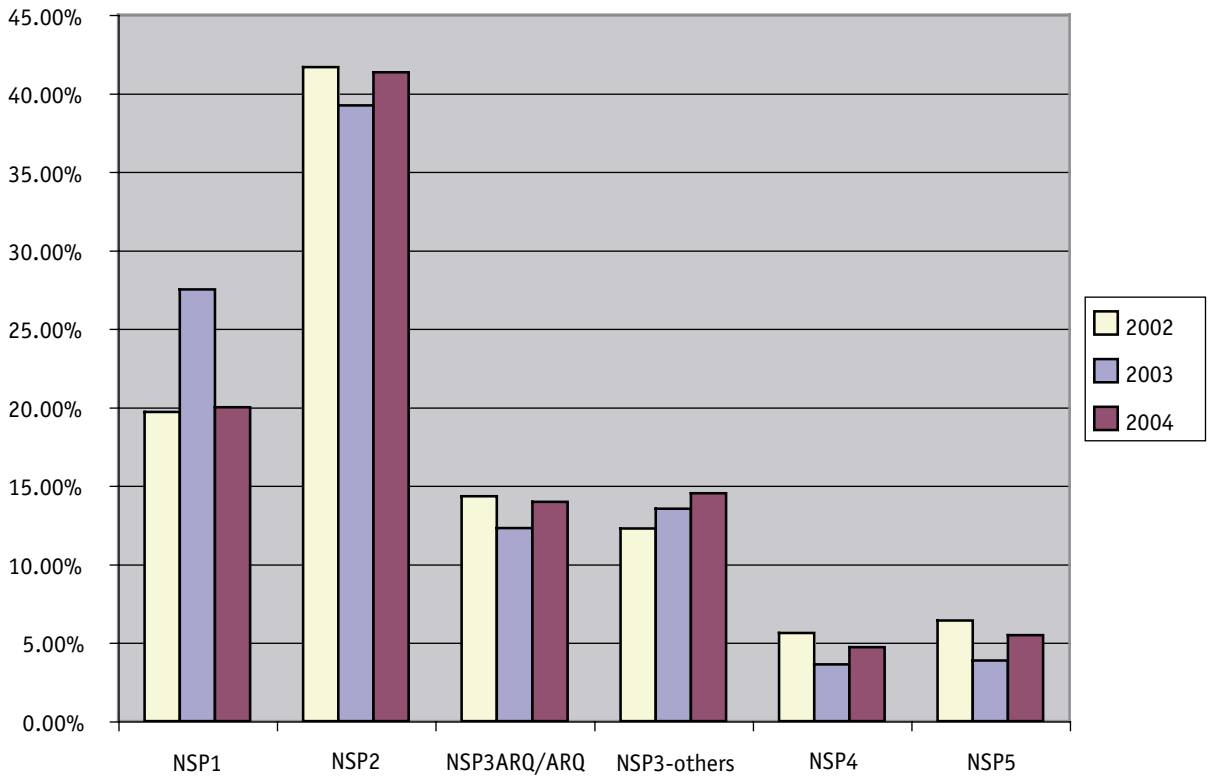


Chart SR15: **Comparison of the distribution of genotypes by random sampling in the EU 15 except the Netherlands and UK in 2003 and 2004.**

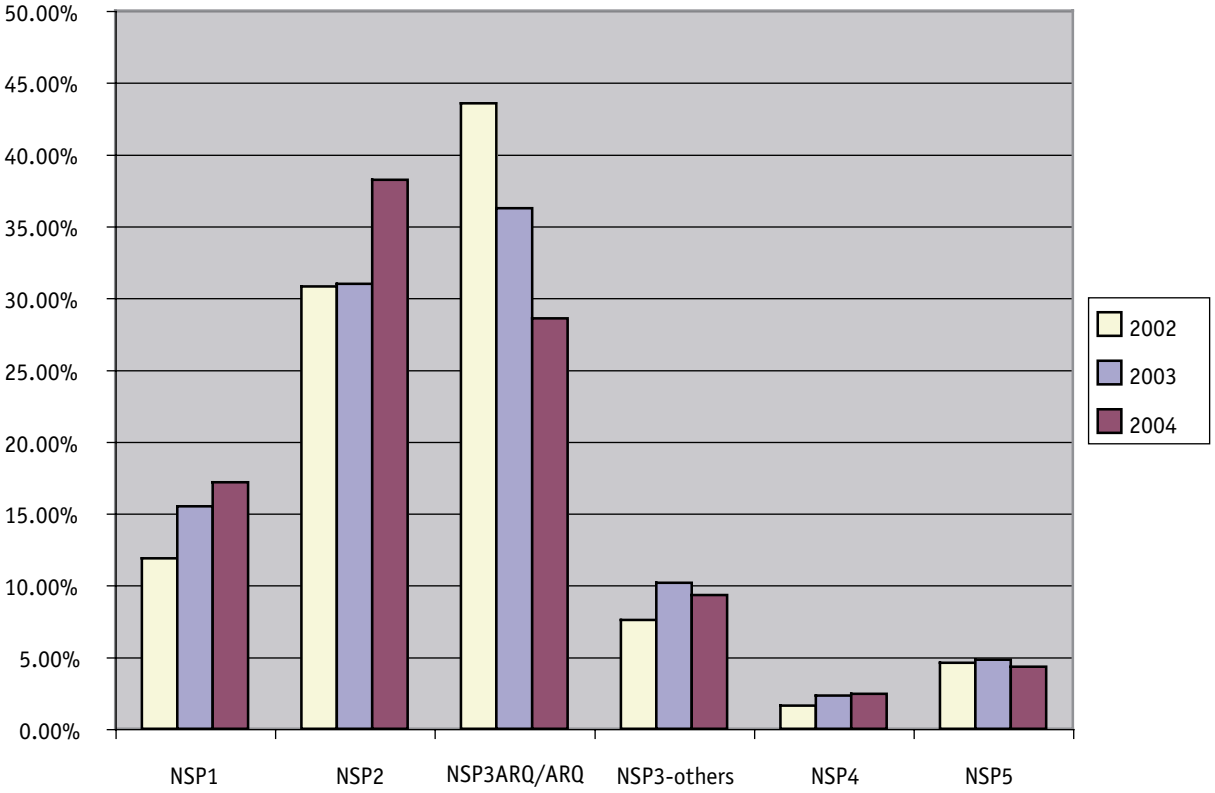


Table SR17: **Susceptibility of genotypes to *classical scrapie* by comparison with genotypes in the population of some Member States: calculation of odds ratios.**

				NSR			
		NSP1	NSP2	ARQ/ARQ	Others	NSP4	NSP5
Ramdom samples (2004)	BE	14.4%	37.1%	15.5%	25.8%	1.0%	6.2%
	DE	38.8%	41.0%	7.8%	3.8%	7.2%	1.4%
	ES	7.2%	33.0%	49.2%	8.0%	1.0%	1.7%
	FR	19.7%	46.9%	20.1%	2.7%	5.4%	5.1%
	IE	21.4%	45.2%	15.2%	8.2%	3.8%	6.2%
	IT	14.0%	44.6%	32.3%	6.6%	0.7%	1.9%
	NL	45.8%	41.7%	8.3%	1.0%	2.3%	0.8%
	UK	20.0%	41.3%	14.0%	14.5%	4.7%	5.5%
Classical cases (2002-2004)	BE	0%	3%	7%	10%	10%	70%
	DE	0%	0%	90%	5%	0%	5%
	ES	0%	6%	87%	2%	0%	6%
	FR	0%	2%	54%	1%	4%	38%
	IE	0%	1%	54%	15%	3%	28%
	IT	0%	0%	88%	12%	0%	0%
	NL	0%	0%	14%	2%	8%	77%
	UK	0%	0%	22%	5%	6%	67%
Odds Ratio	BE	0.00	0.21	1.00	0.90	22.50	26.25
	DE	0.00	0.00	1.00	0.12	0.00	0.32
	ES	0.00	0.01	1.00	0.13	0.00	1.92
	FR	0.00	0.02	1.00	0.14	0.29	2.78
	IE	0.00	0.01	1.00	0.52	0.19	1.25
	IT	0.00	0.00	1.00	0.68	0.00	0.00
	NL	0.00	0.00	1.00	1.33	2.00	56.40
	UK	0.00	0.00	1.00	0.22	0.78	7.67

Table SR18: **Susceptibility of genotypes to *atypical scrapie* by comparison with genotypes in the population of some Member States: calculation of odds ratios.**

				NSP3			
		NSP1	NSP2	ARQ/ARQ	Others	NSP4	NSP5
Ramdom samples (2004)	DE	38.8%	41.0%	7.8%	3.8%	7.2%	1.4%
	FR	19.7%	46.9%	20.1%	2.7%	5.4%	5.1%
	PT	9.5%	48.8%	30.3%	4.0%	3.5%	4.0%
	UK	20.0%	41.3%	14.0%	14.5%	4.7%	5.5%
	NO	11.8%	40.1%	17.2%	12.6%	0.0%	18.3%
Atypical cases (2002-2004)	DE	6%	18%	12%	65%	0%	0%
	FR	8%	31%	41%	10%	0%	10%
	PT	27%	27%	32%	14%	0%	0%
	UK	24%	29%	18%	29%	0%	0%
	NO	4%	35%	12%	50%	0%	0%
Odds Ratio	DE	0.10	0.28	1.00	11.36	0.00	0.00
	FR	0.19	0.32	1.00	1.84	0.00	0.98
	PT	2.75	0.53	1.00	3.29	0.00	0.00
	UK	0.93	0.56	1.00	1.60	0.00	0.00
	NO	0.49	1.29	1.00	5.92		0.00

Calculation and meaning of the odds ratio:

ARQ/ARQ was used as reference and the percentage of genotypes in random samples as controls. As an example, the odd ratio for atypical cases with NSP1 genotype in Germany is than calculated as:

$$\frac{\text{\% atypical cases in DE with NSP1 genotype/ \% random samples in DE with NSP1 genotype}}{\text{\% atypical cases in DE with ARQ/ARQ genotype/ \% random samples in DE with ARQ/ARQ genotype}}$$

= (6%/38.8%)/(12%/7.8%) = 0.10

An odds ratio higher than 1 means a higher susceptibility than the ARQ/ARQ genotype, an odds ratio lower than 1 means a susceptibility lower than the ARQ/ARQ genotypes. Using these odds ratio would however require further computing confidence intervals.

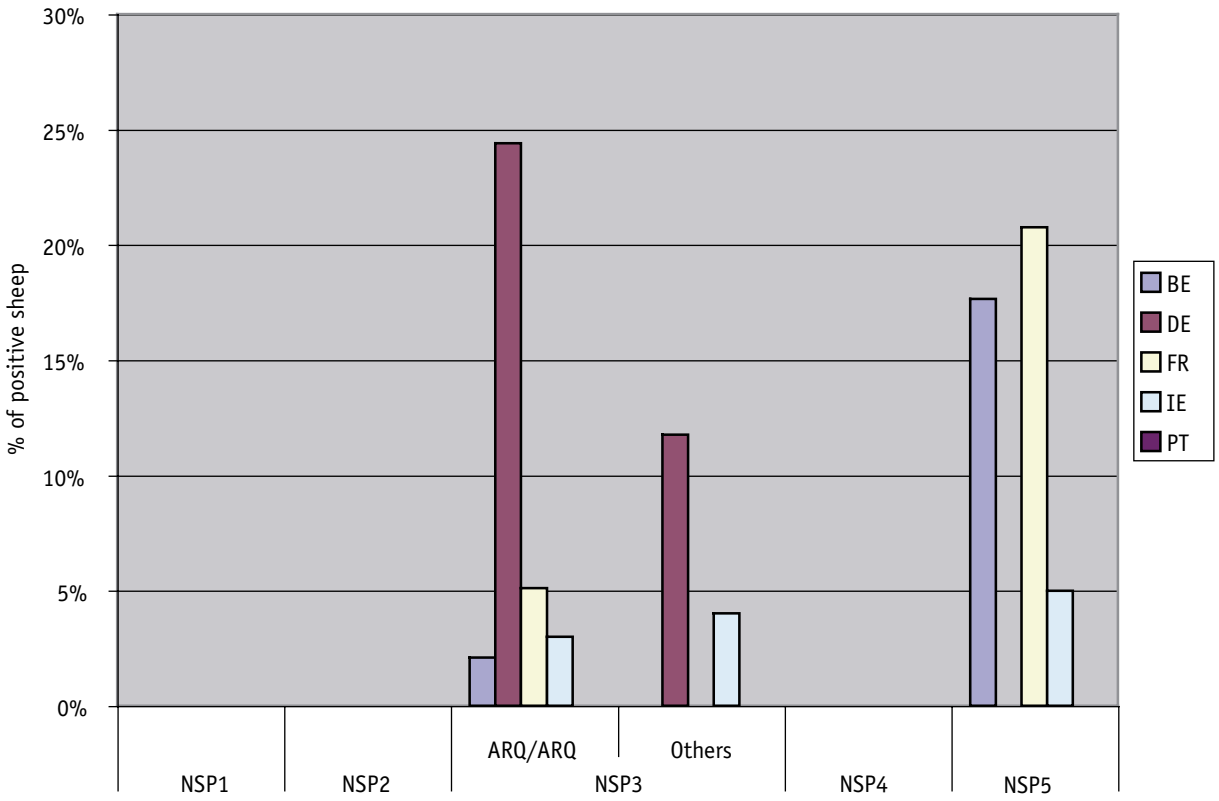
5.6.3 Genotyping and TSE testing in culled ovine animals carried out under the provisions of Annex VII, point 2(b)(ii) to the TSE Regulation in certain Member States.

Table SR19: TSE testing per genotype in ovine animals culled in the frame of TSE eradication including animals additionally tested on infected herds before culling measures were applied.

		NSP1	NSP2	NSP3		NSP4	NSP5	Total
				ARQ/ARQ	others			
België/Belgique	No. of TSE tests	53	110	48	56	42	34	343
	% TSE positives	0%	0%	2%	0%	0%	18%	
Česká Republika	No. of TSE tests	0	0	23	55	0	0	78
	% TSE positives	0%	0%	4%	11%	0%	0%	
Deutschland	No. of TSE tests	4	13	205	17	8	6	253
	% TSE positives	0%	0%	24%	12%	0%	0%	
France	No. of TSE tests	1	9	137	28	36	53	264
	% TSE positives	0%	0%	5%	0%	0%	21%	
Ireland	No. of TSE tests	0	0	536	400	0	261	1197
	% TSE positives			3%	4%		5%	
Portugal	No. of TSE tests	4	6	12	0	5	10	37
	% TSE positives	0%	0%	0%		0%	0%	
Slovenia	No. of TSE tests	4	35	41	6	6	71	163
	% TSE positives	0%	0%	15%	0%	0%	7%	
Total	**No. of TSE tests**	**66**	**173**	**1 002**	**562**	**97**	**435**	**2 335**
	% TSE positives	**0%**	**0%**	**8%**	**4%**	**0%**	**8%**	

*: Only cases from which additional information (date, of birth, genotype,...) was forwarded.

Chart SR16: **Percentage of TSE positive ovine animals in infected flocks per genotype**



Comments on the genotypes of positive cases

Whether atypical cases were considered as Nor98 or not, the genotype distribution of atypical cases was clearly different from classical scrapie (Chart SR10).

The odds ratios in Tables SR17 and SR18 provide an indication if genotypes have a different sensitivity to an infection of respectively classical scrapie and atypical cases. The odds ratios should be interpreted with caution because the number of cases was low in most Member States even when all cases detected between 2002 and 2004 are considered. Making such estimation at Community level in order to have larger groups of cases is difficult because of the differences of distribution of genotypes in the population of each Member State.

The tendency in Table SR17 (classical scrapie) indicates the high susceptibility of NSP5 genotypes, but also of the ARQ/ARQ genotypes in particular in comparison with other NSP3 and NSP4 genotypes.

The tendency in Table SR18 (atypical cases) indicate a higher susceptibility of NSP 1 and NSP 2 genotypes to atypical scrapie compared to classical scrapie. However, susceptibility to atypical cases is mainly found in NSP3 genotypes other than ARQ/ARQ. These NSP3 genotypes mostly contained one or to AHQ alleles. Further differentiation between different atypical cases may however be necessary.

6. Summary of TSE testing in other species during 2004

A. Ruminants

Species	Country	Nbr of tests	Nbr of positives
Addax	UK	1	0
Ankole	UK	1	0
Antelope (Roan)	UK	1	0
Bison	UK	1	0
Eland	UK	2	0
Fallow deer	DK	1	0
	HU	3	0
	SI	28[1]	0
Gemsbok	UK	1	0
Lama	FI	1	0
Lechwe	UK	2	0
Markhor	FI	1	0
Moose	FI	4	0
Moufflon	HU	1	0
Musk ox	FI	1	0
Oryx (Arabian)	UK	1	0
Red deer	HU	1	0
	SI	30[1]	0
Reindeer (farmed)	FI	375	0
Reindeer (wild)	FI	15	0
Reindeer (Zoo)	FI	1	0
Roe deer	FI	3	0
	SI	27[1]	0
	HU	40	0
	DK	9	0
Tari	FI	1	0
Wapiti	FI	1	0
White-tailed deer	FI	3	0

1 test performed in 2002, 2003 or 2004

B. Carnivores

Species	Country	Nbr of tests	Nbr of positives
Asian lion	FI	1	0
Cat	IE	70	0
	DK	1	0
	FI	35	0
	HU	593	0
	UK	1	0
Cheetah	UK	3	0
Dog	DK	1	0
Fox	IE	50	0
	FI	6	0
	DK	1	0
Lion	UK	1	0
Mink	IE	130	0
	FI	4	0

C. Others

Species	**Country**	**Nbr of tests**	**Nbr of positives**
Pigs	IE	1000	0
Horses	IE	100	0

European Commission

Report on the monitoring and testing of ruminants for the presence of transmissible spongiform encephalopathy (TSE) in the EU in 2004

Luxembourg: Office for Official Publications of the European Communities

2005 — VIII, 104 pp — 21 x 29.7 cm

ISBN 92-894-7431-9

SALES AND SUBSCRIPTIONS

Publications for sale produced by the Office for Official Publications of the European Communities are available from our sales agents throughout the world.

How do I set about obtaining a publication?

Once you have obtained the list of sales agents, contact the sales agent of your choice and place your order.

How do I obtain the list of sales agents?

- Go to the Publications Office website http://publications.eu.int/
- Or apply for a paper copy by fax (352) 2929 42758

ND-AB-05-000-EN-C

ISBN 92-894-7431-9

Publications Office
Publications.eu.int

9 789289 474313