



**Report** on the monitoring of  
ruminants for the presence of  
**Transmissible Spongiform  
Encephalopathies (TSEs)**  
in the EU in 2012

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Luxembourg: Publications Office of the European Union, 2013

ISBN 978-92-79-33524-2

doi:[10.2772/15481](https://doi.org/10.2772/15481)

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*Printed in Belgium*

PRINTED ON ELEMENTAL CHLORINE-FREE BLEACHED PAPER (ECF)



EUROPEAN COMMISSION  
HEALTH AND CONSUMERS DIRECTORATE-GENERAL  
Safety of the Food chain  
**Food Hygiene, Alert System and Training**

# Report on the monitoring and testing of ruminants for the presence of transmissible spongiform encephalopathies (TSEs) in the EU in 2012

**Final version 9 October 2013**

## **TABLE OF CONTENTS**

1. SUMMARY.....	4
1.1. Bovine animals.....	4
1.2. Ovine and caprine animals.....	4
2. MONITORING PROGRAMMES, SAMPLING AND DIAGNOSTIC METHODS APPLICABLE IN 2012 .....	5
2.1. Legal basis.....	5
2.2. BSE monitoring of bovine animals .....	5
2.3. TSE monitoring of ovine and caprine animals.....	7
2.4. Sampling and testing for the prion protein genotype determination in ovine animals.....	8
3. DATA AND PRESENTATION .....	8
3.1. Origin of the data.....	8
3.2. Presentation of the EU report .....	9
4. SUMMARY OF THE BSE TESTING IN BOVINE ANIMALS DURING 2012.....	11
4.1. Sampling .....	11
4.2. BSE cases.....	15
4.3. Testing by target group.....	19
4.4. Age distribution of BSE cases .....	22
4.5. Year of birth distribution of BSE cases detected since 2001 .....	24
4.6. Prevalence of BSE in different age categories in 2012.....	26
4.7. BSE in young animals .....	32
4.8. Atypical BSE cases .....	34
5. SUMMARY OF TSE TESTING IN OVINE AND CAPRINE ANIMALS DURING 2011 .....	38
5.1. Sampling .....	38
5.2. TSE cases.....	39
5.3. Classical scrapie cases.....	43
5.4. Atypical scrapie cases .....	52
5.5. TSE discriminatory tests .....	55
5.6. Age distribution of TSE cases.....	56
5.7. Genotyping .....	58

## **LIST OF ACRONYMS**

<b>AM</b>	Ante-mortem inspection
<b>AS</b>	Atypical scrapie
<b>BSE</b>	Bovine spongiform encephalopathy
<b>CS</b>	Classical scrapie
<b>CWD</b>	Chronic wasting disease
<b>DNA</b>	Deoxyribonucleic acid
<b>EU 27</b>	The 27 countries that were members of the European Union before 1 July 2013
<b>EU 28</b>	The EU 27 + Croatia which joined the EU on 1 July 2013
<b>Na</b>	not available
<b>NSP</b>	National scrapie plan
<b>TSE</b>	Transmissible spongiform encephalopathy
<b>TSE Regulation</b>	Regulation (EC) No 999/2001

## **1. SUMMARY**

All the Member States of the EU 28 submitted information on the TSE testing of bovine, ovine and caprine animals, including for the first time Croatia. In addition, Norway also submitted information on its TSE testing programmes.

### **1.1. Bovine animals**

In 2012, a total of 4,795,332 bovine animals were tested in the EU 28 in the framework of the BSE monitoring programmes. 18 bovine animals turned out positive.

All of the 18 BSE cases identified in 2012 were submitted to discriminatory testing by the Member States, on a voluntary basis. These tests confirmed 11 cases of classical BSE, 1 cases of atypical H-type BSE and 6 cases of atypical L-type BSE.

1,037,397 risk bovine animals and 3,757,089 healthy animals slaughtered for human consumption were tested by rapid tests. 101 animals were tested in the framework of culling of animals with an epidemiological connection to a BSE case. In addition, 745 bovine animals were tested in the framework of passive surveillance (animals reported as official BSE suspects). 100 % of positive cases were detected by the active monitoring (testing of risk animals and healthy slaughtered cattle) and 0 % were detected by passive surveillance.

No BSE cases were found in Belgium, Bulgaria, Czech Republic, Denmark, Germany, Estonia, Greece, Croatia, Italy, Cyprus, Latvia, Lithuania, Luxembourg, Hungary, Malta, the Netherlands, Austria, Romania, Slovenia, Slovakia, Finland and Sweden. The number of BSE cases and the overall prevalence in tested animals decreased by respectively 36 % and 15 % in 2012 compared to 2011.

### **1.2. Ovine and caprine animals**

In 2012, a total of 358,850 ovine and 135,175 caprine animals were tested in the EU 28 in the framework of the TSE monitoring programmes. 936 ovine and 1,208 caprine animals turned out positive to classical scrapie.

358,683 ovine animals were tested by active monitoring, while 167 were animals reported as official TSE suspects and therefore subjected to laboratory examination. In caprine animals, the numbers of tests in the respective groups were 133,699 (active monitoring) and 1,476 (TSE suspects). Some 488 and 104 TSE cases in respectively sheep and goats confirmed in 2012 were subjected to discriminatory testing. None of them have been confirmed to be BSE.

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## **2. MONITORING PROGRAMMES, SAMPLING AND DIAGNOSTIC METHODS APPLICABLE IN 2012**

### **2.1. Legal basis**

Animals suspected of a TSE shall be examined in accordance with Article 12.2 of Regulation (EC) No 999/2001 of the European Parliament and of the Council laying down rules for the prevention, control and eradication of certain transmissible spongiform encephalopathies as amended (TSE Regulation). The legal framework for the active monitoring of ruminants for the presence of TSE is laid down in Article 6 of TSE Regulation and specified in its Annex III Chapter A.

Commission Decision 2009/719/EC as amended allows 25 Member States (all except Bulgaria, Romania and Croatia) to apply a revised BSE monitoring programme. In 2012, these 25 Member States have been routinely testing healthy cattle over 72 months of age at the slaughterhouse.

The legal basis for the sample collection and for the test methods is laid down in Chapter C of Annex X to the TSE Regulation. From 2005, Annex X (as amended by Commission Regulation (EC) No 36/2005) also provides for mandatory discriminatory testing for BSE of TSE cases detected in small ruminants.

The legal basis for the testing for the determination of the prion protein genotypes is laid down in points 8.1 and 8.2 of Chapter A in Annex III to TSE Regulation.

The legislation on TSE monitoring applicable in 2012 is summarised in Table 1.

### **2.2. BSE monitoring of bovine animals**

#### **(1) The monitoring of bovine animals for the presence of BSE is divided into the following target groups:**

- 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.

- Emergency slaughtered animals

Bovine animals subject to "special emergency slaughtering" as described in relevant Union legislation.

**Table 1: Summary of the EU legislation on TSE monitoring in 2012**

	<b>EU 27</b>	<b>Croatia</b>
<b>Legal provisions</b>	Regulation (EC) No 999/2001 as amended Commission Decision 2007/182/EC as amended Commission Decision 2009/719/EC as amended	Regulation (EC) No 999/2001 as amended
<b>Bovine animals</b>		
<b>Special emergency slaughter</b>	For EU 27 (except BG and RO): all > 48 months	> 24 months
<b>Clinical signs at AM</b>	For BG and RO: all > 24 months	
<b>Fallen stock</b>		
<b>Animals slaughtered for human consumption</b>	For EU 27 (except BG and RO): all > 72 months For BG and RO: all > 30 months	> 30 months
<b>BSE suspects</b>	All	All
<b>Ovine and caprine animals</b>		
<b>Animals slaughtered for human consumption</b>	Minimal annual sample size of animals over 18 months of age in MS with major populations	Na
<b>Animals not slaughtered for human consumption</b>	Minimal annual sample size of animals over 18 months of age depending on size of MS populations of ewes or goats	1500 sheep > 18 months 500 goats > 18 months
<b>Animals in infected flocks</b>	Minimal sample size in animals over 18 months of age	All animals > 18 months culled or slaughtered for human consumption
<b>Other than bovine, ovine and caprine animals: voluntary</b>		

- 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 humans and to animals or showing symptoms or being in a general condition indicating that such a disease may occur.
- (b) showing symptoms of a disease or of a disorder of their general condition which is likely to make their meat unfit for human consumption.

- 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.

- Animals culled under BSE eradication

Birth cohorts (bovine animals 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.

- Animals clinically suspected of being infected by BSE

Bovine animals reported as suspect of TSE as defined in Article 3 of the TSE Regulation and subject to the measures described in Articles 12 and 13.

## **(2) Discriminatory testing of BSE cases:**

Although not yet required by the TSE Regulation in force in 2012, all BSE positive cases of 2012 have been submitted to further testing in order to discriminate classical BSE cases from atypical L or atypical H-BSE cases.

## **2.3. TSE monitoring of ovine and caprine animals**

### **(1) The monitoring of ovine and caprine animals for the presence of TSE is divided into the following target groups:**

- Healthy animals which are slaughtered for human consumption

Member States with major ovine population shall test an annual minimum sample size of healthy slaughtered animals over 18 months of age.

Where a Member State experiences difficulty in collecting sufficient numbers of healthy slaughtered animals to reach its allotted minimum sample size, it may choose to replace some of its minimum sample size by testing dead animals or animals killed in the framework of a disease eradication campaign at the ratio of one to one.

- Animals which are not slaughtered for human consumption

This target group contains 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. There are minimum samples sizes of both ovine and caprine animals over 18 months of age to be tested in each Member State.

- Animals culled under TSE eradication

Animals additionally tested on infected herds before culling measures were applied are included in this target group.

- Animals clinically suspected of being infected by a TSE

Ovine and caprine animals reported as suspect of TSE as defined in Article 3 of the TSE Regulation and subject to the measures described in Articles 12 and 13.

## **(2) Testing protocols for TSE monitoring and discriminatory testing**

Samples collected in the context of TSE active monitoring are screened by one of the rapid tests listed in Annex X to the TSE Regulation. Confirmation tests from inconclusive or positive results in the active monitoring and analysis of samples from suspects are performed by histopathology, immunohistochemistry, 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 immunoblottings, immunohistochemistry and ELISA were laid down in Chapter C point 3.2.(c) of Annex X to TSE Regulation. In addition the mouse bio-assay method has to be applied to certain samples for final confirmation or exclusion of BSE.

### **2.4. Sampling and testing for the prion protein genotype determination in ovine animals**

The prion protein genotype shall be determined for:

- All TSE positive ovine animals.
- A random sample of ovine animals selected from animals over 18 months of age.

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 are used.

## **3. DATA AND PRESENTATION**

### **3.1. Origin of the data**

Most of the raw data has been electronically submitted by the Member States to the EU TSE database, on a regular basis, via monthly and case reports forms. The remaining data was provided by the Member States in the annual report they have to submit in accordance with Article 6.4 of, and as specified in Chapter B.I of Annex III to, the TSE Regulation. All this data was then further processed by the Commission in order to summarise the information and to elaborate the summary tables presented in the present EU annual report.

A significant effort has been made this year by the Member States to improve the quality of the data submitted to the database with regards to TSE in sheep and goats, particularly for the years 2007 to 2012. The TSE results shown in the present report have therefore somewhat evolved from past editions.

The data contained in the present report only refer to the testing of the samples taken from 1<sup>st</sup> January 2012 to 31<sup>st</sup> December 2012 in the EU

28 and Norway, as well as to the samples collected in previous years. However, as certain Member States may calculate their annual statistics using other reporting criteria (i.e. based on the date of final test results rather than the date of sampling), the data in this report may slightly differ from the national figures published by the Member States for 2012.

The information was extracted directly from the electronic submission of monthly and case reports by Member States. The monthly information is often updated and/or corrected by the Member States in following reports. The information shown in the following tables and charts is updated according to the information received electronically until 9 October 2013. Information on adult cattle population in 2012 was obtained from Eurostat.

The present report should be considered as a final update of the information received and as the Commission summary report for 2012 as requested by Article 6.4 of the TSE Regulation.

### **3.2. Presentation of the EU report**

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

The target groups mentioned in this report were combined into the following categories:

- **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 official BSE suspects by the farmer or the veterinary practitioner and subject to laboratory examination.

The age limits actually used in testing different target groups of bovine animals in 2012 are summarised in Table 2.

- **Ovine and caprine animals:**

- (a) Active Monitoring

- Animals not slaughtered for human consumption: risk animals containing almost exclusively fallen stock with a few tests in emergency slaughtered animals and animals with clinical signs at AM.
- Healthy animals slaughtered for human consumption
- 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.

(b) Passive Surveillance

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

**Table 2: Age limits used in sampling of bovine animals in 2012**

		Age limit in months					
		Fallen Stock	Emergency slaughtered	Clinical signs at AM	Healthy slaughtered	BSE eradication	BSE suspects
<b>Belgique/België</b>	BE		> 48		> 72	> 24	No age limit
<b>Bulgaria</b>	BG		> 24		> 30		No age limit
<b>Ceská Republika</b>	CZ		> 48		> 72		No age limit
<b>Danmark</b>	DK		> 48		> 72	> 24	No age limit
<b>Deutschland</b>	DE		> 48		> 72		No age limit
<b>Eesti</b>	EE		> 48		> 72		No age limit
<b>Ellas</b>	EL		> 48		> 72		No age limit
<b>España</b>	ES	> 48		> 36		> 72	No age limit
<b>France</b>	FR			> 24		> 24	No age limit
<b>Hrvatska</b>	HR			> 24		> 30	No age limit
<b>Ireland</b>	IE			> 48		> 48	No age limit
<b>Italia</b>	IT			> 48		> 72	No age limit
<b>Kypros*</b>	CY			> 48		> 72	> 48
<b>Latvija</b>	LV			> 48		> 72	No age limit
<b>Lietuva</b>	LT			> 48		> 72	No age limit
<b>Luxembourg</b>	LU	> 24		> 48		> 72	> 24
<b>Magyarország</b>	HU			> 24		> 72	No age limit
<b>Malta</b>	MT			> 48		> 72	No age limit
<b>Nederland</b>	NL			> 48		> 72	No age limit
<b>Österreich</b>	AT	> 24		> 48		> 72	No age limit
<b>Polska</b>	PL			> 48		> 72	No age limit
<b>Portugal</b>	PT			> 48		> 72	> 48
<b>Romania</b>	RO			> 24		> 30	No age limit
<b>Slovenija</b>	SI			> 24		> 72	No age limit
<b>Slovensko</b>	SK			> 48		> 72	No age limit
<b>Suomi/Finland</b>	FI			> 48		> 72	No age limit
<b>Sverige</b>	SE			> 48		> 72	No age limit
<b>United Kingdom</b>	UK			> 48		> 72	No age limit
<b>Norway</b>	NO			> 24		> 30	No age limit

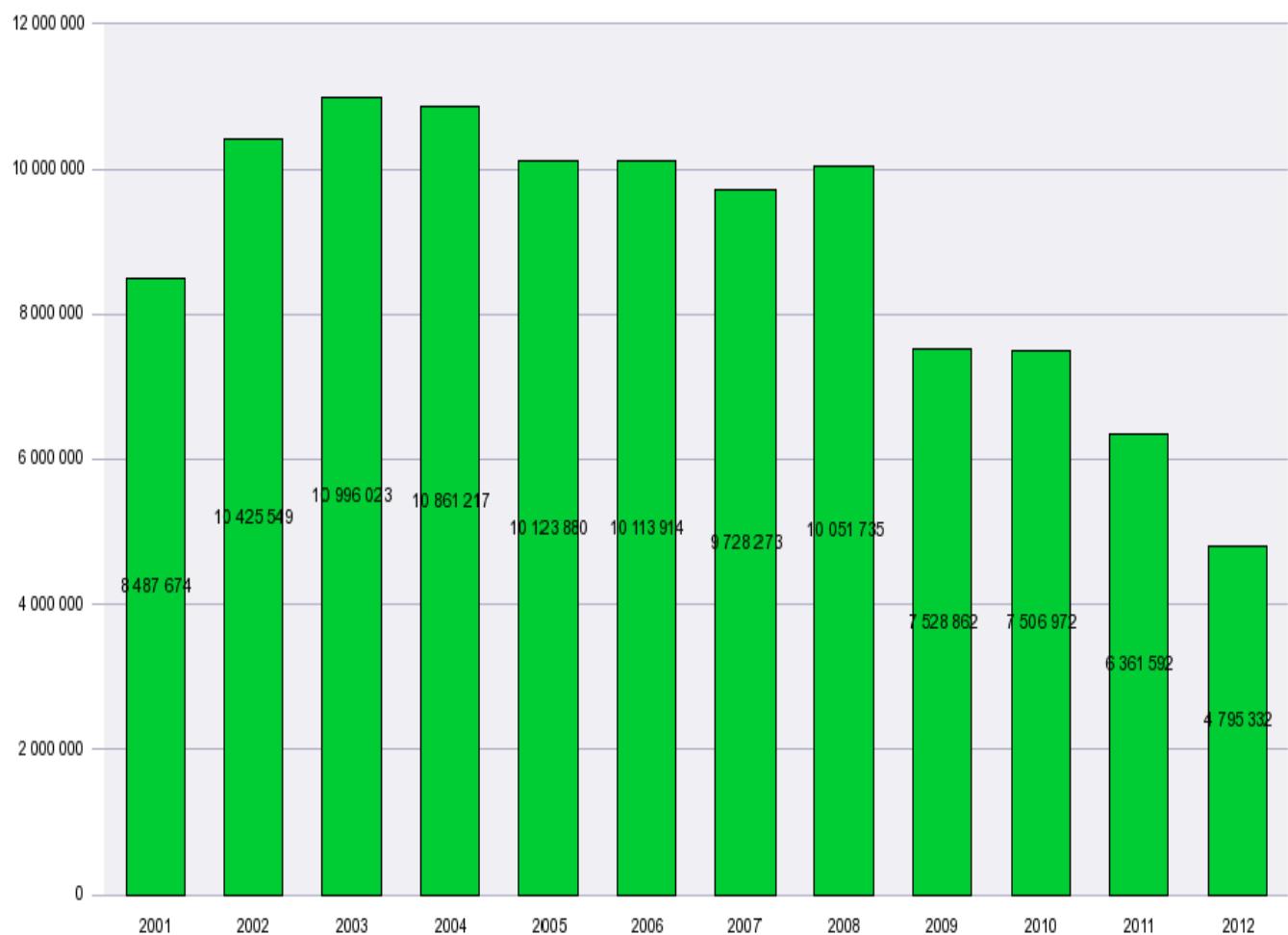
## **4. SUMMARY OF THE BSE TESTING IN BOVINE ANIMALS DURING 2012**

### **4.1. Sampling**

#### **Comments on the sampling**

Sampling decreased in 2012 from a little less than 6.4 million in 2011 to a little over 4.7 million cattle in 2012. This drop can be explained by the fact that 25 Member States were allowed, as of 1 July 2011, to test only healthy cattle over 72 months of age at the slaughterhouse. 2012 was therefore the first year when this new age limit was applied to the whole year. Over 107 million cattle have been tested in the EU since 2001.

**Chart B1: Total tests performed in the period 2001–2012 in the EU28**



**Table B1: Number of BSE tests performed by country and target group in 2012**

	Clinical signs at AM	Emergency slaughter	Eradication Measures	Fallen stock	Healthy slaughtered animals	Suspects subject to laboratory examination	Total tests 2012
<b>Belgique/België</b>	3	394		24 620	102 533	29	127 579
<b>Bulgaria</b>	7	3 764		1 014	16 007		20 792
<b>Ceská Republika</b>	5	772		12 642	41 373	2	54 794
<b>Danmark</b>		800		20 312	54 687	1	75 800
<b>Deutschland</b>	1	7 632	7	132 197	507 648	453	647 938
<b>Eesti</b>	35	116		3 295	7 625		11 071
<b>Elias</b>	2	4		2 718	11 886		14 611
<b>España</b>	746	392	33	61 166	255 841	8	318 186
<b>France</b>		21 443	15	291 871	938 126	4	1 251 459
<b>Hrvatska</b>	606	1 144		7 506	27 914	6	37 176
<b>Ireland</b>	1 254	29	7	57 042	239 410	14	297 756
<b>Italia</b>	4 576	6 964		41 438	254 707		307 685
<b>Kypros</b>		1		662	2 322		2 985
<b>Latvija</b>	280	29		905	21 775	9	22 998
<b>Lietuva</b>	40	432		2 719	47 242		50 433
<b>Luxembourg</b>		1		2 170	3 325	2	5 498
<b>Magyarország</b>	10	469		10 765	28 245	5	39 494
<b>Malta</b>	7	39		388	1 857		2 291
<b>Nederland</b>		3 944		40 683	188 529		233 156
<b>Österreich</b>	96	1 871		12 709	105 797	10	120 483
<b>Polska</b>	1 640	392	9	24 378	299 491	13	325 923
<b>Portugal</b>	4 866	2 000	17	17 217	43 637	2	67 739
<b>Romania</b>	227	1 317		1 934	72 855	171	76 504
<b>Slovenija</b>	265	453		8 384	10 503	8	19 613
<b>Slovensko</b>	4	248		5 282	8 631	1	14 166
<b>Suomi/Finland</b>	175	150		10 994	27 399		38 718
<b>Sverige</b>				10 765	49 716	3	60 484
<b>United Kingdom</b>	983	4 684	13	156 308	388 008	4	550 000
<b>EU 28</b>	<b>15 828</b>	<b>59 484</b>	<b>101</b>	<b>962 085</b>	<b>3 757 089</b>	<b>745</b>	<b>4 795 332</b>
<b>Norway</b>	7	6 840		2 936	8 745	1	18 529
<b>Others</b>	7	6 840		2 936	8 745	1	18 529

**Table B2: Active monitoring in relation to the adult bovine population (>2 years of age) in 2012**

	Adult cattle pop. in 2012*	Risk animals		Healthy slaughtered animals	
		Nº Tests	% tests/ adult cattle	Nº Tests	% tests/ adult cattle
Belgique/België	1 221 700	25 017	2.05%	102 533	8.39%
Bulgaria	346 700	4 785	1.38%	16 007	4.62%
Ceská Republika	627 800	13 419	2.14%	41 373	6.59%
Danmark	748 000	21 112	2.82%	54 687	7.31%
Deutschland	5 698 500	139 830	2.45%	507 648	8.91%
Eesti	132 000	3 446	2.61%	7 625	5.78%
Ellas	330 000	2 725	0.83%	11 886	3.60%
España	2 976 600	62 304	2.09%	255 841	8.60%
France	10 133 000	313 314	3.09%	938 126	9.26%
Hrvatska	208 000	9 256	4.45%	27 914	13.42%
Ireland	2 649 500	58 325	2.20%	239 410	9.04%
Italia	3 072 300	52 978	1.72%	254 707	8.29%
Kypros	26 000	663	2.55%	2 322	8.93%
Latvija	214 700	1 214	0.57%	21 775	10.14%
Lietuva	391 100	3 191	0.82%	47 242	12.08%
Luxembourg	93 300	2 171	2.33%	3 325	3.56%
Magyarország	386 000	11 244	2.91%	28 245	7.32%
Malta	7 100	434	6.11%	1 857	26.15%
Nederland	1 760 000	44 627	2.54%	188 529	10.71%
Österreich	903 000	14 676	1.63%	105 797	11.72%
Polska	2 808 600	26 410	0.94%	299 491	10.66%
Portugal	840 500	24 083	2.87%	43 637	5.19%
Romania	1 345 300	3 478	0.26%	72 855	5.42%
Slovenija	193 500	9 102	4.70%	10 503	5.43%
Slovensko	240 100	5 534	2.30%	8 631	3.59%
Suomi/Finland	375 700	11 319	3.01%	27 399	7.29%
Sverige	630 000	10 765	1.71%	49 716	7.89%
United Kingdom	4 443 000	161 975	3.65%	388 008	8.73%
<b>Total EU 28</b>	<b>42 802 000</b>	<b>1 037 397</b>	<b>2.42%</b>	<b>3 757 089</b>	<b>8.78%</b>
<b>Norway</b>	360 000	9 783	2.72%	8 745	2.43%
<b>Total Others</b>	<b>360 000</b>	<b>9 783</b>	<b>2.72%</b>	<b>8 745</b>	<b>2.43%</b>

\*Eurostat May 2012

**Table B3: comparative active monitoring 2012 versus 2011**

	Eradication Measures			Healthy slaughtered animals			Risk animals			Total active monitoring			
	2011	2012	Diff	2011	2012	Diff	2011	2012	Diff	2011	2012	Diff	
<b>Belgique/België</b>				180 006	102 533	-43.04%	27 167	25 017	-7.91%	207 173	127 550	-38.43%	
<b>Bulgaria</b>				10 861	16 007	47.38%	2 832	4 785	68.96%	13 693	20 792	51.84%	
<b>Ceská Republika</b>				79 416	41 373	-47.90%	18 432	13 419	-27.20%	97 848	54 792	-44.00%	
<b>Danmark</b>				99 140	54 687	-44.84%	22 875	21 112	-7.71%	122 015	75 799	-37.88%	
<b>Deutschland</b>	7	7		853 966	507 648	-40.55%	156 055	139 830	-10.40%	101 0028	64 7485	-35.89%	
<b>Eesti</b>				13 527	7 625	-43.63%	4 554	3 446	-24.33%	18 081	11 071	-38.77%	
<b>Ellas</b>				19 187	11 886	-38.05%	3 134	2 725	-13.05%	22 321	14 611	-34.54%	
<b>España</b>	7	33	371.43%	324 789	255 841	-21.23%	76 453	62 304	-18.51%	401 249	318 178	-20.70%	
<b>France</b>	7	15	114.29%	1 321 957	938 126	-29.04%	314 386	313 314	-0.34%	163 6350	125 1455	-23.52%	
<b>Hrvatska</b>					27 914			9 256				37 170	
<b>Ireland</b>		7		284 143	239 410	-15.74%	53 420	58 325	9.18%	337 563	297 742	-11.80%	
<b>Italia</b>				338 707	254 707	-24.80%	54 089	52 978	-2.05%	392 796	307 685	-21.67%	
<b>Kypros</b>				4 158	2 322	-44.16%	694	663	-4.47%	4852	2 985	-38.48%	
<b>Latvija</b>				31 350	21 775	-30.54%	1 450	1 214	-16.28%	32 800	22 989	-29.91%	
<b>Lietuva</b>				60 093	47 242	-21.39%	3 899	3 191	-18.16%	63 992	50 433	-21.19%	
<b>Luxembourg</b>				4 918	3 325	-32.39%	2 848	2 171	-23.77%	7 766	5 496	-29.23%	
<b>Magyarország</b>				47 001	28 245	-39.91%	12 745	11 244	-11.78%	59 746	39 489	-33.91%	
<b>Malta</b>				1 657	1 857	12.07%	350	434	24.00%	2007	2291	14.15%	
<b>Nederland</b>				261 601	188 529	-27.93%	46 879	44 627	-4.80%	308 480	233 156	-24.42%	
<b>Österreich</b>				141 941	105 797	-25.46%	17 267	14 676	-15.01%	159 208	120 473	-24.33%	
<b>Polska</b>	1	9	800.00%	440 856	299 491	-32.07%	35 041	26 410	-24.63%	475 898	325 910	-31.52%	
<b>Portugal</b>	41	17	-58.54%	51 019	43 637	-14.47%	29 583	24 083	-18.59%	80 643	67 737	-16.00%	
<b>Romania</b>				69 596	72 855	4.68%	2 543	3 478	36.77%	72 139	76 333	5.81%	
<b>Slovenija</b>				13 092	10 503	-19.78%	9 770	9 102	-6.84%	22 862	19 605	-14.25%	
<b>Slovensko</b>				18 555	8 631	-53.48%	8 737	5 534	-36.66%	27 292	14 165	-48.10%	
<b>Suomi/Finland</b>				43 728	27 399	-37.34%	12 200	11 319	-7.22%	55 928	38 718	-30.77%	
<b>Sverige</b>				71 505	49 716	-30.47%	11 598	10 765	-7.18%	83 103	60 481	-27.22%	
<b>United Kingdom</b>	30	13	-56.67%	483 824	388 008	-19.80%	161 191	161 975	0.49%	645 045	549 996	-14.74%	
<b>Total EU 28</b>	<b>93</b>	<b>101</b>	<b>8.60%</b>	<b>5 270 593</b>	<b>3 757 089</b>	<b>-28.72%</b>	<b>1 090 192</b>	<b>1 037 397</b>	<b>-4.84%</b>	<b>6 360 878</b>	<b>4 794 587</b>	<b>-24.62%</b>	
<b>Norway</b>				7 878	8 745	11.01%	10 342	9 783	-5.41%	18 220	18 528	1.69%	
<b>Total Others</b>				<b>7 878</b>	<b>8 745</b>	<b>11.01%</b>	<b>10 342</b>	<b>9 783</b>	<b>-5.41%</b>	<b>18 220</b>	<b>18 528</b>	<b>1.69%</b>	

## 4.2. BSE cases

**Table B4: Number of BSE cases confirmed in 2012 and prevalence rate**

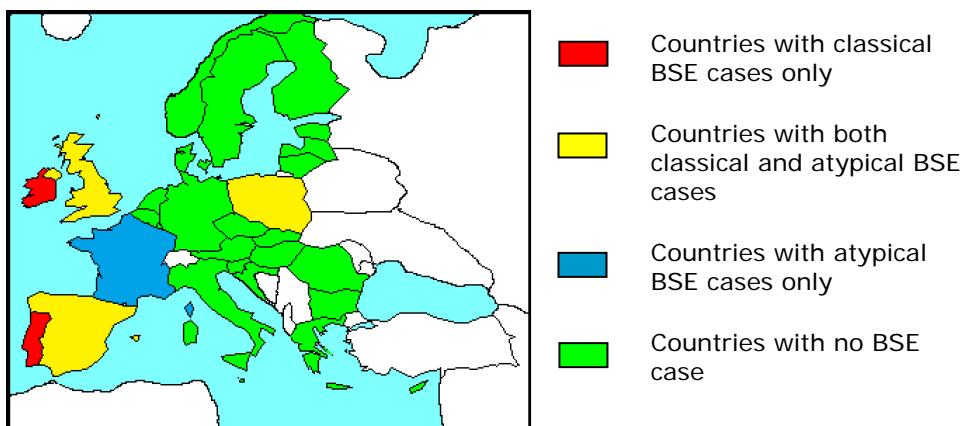
	Adult cattle population*	N° Tests	Positives			Ratio positives per tests**	Prevalence rate pop***
			All BSE cases	Classical BSE cases	Atypical BSE cases		
Belgique/België	1 221 700	127 579					
Bulgaria	346 700	20 792					
Ceská Republika	627 800	54 794					
Danmark	748 000	75 800					
Deutschland	5 698 500	647 938					
Eesti	132 000	11 071					
Elias	330 000	14 611					
España	2 976 600	318 186	6	3	3	0.19	2.02
France	10 133 000	1 251 459	1		1	0.01	0.10
Hrvatska	208 000	37 176					
Ireland	2 649 500	297 756	3	3		0.10	1.13
Italia	3 072 300	307 685					
Kypros	26 000	2 985					
Latvija	214 700	22 998					
Lietuva	391 100	50 433					
Luxembourg	93 300	5 498					
Magyarország	386 000	39 494					
Malta	7 100	2 291					
Nederland	1 760 000	233 156					
Österreich	903 000	120 483					
Polska	2 808 600	325 923	3	1	2	0.09	1.07
Portugal	840 500	67 739	2	2		0.30	2.38
Romania	1 345 300	76 504					
Slovenija	193 500	19 613					
Slovensko	240 100	14 166					
Suomi/Finland	375 700	38 718					
Sverige	630 000	60 484					
United Kingdom	4 443 000	550 000	3	2	1	0.05	0.68
Total EU 28	42 802 000	4 795 332	18	11	7	0.04	0.42
Norway	360 000	18 529					
Total Others	360 000	18 529	0	0	0	0	0

\* Cattle > 24 months old; Eurostat May 2012 (except for EL and CY: May 2011)

\*\* Positives per 10 000 bovine animals tested

\*\*\* Cases (all types) over the last 12 months per 1 Million adult bovine animals

## Map 1: Countries where BSE cases were detected in 2012



**Table B5: Comparison of the number of positive cases (all types) and the prevalence rate in animals tested in 2012 and 2011**

	Positives			Prevalence rate*		
	2011	2012	Diff	2011	2012	Diff
Belgique/België						
Bulgaria						
Ceská Republika						
Danmark						
Deutschland						
Eesti						
Elias						
España	7	6	-14 %	0.174	0.189	8 %
France	3	1	-67 %	0.018	0.008	-56 %
Hrvatska						
Ireland	3	3		0.089	0.101	13 %
Italia	1		-100 %	0.025		-100 %
Kypros						
Latvija						
Lietuva						
Luxembourg						
Magyarország						
Malta						
Nederland						
Österreich						
Polska	1	3	200 %	0.021	0.092	338 %
Portugal	5	2	-60 %	0.620	0.295	-52 %
Romania						
Slovenija						
Slovensko						
Suomi/Finland						
Sverige						
United Kingdom	8	3	-63 %	0.124	0.055	-56 %
EU 28	28	18	-36 %	0.044	0.038	-15 %
Norway						
Others	0	0	0 %	0.000	0.000	0 %

\* positive cases per 10 000 bovine animals tested

**Table B6: Evolution of BSE cases (all types) world-wide since BSE was recognized**

EU	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	Total
Belgique/België											1	6	3	9	46	38	15	11	2	2							133
Ceská Republika															2	2	4	7	8	3	2			2			30
Danmark					1									1	6	3	2	1	1					1			16
Deutschland					1		3				2			7	125	106	54	65	32	16	4	2	2				419
Eesti																										0	
Elias															1											1	
España														2	83	134	173	138	103	68	40	25	18	13	7	6	810
France					5		1	4	3	12	6	18	31	162	277	240	138	54	31	8	8	8	10	5	3	1	1,025
Ireland		15	14	17	18	16	19	16	74	80	83	95	149	246	331	185	121	69	38	25	22	9	2	3	3	1,650	
Italia							2							50	36	31	7	8	7	2	1	2		1		147	
Kypros																										0	
Latvija																										0	
Lietuva																										0	
Luxembourg											1					1			1							3	
Magyarország																										0	
Malta																										0	
Nederland											2	2	2	2	20	24	19	6	3	2	2	1		3		88	
Österreich														1					2	2	1			2		8	
Polska															4	5	11	20	10	9	5	4	2	1	3	74	
Portugal			1	1	1	3	12	15	31	30	127	159	150	113	86	133	91	51	33	14	18	8	6	5	2	1,090	
Slovenija														1	1	1	2	1	1	1						8	
Slovensko														5	6	2	7	3		2	1					27	
Suomi/Finland														1												1	
Sverige																			1							1	
United Kingdom	442	2 514	7 228	14 407	25 359	37 301	35 090	24 436	14 562	8 149	4 393	3 235	2 301	1 441	1 198	1 125	614	343	226	129	65	42	11	11	8	3	184,633
Total EU	442	2 514	7 243	14 422	25 382	37 322	35 110	24 476	14 596	8 266	4 515	3 471	2 591	1 923	2 175	2 137	1 376	864	561	320	175	125	67	45	28	18	190,164

Rest of the world	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	Total
Brazil																								1		1	
Canada								1													3	4	1	1	1	19	
Israel																										1	
Japan																		3	2	4	5	7	10			36	
Liechtenstein											2															2	
Switzerland			2	8	15	29	64	68	45	38	14	50	33	42	24	21	3	3	3	5				2	1	467	
United States																									1	4	
Total rest of world	0	0	0	2	8	15	30	64	68	45	38	16	50	33	45	27	27	9	12	21	6	5	2	1	3	530	

Sources:

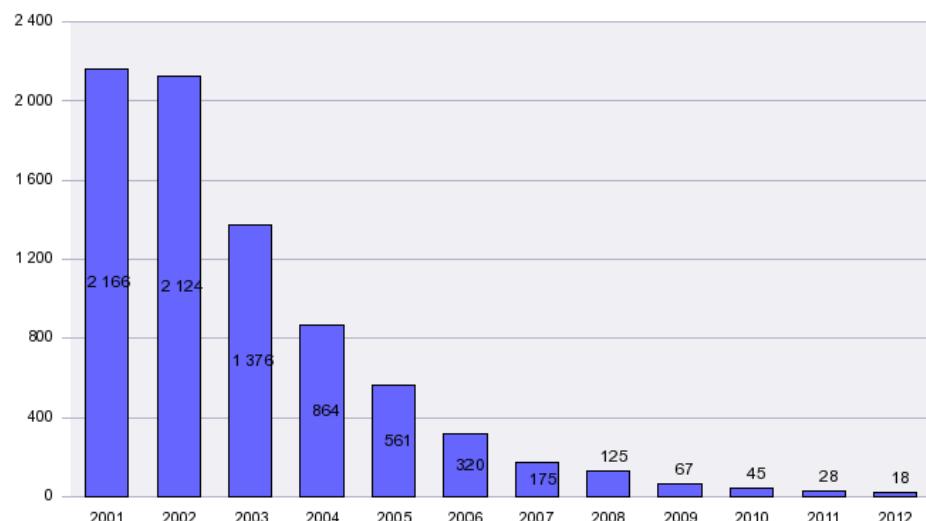
<1997: OIE.

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 OIE.

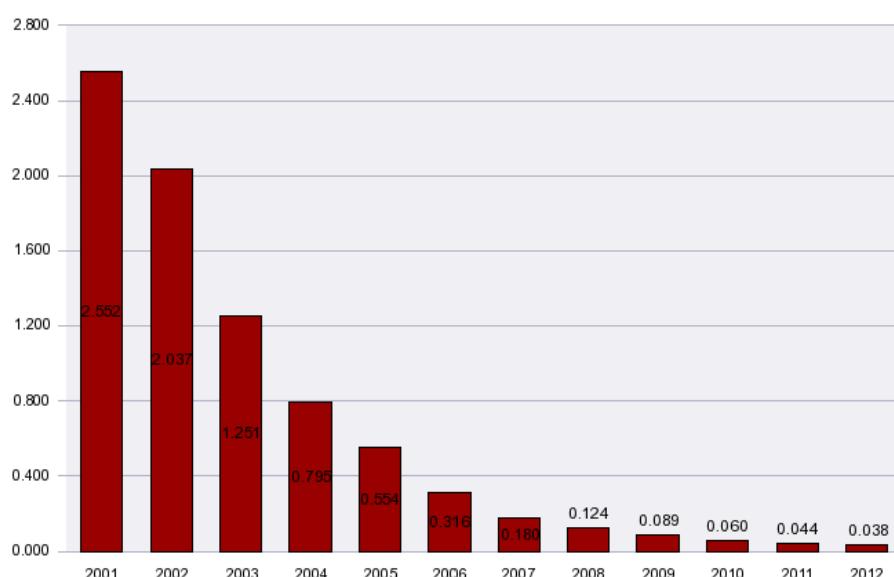
The figures displayed in the table include the following imported cases:

- Canada: 1 in 1993
- Denmark: 1 in 1992
- France: 1 in 1999
- Germany: 1 in 1992, 3 in 1994, 2 in 1997
- Ireland: 5 in 1989, 1 in 1990, 2 in 1991 and 1992, 1 in 1994 and 1 in 1995
- Italy: 2 in 1994, 2 in 2001 and 2 in 2002
- Portugal: 1 in 1990, 1 in 1991, 1 in 1992, 3 in 1993, 1 in 2000, 1 in 2004
- Slovenia: 1 in 2004
- Switzerland: 1 in 2012
- USA: 1 in 2003

**Chart B2: Evolution of the number of BSE positive cases (all types) in the 28 EU Member States since 2001**



**Chart B3: Evolution of the prevalence rate of BSE (all types) in the 28 EU Member States since 2001 (ratio of the number of BSE positive cases per 10 000 animals tested)**



### Comments on BSE positive cases

When analysing the evolution of BSE positive cases, it should be kept in mind that active monitoring was limited before 2001 and has decreased since 2009 for some Member States due to the modification of the age limit for testing. The expanded active monitoring became fully applicable in July 2001. The annual number of tests was about 25 % higher in the period 2002-2008 than in 2001 (see Chart B1). Despite the fact that the number of tests remained stable between 2002 and 2008, and decreased since 2009, the prevalence of BSE in tested animals (ratio of positives per 10 000 tests) has been steadily dropping since 2002, due to the decline in positive cases.

Overall the number of cases and the prevalence in tested animals of BSE dropped by 36% and 14% respectively in the EU in 2012 compared to 2011.

### 4.3. Testing by target group

**Table B7/B8/B9: Testing in 2012 (all BSE types) of emergency slaughtered bovine animals / bovine animals with clinical signs at ante-mortem inspection / bovine animals culled in the frame of BSE eradication**

Since no BSE case was detected in these 3 testing streams in 2012, these tables were considered redundant and are therefore not displayed. The detailed number of tests performed by Member State is available in Table B1.

**Table B10: Testing on bovine fallen stock in 2012 (all BSE types)**

	N° tests 2012	Positive 2012	Ratio*		
			2012	2011	Diff
Belgique/België	24 620				
Bulgaria	1 014				
Ceská Republika	12 642				
Danmark	20 312				
Deutschland	132 197				
Eesti	3 295				
Ellas	2 719				
España	61 166	2	0.327	0.397	-18 %
France	291 871	1	0.034	0.102	-66 %
Hrvatska	7 506				
Ireland	57 042	3	0.526	0.574	-8 %
Italia	41 438				
Kypros	662				
Latvija	905				
Lietuva	2 719				
Luxembourg	2 170				
Magyarország	10 765				
Malta	388				
Nederland	40 683				
Österreich	12 709				
Polska	24 378				
Portugal	17 217	1	0.581	0.941	-38 %
Romania	1 934				
Slovenija	8 384				
Slovensko	5 282				
Suomi/Finland	10 994				
Sverige	10 765				
United Kingdom	156 308	3	0.192	0.510	-62 %
EU 28	<b>962 085</b>	<b>10</b>	<b>0.104</b>	<b>0.186</b>	<b>-44 %</b>
Norway	2 936				
Others	2 936	0	0.000	0.000	0 %

**Table B11: Testing on all risk bovine animals (Fallen stock, bovine animals with clinical signs at ante-mortem inspection and emergency slaughter) in 2012 (all BSE types)**

	N° tests 2012	Positive 2012	Ratio*		
			2012	2011	Diff
Belgique/België	25 017				
Bulgaria	4 785				
Ceská Republika	13 419				
Danmark	21 112				
Deutschland	139 830				
Eesti	3 446				
Ellas	2 725				
España	62 304	2	0.321	0.392	-18 %
France	313 314	1	0.032	0.095	-67 %
Hrvatska	9 256				
Ireland	58 325	3	0.514	0.562	-8 %
Italia	52 978				
Kypros	663				
Latvija	1 214				
Lietuva	3 191				
Luxembourg	2 171				
Magyarország	11 244				
Malta	434				
Nederland	44 627				
Österreich	14 676				
Polska	26 410				
Portugal	24 083	1	0.415	0.676	-39 %
Romania	3 478				
Slovenija	9 102				
Slovensko	5 534				
Suomi/Finland	11 319				
Sverige	10 765				
United Kingdom	161 975	3	0.185	0.496	-63 %
EU 28	<b>1 037 397</b>	<b>10</b>	<b>0.096</b>	<b>0.174</b>	<b>-45 %</b>
Norway	9 783				
Others	9 783	0	0.000	0.000	0 %

\* positive cases per 10 000 bovine animals tested

**Table B12: Testing on healthy slaughtered bovine animals in 2012 (all BSE types)**

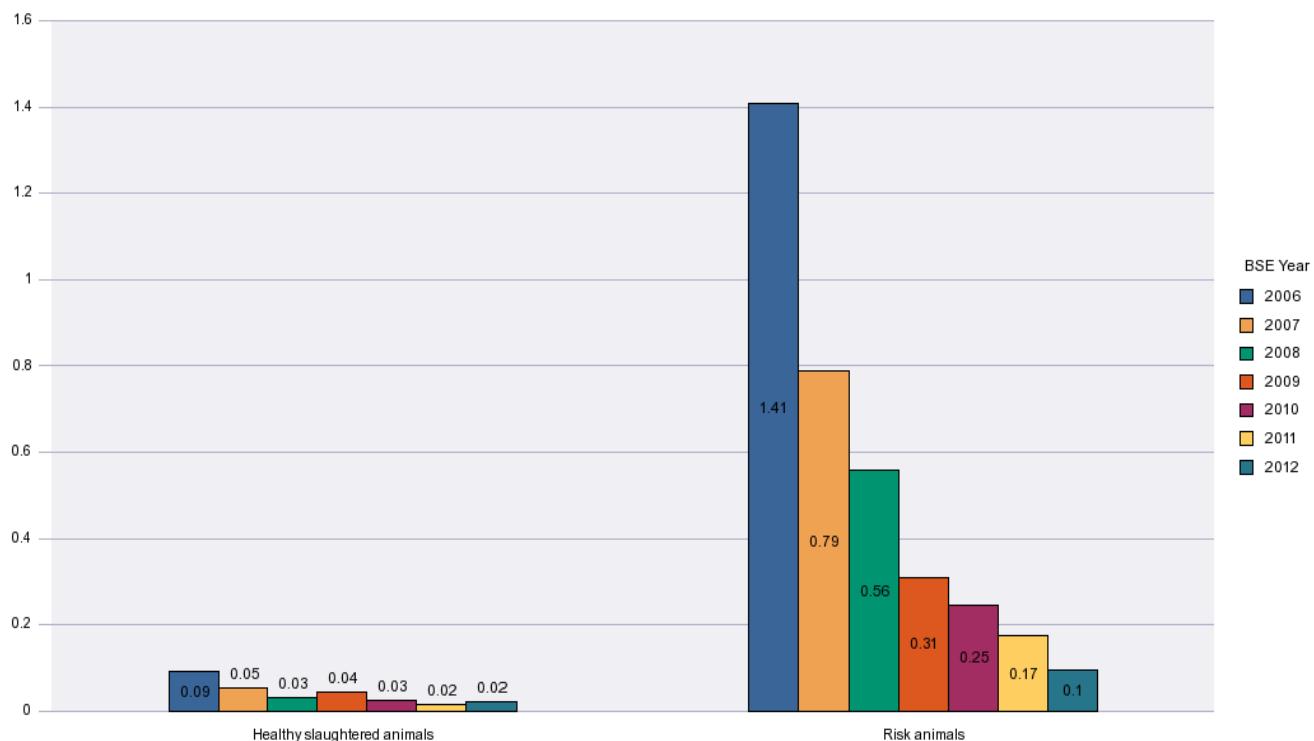
	N° tests 2012	Positive 2012	Ratio*		
			2012	2011	Diff
Belgique/België	102 533				
Bulgaria	16 007				
Ceská Republika	41 373				
Danmark	54 687				
Deutschland	507 648				
Eesti	7 625				
Elias	11 886				
España	255 841	4	0.156	0.12	27 %
France	938 126				
Hrvatska	27 914				
Ireland	239 410				
Italia	254 707		0.03	-100 %	
Kypros	2 322				
Latvija	21 775				
Lietuva	47 242				
Luxembourg	3 325				
Magyarország	28 245				
Malta	1 857				
Nederland	188 529				
Österreich	105 797				
Polska	299 491	3	0.100	0.02	342 %
Portugal	43 637	1	0.229	0.59	-61 %
Romania	72 855				
Slovenija	10 503				
Slovensko	8 631				
Suomi/Finland	27 399				
Sverige	49 716				
United Kingdom	388 008				
EU 28	<b>3 757 089</b>	<b>8</b>	<b>0.021</b>	<b>0.017</b>	<b>25 %</b>
Norway	8 745				
Others	<b>8 745</b>	<b>0</b>	<b>0.000</b>	<b>0.000</b>	<b>0 %</b>

**Table B13: Testing by active monitoring in 2012 (fallen stock, emergency slaughter, animals with clinical signs at AM, healthy slaughtered animals, animals culled in connection to a BSE case) (all BSE types)**

	N° tests 2012	Positive 2012	Ratio*		
			2012	2011	Diff
Belgique/België	127 579				
Bulgaria	20 792				
Ceská Republika	54 794				
Danmark	75 800				
Deutschland	647 938				
Eesti	11 071				
Elias	14 611				
España	318 186	6	0.189	0.174	8 %
France	1 251 459	1	0.008	0.018	-56 %
Hrvatska	37 176				
Ireland	297 756	3	0.101	0.089	13 %
Italia	307 685			0.025	-100 %
Kypros	2 985				
Latvija	22 998				
Lietuva	50 433				
Luxembourg	5 498				
Magyarország	39 494				
Malta	2 291				
Nederland	233 156				
Österreich	120 483				
Polska	325 923	3	0.092	0.021	338 %
Portugal	67 739	2	0.295	0.620	-52 %
Romania	76 504				
Slovenija	19 613				
Slovensko	14 166				
Suomi/Finland	38 718				
Sverige	60 484				
United Kingdom	550 000	3	0.055	0.124	-56 %
EU 28	<b>4 795 332</b>	<b>18</b>	<b>0.038</b>	<b>0.044</b>	<b>-15 %</b>
Norway	18 529				
Others	<b>18 529</b>	<b>0</b>	<b>0.000</b>	<b>0.000</b>	<b>0 %</b>

\* positive cases per 10 000 bovine animals tested

**Chart B4: Evolution of the BSE cases prevalence rate\* (all BSE types) in cattle tested in the EU 28 by active monitoring\*\*, per target group, from 2006 to 2012**



\* positive cases per 10 000 bovine animals tested

\*\* fallen stock, emergency slaughter, animals with clinical signs at AM, healthy slaughtered animals, animals culled in connection to a BSE case

### Comments on testing by target group

Figures between different Member States should be compared with caution as different monitoring programmes were run. Testing older cattle decreases the denominator and, considering that the disease is confirmed only in older animals, this results in a higher calculated prevalence. In addition, in the case of UK, the testing focussed on animals born after the date of the effective feed ban (August 1996).

The figures illustrate that the likelihood of finding BSE cases is much higher in risk animals than in healthy slaughtered cattle. It can also be noted that no BSE case was found in the emergency slaughter target group since 2009 and in cattle with general clinical signs at ante-mortem since 2008.

#### 4.4. Age distribution of BSE cases

**Table B14: Age distribution (age group of months) of BSE cases (all types) with known age in 2012**

	Age (years old)	6	7	8	12	>12
	Age group (months)	72-83	84-95	96-107	144-155	>155
España	No of cases		1		1	4
France	No of cases				1	
Ireland	No of cases					3
Polska	No of cases	1		1		1
Portugal	No of cases					2
United Kingdom	No of cases	1				2
EU 28		2	1	1	2	12

**Table B15: Age distribution (age group of months) of BSE cases (all types) with a known age in risk animals (fallen stock, emergency slaughter and clinical signs at Ante-Mortem inspection) in 2012**

	Age (years old)	6	12	>12
	Age group (months)	72-83	144-155	>155
España	No of cases			2
France	No of cases		1	
Ireland	No of cases			3
Portugal	No of cases			1
United Kingdom	No of cases	1		2
EU 28		1	1	8

**Table B16: Age distribution (age group of months) of BSE cases (all types) with known age in healthy slaughtered bovine animals in 2012**

	Age (years old)	6	7	8	12	>12
	Age group (months)	72-83	84-95	96-107	144-155	>155
España	No of cases		1		1	2
Polska	No of cases	1		1		1
Portugal	No of cases					1
EU 28		1	1	1	1	4

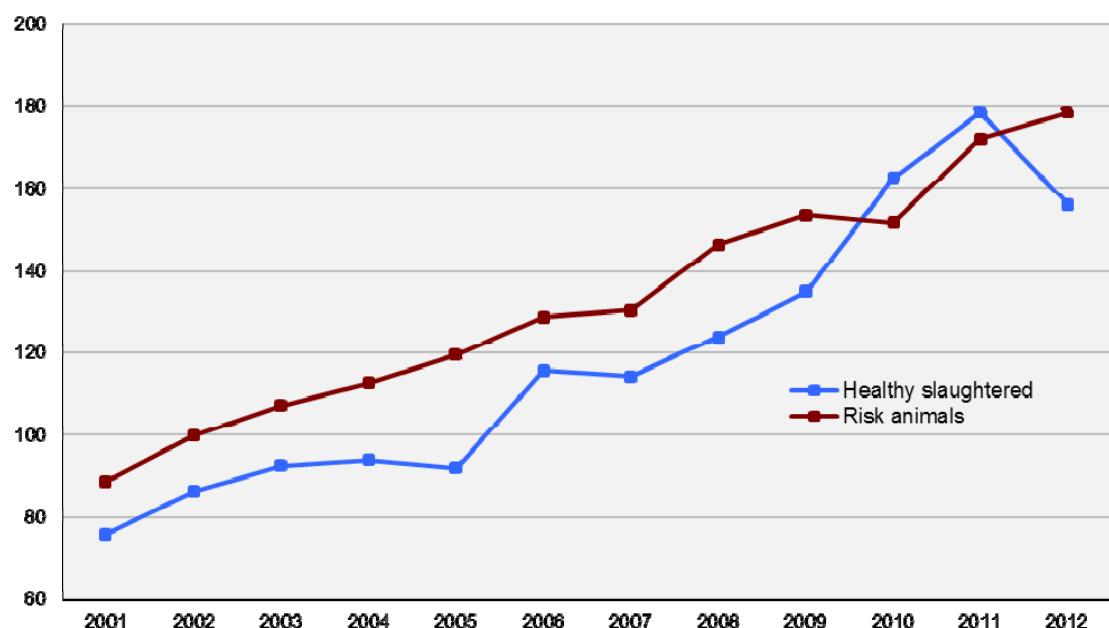
**Table B17: Age distribution (age group of months) of BSE cases (all types) in BSE suspects in 2012**

Table redundant - no case was detected in BSE suspects in 2012.

**Table B18: Average age (in months) per target group of BSE cases (all types) detected in the EU 28 from 2001 to 2012**

	BSE eradication	BSE suspects	Healthy slaughtered	Risk animals
2001	76	87	76	89
2002	71	97	86	100
2003	72	100	93	107
2004	76	111	94	113
2005	76	113	92	120
2006	82	109	116	129
2007	92	136	114	131
2008	107	124	124	146
2009		142	135	153
2010			162	152
2011			178	172
2012			156	178

**Chart B5: Average age (in months) of BSE cases (all types) detected in the EU 28 from 2001 to 2012 in the healthy slaughtered cattle and risk animals**



#### **Comments on the age distribution of BSE positive animals**

Without any BSE case younger than 6 years old in 2012, the average age of cases remained high during the period. However, one can note that the average age of BSE cases of all types in healthy slaughtered cattle dropped while it continued to rise in risk animals.

The overall evolution of the average age of positive cases appears favourable since 2001. Taking into consideration an average incubation period of 5-6 years, these figures are an indication that measures taken (mainly feed ban) have been effective.

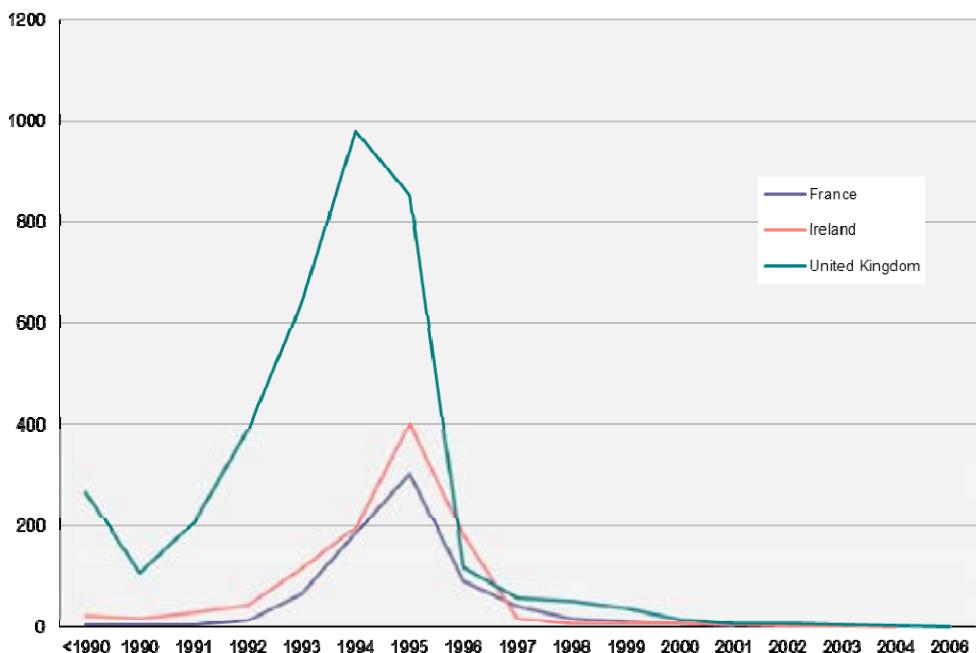
#### 4.5. Year of birth distribution of BSE cases detected since 2001

**Table B19: Year of birth distribution of cases (all types) detected from 2001 to 2012**

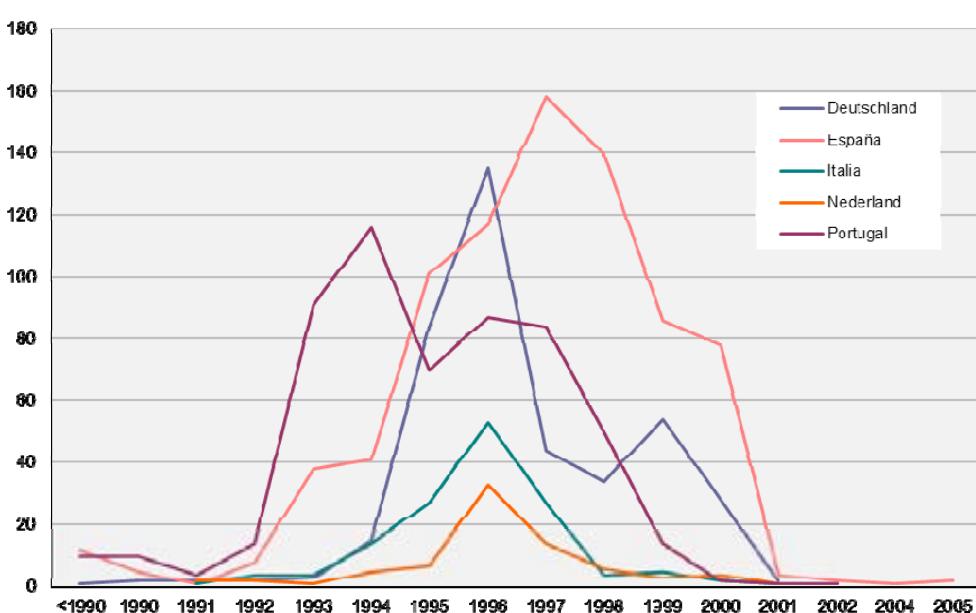
No of cases	<1990	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	Unknown	Total
<b>Belgique/België</b>	1		3	4	2	16	28	41	17	3											<b>115</b>
<b>Ceská Republika</b>							4	3	3	2	3	12	1		1	1					<b>30</b>
<b>Danmark</b>		1			1		1	7	2	2											<b>14</b>
<b>Deutschland</b>	1	2	2	2	3	15	84	135	44	34	54	28	2								<b>406</b>
<b>Elias</b>							1														<b>1</b>
<b>España</b>	12	5	1	8	38	41	101	117	158	140	86	78	4	2		1	2				<b>794</b>
<b>France</b>	4	4	5	13	66	186	303	92	43	17	11	6	2			1					<b>753</b>
<b>Ireland</b>	23	17	29	45	117	197	402	182	17	7	8	6	5	2	3	1					<b>1061</b>
<b>Italia</b>	3		1	4	4	14	27	53	27	4	5	2	1								<b>145</b>
<b>Luxembourg</b>							1						1								<b>2</b>
<b>Nederland</b>	1		2	2	1	5	7	33	14	6	3	4	1								<b>79</b>
<b>Österreich</b>				1	1	1	1	2	1			1									<b>8</b>
<b>Polska</b>		1		3	1	5	9	12	6	6	12	9	3	1	2	2	2				<b>74</b>
<b>Portugal</b>	10	10	4	14	91	116	70	87	84	50	14	2	1	1				2			<b>556</b>
<b>Slovenija</b>							1	1		1	1	4									<b>8</b>
<b>Slovensko</b>			1				9	4	1		1	5	5	1							<b>27</b>
<b>Suomi/Finland</b>							1														<b>1</b>
<b>Sverige</b>						1															<b>1</b>
<b>United Kingdom</b>	266	108	207	389	643	980	855	119	58	53	37	16	8	8	5	2		1	1	5	<b>3761</b>
<b>Total</b>	<b>321</b>	<b>148</b>	<b>255</b>	<b>485</b>	<b>968</b>	<b>1577</b>	<b>1903</b>	<b>890</b>	<b>475</b>	<b>325</b>	<b>235</b>	<b>173</b>	<b>34</b>	<b>15</b>	<b>11</b>	<b>8</b>	<b>4</b>	<b>1</b>	<b>1</b>	<b>7</b>	<b>7836</b>

**Charts B6 and B7: Distribution of number of cases (all types) per year of birth detected from 2001 to 2012 in 8 Member States**

**Chart B6**



**Chart B7**



**Comments on the year of birth distribution of positive animals**

The previous tables and charts only take account of cases detected since 2001 and does not include cases detected before 2001. However, differences between Member States with regard to the year of birth with the highest percentage of positive cases may be an indication of differences in the period of exposure to the agent and of the effectiveness of measures to prevent transmission of the agent, in particular the feed ban.

#### 4.6. Prevalence of BSE in different age categories in 2012

**Table B20: Reported age distribution (in months) of all bovines tested in the EU and Norway in 2012**

	AT	BE	BG	CY	CZ	DE	DK	EE	EL	ES	FI	FR	HR	HU	IE	IT
< 24	2	13			4	1706	44		6	5	5	3017	70	21		14
24-29	2	11	816	9	1	925	11		12	1	5	18863	5221	1259	29	12
30-35	43	26	1628	8	3	786	19		67	6	6	26990	2745	961	24	90
36-47	64	82	2735	48	51	1865	68	6	73	108	39	51929	13097	1905	128	116
48-59	2510	6930	2415	211	3488	35994	7008	898	446	11129	3287	43646	6736	2002	7179	13881
60-71	2544	6050	2108	275	2974	33234	5668	872	429	9498	3108	37551	7324	1700	6836	12027
72-83	26611	45577	2231	911	15717	192855	28307	3326	2574	43789	13209	247772	692	8507	46626	74076
84-95	22987	29124	2032	605	11128	139215	15237	2343	2196	35455	8160	209102	395	6336	46805	54807
96-107	18672	16991	1801	416	7097	92291	8084	1496	1974	30001	4613	162604	284	5776	44398	39754
108-119	14652	9703	1384	252	4765	56625	4340	916	1494	25831	2595	124147	188	2368	38240	29882
120-131	10838	5233	1142	126	3393	35497	2518	551	1080	22060	1424	91865	130	1622	30284	21445
132-143	7498	3274	922	63	2176	22519	1446	306	807	19721	829	69086	78	1279	24258	15857
144-155	5121	1740	1367	36	1550	13281	951	167	700	18305	491	52921	70	820	17417	12103
> 155	8939	2293	189	25	2447	20995	1996	190	2753	94150	855	101064	146	2036	35532	33613
Unknown						532	6805		150	103		8127	8	10902		8
Total	120 483	127 579	27 575	2 985	54 794	647 938	75 800	11 071	14 611	318 186	38 634	1 251 459	37 176	36 592	297 756	307 685

	LT	LU	LV	MT	NL	PL	PT	RO	SE	SI	SK	UK		Total EU		NO	
< 24		2	1	25		15		28	64	10	1	3	< 24	5285	< 24	229	
24-29				40	197	7		386	59	1028		54	24-29	30856	24-29	1908	
30-35				225	79	4		7050	116	928		110	30-35	43617	30-35	1703	
36-47				6	472	168	17	1	10595	718	1283		711	36-47	90050	36-47	3765
48-59	530	494	319	553	25950	5568	4365	8879	2427	1257	1358	23789	48-59	226646	48-59	3397	
60-71	315	479	305	395	25553	5126	3469	7566	2548	1164	1315	23222	60-71	206379	60-71	2724	
72-83	8662	1100	5825	217	61578	66678	9852	6902	19942	3260	3867	91409	72-83	1033961	72-83	1889	
84-95	10059	892	4949	164	45395	58054	8386	6712	12961	2773	2710	84694	84-95	824727	84-95	1051	
96-107	9212	688	3724	108	30404	43584	6993	4229	7788	2140	1594	76088	96-107	623327	96-107	523	
108-119	6864	519	2722	48	18459	35314	5576	3638	4589	1748	1198	64689	108-119	463017	108-119	271	
120-131	4617	386	1910	43	10716	31336	4732	3655	2842	1342	768	51892	120-131	343573	120-131	126	
132-143	4850	252	1303		6588	20007	4105	3632	1984	915	513	39715	132-143	254044	132-143	61	
144-155	3762	228	789		3516	15920	3666	3781	1294	679	353	33423	144-155	194492	144-155	41	
> 155	1562	458	1145		4556	44650	16595	9451	2314	1086	489	57279	> 155	446888	> 155	80	
Unknown					13	235			43			2922	Unknown	30421	Unknown	573	
Total	50 433	5 498	22 998	2 303	233 394	326 280	67 739	76 504	59 689	19 613	14 166	550 000	Total	4 817 282	Total	18 341	

**Table B21: Reported age distribution (in months) of risk animals tested in the EU and Norway in 2012**

	AT	BE	BG	CY	CZ	DE	DK	EE	EL	ES	FI	FR	HR	HU	IE	IT
< 24		7			2	90	19		6		2	2887	56	15		11
24-29		7	816	1	1	266	3		8	1	3	18604	1747	1255	28	12
30-35		16	290			261	4		3		1	26643	705	939	23	26
36-47		51	467	15	12	813	48	6	25	101	31	51255	2578	1865	125	64
48-59	2463	6811	365	179	3462	34467	6971	893	400	11109	3259	43039	1408	1969	7177	13660
60-71	2504	5895	386	136	2960	31644	5633	866	346	9432	3018	36994	1119	1670	6833	11555
72-83	2329	4222	400	121	2231	25828	3752	655	280	7336	2081	31677	618	1210	7274	8456
84-95	1919	2887	384	89	1410	17418	2013	447	210	5654	1217	24679	342	850	7201	6020
96-107	1512	1824	453	55	859	11059	976	267	236	4719	671	18419	219	521	6749	3962
108-119	1109	1166	170	35	639	6404	529	159	205	3786	368	13927	149	315	5720	2854
120-131	806	650	403	13	493	4050	324	83	166	3207	213	10274	104	177	4567	1844
132-143	568	420	224	6	405	2474	187	30	118	2862	121	7724	58	155	3676	1267
144-155	411	219	374	6	291	1599	129	22	134	2379	112	6246	46	78	2532	882
> 155	1055	341	53	7	654	3357	422	18	588	11198	204	14894	107	225	6420	2358
Unknown		501	1677			100	102			520	1	6052				7
Total	14 676	25 017	6 462	663	13 419	139 830	21 112	3 446	2 725	62 304	11 302	313 314	9 256	11 244	58 325	52 978

	LT	LU	LV	MT	NL	PL	PT	RO	SE	SI	SK	UK		Total EU		NO
< 24				25		1		20	21	5		3	< 24	3306	< 24	136
24-29				40	21	5		360	51	1027		50	24-29	25596	24-29	1290
30-35				38	27	3		236	106	909		103	30-35	31148	30-35	815
36-47			5	90	57	15		465	695	1276		673	36-47	62467	36-47	1735
48-59	530	494	317	115	9842	5568	4365	461	2392	1252	1354	23646	48-59	189562	48-59	1594
60-71	315	479	302	50	10203	5123	3468	338	2489	1154	1313	23080	60-71	170768	60-71	1463
72-83	339	380	193	33	8485	4239	2932	273	1846	982	1031	20999	72-83	141237	72-83	1035
84-95	385	261	133	21	5970	3331	2524	274	1221	772	637	18514	84-95	107386	84-95	603
96-107	290	176	107	10	3837	2251	2048	198	703	553	361	16106	96-107	79419	96-107	278
108-119	276	121	66	8	2391	1731	1617	132	415	400	315	13269	108-119	58437	108-119	161
120-131	392	90	39	7	1399	1359	1326	142	219	249	185	10375	120-131	43231	120-131	75
132-143	294	47	25		845	787	1093	128	165	182	129	7763	132-143	31797	132-143	44
144-155	196	36	13		531	684	933	128	106	119	85	6655	144-155	24970	144-155	24
> 155	174	87	14		1021	1479	3777	323	296	222	140	17868	> 155	67357	> 155	55
Unknown				11	50				32			2871	Unknown	12223	Unknown	299
Total	3 191	2 171	1 214	448	44 679	26 576	24 083	3 478	10 757	9 102	5 550	161 975	Total	1 048 904	Total	9 607

**Table B22: Reported age distribution (in months) of healthy slaughtered animals tested in the EU and Norway in 2012**

	AT	BE	BG	CY	CZ	DE	DK	EE	EL	ES	FI	FR	HR	HU	IE	IT
< 24		3			2	1614	25				3	130	14	5		3
24-29		3		8		658	8		4		2	259	3473	3	1	
30-35	42	8	1338	8	3	525	15		64	5	5	347	2039	22		64
36-41	64	23	2268	33	38	1046	20		48	6	8	672	10517	39	3	52
48-59	44	113	2050	32	26	1405	37	5	46	18	28	606	5328	32	2	221
60-71	39	151	1722	139	14	1486	35	6	83	66	90	557	6205	30	1	472
72-83	24282	41353	1831	790	13486	166949	24555	2671	2294	36445	11128	216095	73	7297	39350	65620
84-95	21068	26235	1648	516	9718	121743	13224	1896	1986	29796	6943	184423	53	5485	39602	48787
96-107	17160	15166	1348	361	6238	81200	7107	1229	1738	25277	3942	144185	64	5255	37648	35792
108-119	13542	8536	1214	217	4126	50200	3811	757	1289	22043	2227	110220	39	2053	32517	27028
120-131	10032	4583	739	113	2900	31436	2194	468	914	18853	1211	81590	26	1445	25711	19601
132-143	6930	2854	698	57	1771	20037	1259	276	689	16858	708	61358	20	1124	20579	14590
144-155	4710	1521	993	30	1259	11674	822	145	566	15925	379	46665	24	742	14885	11221
> 155	7884	1952	136	18	1792	17625	1574	172	2165	82942	651	86169	39	1811	29111	31255
Unknown			31	5128			50	1		7607	7	4850				1
Total	105 797	102 532	21 113	2 322	41 373	507 648	54 687	7 625	11 886	255 841	27 332	938 126	27 914	25 343	239 410	254 707

	LT	LU	LV	MT	NL	PL	PT	RO	SE	SI	SK	UK		Total EU		NO
< 24									5	42						
24-29					176				14	8						
30-35				187	52				6802	10	19					
36-47				381	111				10115	23	7					
48-59				438	16108				8401	35	5	4	143			
60-71			2	345	15350	2			7216	59	10	2	142			
72-83	8323	720	5630	184	53093	62439	6921	6615	18095	2277	2836	70410				
84-95	9674	631	4815	143	39425	54721	5861	6417	11740	2001	2073	66180				
96-107	8922	512	3617	98	26567	41333	4944	4020	7085	1587	1233	59982				
108-119	6588	398	2656	40	16068	33583	3959	3499	4174	1348	883	51419				
120-131	4225	296	1870	36	9317	29977	3406	3504	2622	1092	583	41517				
132-143	4556	205	1278		5743	19220	3012	3497	1819	733	384	31944				
144-155	3566	192	776		2985	15236	2733	3642	1188	560	268	26766				
> 155	1388	371	1131		3535	43171	12800	9108	2018	864	349	39408				
Unknown					2	185				11			49			
Total	47 242	3 325	21 775	1 854	188 715	299 682	43 637	72 855	48 929	10 503	8 615	388 008				
< 24													1939		93	
24-29													5239		618	
30-35													12450		888	
36-47													27541		2030	
48-59													36929		1802	
60-71													35485		1261	
72-83													892616		854	
84-95													717252		448	
96-107													543855		245	
108-119													404544		110	
120-131													300312		51	
132-143													222216		17	
144-155													169490		17	
> 155													379464		25	
Unknown													18196		274	
Total													3 767 529		8 733	

**Table B23: Reported age distribution (in months) of BSE suspects in the EU and Norway tested in 2012**

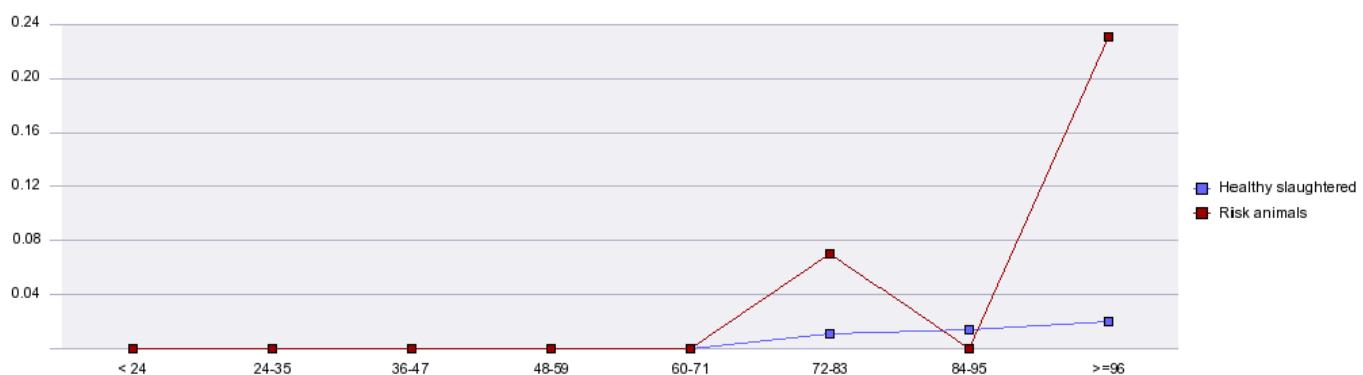
	AT	BE	BG	CY	CZ	DE	DK	EE	EL	ES	FI	FR	HR	HU	IE	IT
< 24	2	3				2				1				1		
24-29	2	1				1							1	1		
30-35	1	2								1			1		1	
36-47		8			1	6				1		2	2	1		
48-59	3	6				121				2		1		1		
60-71	1	4				104									2	
72-83		2				77							1		2	
84-95		2				54								1	2	
96-107		1				32	1						1			
108-119	1	1				21				1						
120-131						11						1			3	
132-143						6				1					3	
144-155						6										
> 155					1	12				1					1	
<b>Unknown</b>																
<b>Total</b>	<b>10</b>	<b>30</b>	<b>0</b>	<b>0</b>	<b>2</b>	<b>453</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>8</b>	<b>0</b>	<b>4</b>	<b>6</b>	<b>5</b>	<b>14</b>	<b>0</b>

	LT	LU	LV	MT	NL	PL	PT	RO	SE	SI	SK	UK		Total EU		NO	
< 24		2	1			10		3	1	5	1			< 24	32	< 24	
24-29						2		12		1				24-29	21	24-29	
30-35						1		12						30-35	19	30-35	
36-47			1	1		2	1	15					1	36-47	42	36-47	
48-59			2					17						48-59	154	48-59	1
60-71			1			1		12						60-71	125	60-71	
72-83			2					14	1	1				72-83	100	72-83	
84-95			1					21						84-95	81	84-95	
96-107								11						96-107	46	96-107	
108-119								7					1	108-119	32	108-119	
120-131				1				9	1	1				120-131	27	120-131	
132-143								7						132-143	17	132-143	
144-155								11						144-155	17	144-155	
> 155								20					2	> 155	37	> 155	
<b>Unknown</b>														<b>Unknown</b>			
<b>Total</b>	<b>0</b>	<b>2</b>	<b>9</b>	<b>1</b>	<b>0</b>	<b>15</b>	<b>2</b>	<b>171</b>	<b>3</b>	<b>8</b>	<b>1</b>	<b>4</b>		<b>Total</b>	<b>750</b>	<b>Total</b>	<b>1</b>

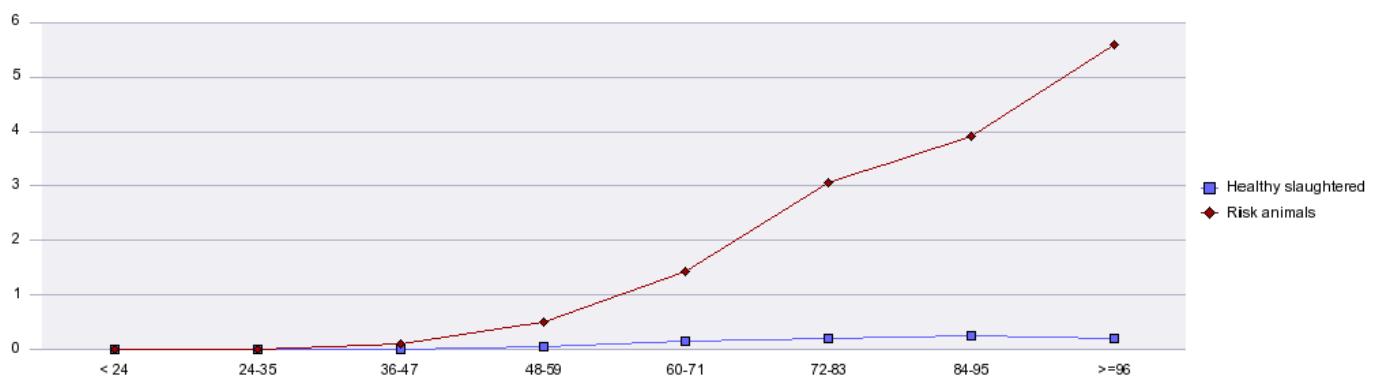
**Table B24: Extrapolated age distribution (in months) of tested animals culled in the framework of BSE eradication in the EU in 2012**

	DE	ES	FR	IE	PL	PT	UK	Total EU
< 24		4			4			8
24-35								
36-47								
48-59	1							1
60-71					1			1
72-83	1	8						9
84-95		5			2			7
96-107		5		1				6
108-119		1		3				4
120-131				3				3
132-143	2		4				8	14
144-155	2	1	10				2	15
> 155	1	9	1			17	1	29
Unknown							2	2
Total	7	33	15	7	7	17	13	99

**Chart B6: Prevalence rate of BSE (all types), per target group, in cattle of different age (months) in the EU in 2012 (positive per 10.000 tests)**



**Chart B7: Prevalence rate of BSE (all types), per target group, in cattle of different age (months) in the EU from 2002 to 2012 (positive per 10.000 tests)**



**Tables B25 to B28: Prevalence rate of BSE (all types; positive per 10 000 tests) in animals of different age groups (months) tested in 2012 in the EU and Norway**

B25: all categories of animals	ES	FR	IE	PL	PT	UK	Global prevalence rate in the EU and NO
< 24							
24-35							
36-47							
48-59							
60-71							
72-83				0,15		0,11	0,02
84-95	0,28						0,01
96-107				0,23			0,02
108-119							
120-131							
132-143							
144-155	0,55	0,19					0,10
> 155			0,84	0,22	1,21	0,35	0,18

B26: risk animals	FR	IE	PT	UK	Global prevalence rate in the EU and NO
< 24					
24-35					
36-47					
48-59					
60-71					
72-83				0,48	0,07
84-95					
96-107					
108-119					
120-131					
132-143					
144-155	1,60				0,40
> 155		4,67	2,65	1,12	0,89

B27: healthy slaughtered animals	ES	PL	PT	Global prevalence rate in the EU and NO
< 24				
24-35				
36-47				
48-59				
60-71				
72-83		0,16		0,01
84-95	0,34			0,01
96-107		0,24		0,02
108-119				
120-131				
132-143				
144-155	0,63			0,06
> 155		0,23	0,78	0,05

**B28: BSE suspects:** No case was detected in BSE suspects in 2012.

## 4.7. BSE in young animals

**Table B29: Number of BSE cases (all types) below 60 months of age from 2001 to 2012**

	Age of BSE cases in months																								
	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
<b>2001</b>	15	14	10	13	10	10	8	6	4	3	6	5	1	1	1	1	3	1	1	1	1	1	1	1	
<b>2002</b>	4	6	11	6	2	6	7	8	1	3	2	3	1	1	1			1	1	1	1	1	1	1	
<b>2003</b>	4	4	4	7	4	3	5	5	2	2	1		3	1	2					1					
<b>2004</b>	7	3	3	6	4	4	3	5	5	2	2	1	2		1	1	1								
<b>2005</b>	5	9	4	5	1	1	3	1	2		2	1		2		1	1	1		2					
<b>2006</b>									1																
<b>2007</b>										1														1	
<b>2008</b>							1																		
<b>2009</b>																									
<b>2010</b>																									
<b>2011</b>																									
<b>2012</b>																									

**Table B30: Details on BSE cases < 60 months detected in 2012**

Table redundant - no BSE case in cattle younger than 60 months since 2008.

**Table B31: Details on BSE cases in animals born after 31/12/2000 detected from 2001 to 2012**

Born in 2001					
Age (Months)	Target Group	Member State	Year of Detection	Date of birth	BSE case type*
39	Emergency slaughter	United Kingdom	2005	10/2001	
42	Healthy slaughtered animals	Slovensko	2004	2/2001	
43	Healthy slaughtered animals	Slovensko	2004	01/2001	
44	Eradication Measures	United Kingdom	2005	9/2001	
44	Fallen stock	Ireland	2005	9/2001	
47	Fallen stock	Deutschland	2005	5/2001	
48	Healthy slaughtered animals	Luxembourg	2005	11/2001	
48	Healthy slaughtered animals	Polska	2005	6/2001	Classical
51	Healthy slaughtered animals	Deutschland	2005	3/2001	
52	Fallen stock	Ireland	2005	3/2001	
58	Clinical signs at AM	Nederland	2005	2/2001	Classical
58	Eradication Measures	Ceská Republika	2005	01/2001	
58	Healthy slaughtered animals	Polska	2005	1/2001	Classical
60	Healthy slaughtered animals	France	2006	01/2001	
60	Healthy slaughtered animals	Polska	2006	01/2001	Classical
61	Clinical signs at AM	Italia	2006	01/2001	Classical
61	Fallen stock	United Kingdom	2006	01/2001	
62	Fallen stock	United Kingdom	2006	01/2001	
62	Fallen stock	United Kingdom	2006	03/2001	
64	Fallen stock	España	2006	01/2001	
66	Fallen stock	United Kingdom	2006	06/2001	
66	Suspects subject to laboratory examination	Ireland	2006	03/2001	
71	Fallen stock	United Kingdom	2007	04/2001	
78	Healthy slaughtered animals	Slovensko	2007	03/2001	
79	Suspects subject to laboratory examination	Ireland	2008	11/2001	
80	Healthy slaughtered animals	Slovensko	2007	03/2001	
81	Healthy slaughtered animals	Slovensko	2008	10/2001	
82	Suspects subject to laboratory examination	Portugal	2007	02/2001	
85	Healthy slaughtered animals	España	2008	01/2001	
85	Suspects subject to laboratory examination	España	2008	05/2001	
86	Fallen stock	España	2008	09/2001	
93	Fallen stock	United Kingdom	2008	00/2001	
96	Fallen stock	Ireland	2009	02/2001	
105	Fallen stock	France	2010	12/2001	Atypical L-Type

Born in 2002					
Age (Months)	Target Group	Member State	Year of Detection	Date of birth	BSE case type*
32	Fallen stock	Portugal	2005	10/2002	
32	Healthy slaughtered animals	Polska	2005	6/2002	Classical
36	Eradication Measures	United Kingdom	2005	5/2002	
41	Fallen stock	España	2005	1/2002	
49	Healthy slaughtered animals	United Kingdom	2006	08/2002	
63	Fallen stock	United Kingdom	2008	10/2002	
65	Fallen stock	Ireland	2007	05/2002	
67	Fallen stock	United Kingdom	2007	04/2002	
67	Fallen stock	United Kingdom	2007	05/2002	
71	Fallen stock	España	2008	07/2002	
74	Suspects subject to laboratory examination	United Kingdom	2008	07/2002	
78	Eradication Measures	United Kingdom	2008	05/2002	
83	Healthy slaughtered animals	Ireland	2009	11/2002	
87	Emergency slaughter	United Kingdom	2009	09/2002	
90	Fallen stock	Slovensko	2010	11/2002	

Born in 2003					
Age (Months)	Target Group	Member State	Year of Detection	Date of birth	BSE case type*
48	Healthy slaughtered animals	Polska	2007	05/2003	Classical
56	Fallen stock	United Kingdom	2008	08/2003	
66	Fallen stock	Ireland	2008	03/2003	
66	Healthy slaughtered animals	Ceská Republika	2009	09/2003	
66	Healthy slaughtered animals	Polska	2008	06/2003	Classical
66	Healthy slaughtered animals	United Kingdom	2008	01/2003	
68	Eradication Measures	Ireland	2008	02/2003	
68	Fallen stock	United Kingdom	2009	06/2003	
71	Fallen stock	United Kingdom	2009	04/2003	
74	Fallen stock	United Kingdom	2009	09/2003	
97	Fallen stock	Ireland	2011	03/2003	Classical

Born in 2004					
Age (Months)	Target Group	Member State	Year of Detection	Date of birth	BSE case type*
32	Healthy slaughtered animals	Polska	2007	08/2004	Classical
60	Healthy slaughtered animals	Ceská Republika	2009	05/2004	
66	Fallen stock	United Kingdom	2010	10/2004	Classical
67	Healthy slaughtered animals	Ireland	2009	04/2004	
68	Fallen stock	España	2010	10/2004	Classical
69	Fallen stock	France	2010	04/2004	Classical
73	Fallen stock	United Kingdom	2010	11/2004	Classical
97	Healthy slaughtered animals	Polska	2012	01/2004	Atypical L-Type

Born in 2005					
Age (Months)	Target Group	Member State	Year of Detection	Date of birth	BSE case type*
42	Healthy slaughtered animals	Polska	2008	03/2005	Classical
80	Healthy slaughtered animals	Polska	2012	11/2005	Classical
83	Fallen stock	España	2011	1/2005	Atypical H-Type
90	Healthy slaughtered animals	España	2012	2/2005	Atypical L-Type

Born in 2006					
Age (Months)	Target Group	Member State	Year of Detection	Date of birth	BSE case type*
77	Fallen stock	United Kingdom	2012	07/2006	Classical

\* The BSE case type information is provided only where the sample has been submitted to further discriminatory testing (not compulsory before July 2013)

## 4.8. Atypical BSE cases

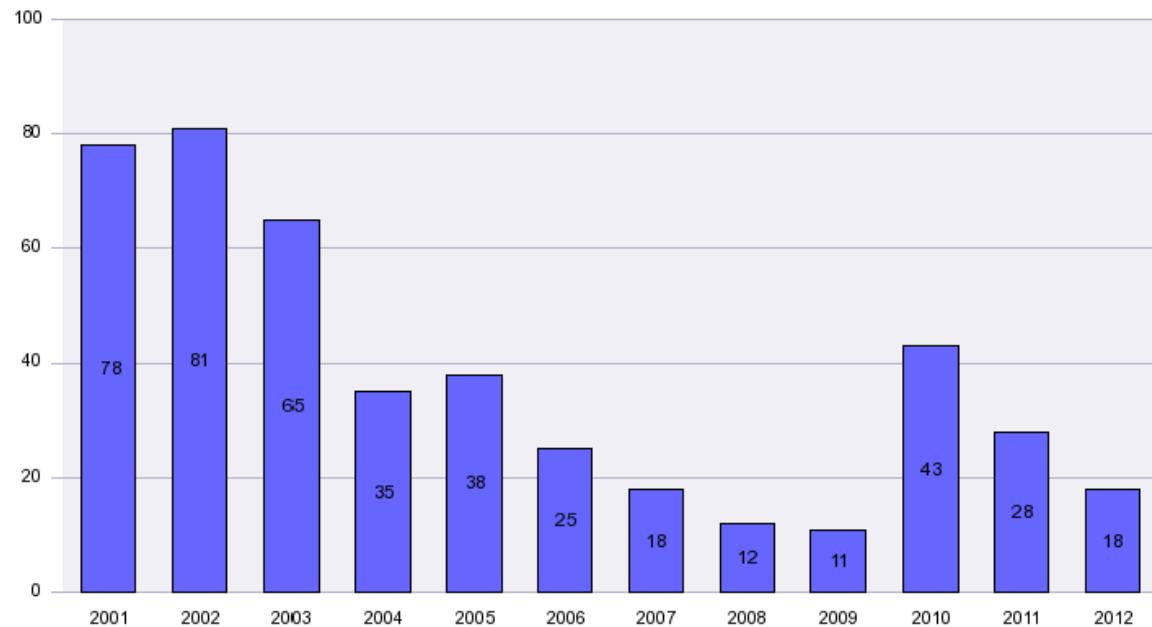
**Table B32: Results of the BSE discriminatory tests reported by the 28 Member States in 2012**

	All BSE cases	BSE cases subject to Discriminatory testing	Results of discriminatory testing			
			Classical BSE cases	H-BSE cases	L-BSE cases	
España	6	6	3	50 %	1	17 %
France	1	1				1
Ireland	3	3	3	100 %		
Polka	3	3	1	33 %		2
Portugal	2	2	2	100 %		
United Kingdom	3	3	2	67 %		1
Total	<b>18</b>	<b>18</b>	<b>11</b>	<b>61 %</b>	<b>1</b>	<b>33 %</b>

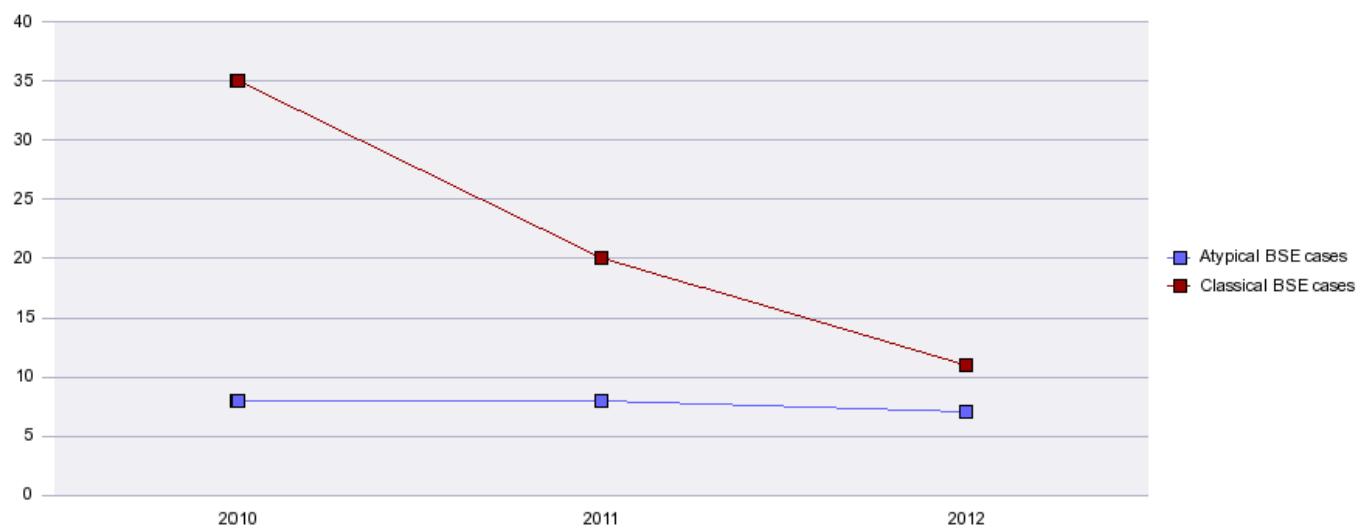
**Table B33: Results of the BSE discriminatory tests reported by the Member States from 2001 to 2012**

	All BSE cases	BSE cases subject to Discriminatory testing	Results of discriminatory testing			
			Classical BSE cases	H-BSE cases	L-BSE cases	
Belgique/België	114	38	38	100 %		
Ceská Republika	30					
Danmark	14	1				1
Deutschland	406	2		1	50 %	1
Elias	1					
España	794	26	22	85 %	2	8 %
France	753	32	5	16 %	13	41 %
Ireland	1060	9	5	56 %	4	44 %
Italia	145	145	140	97 %		5
Luxembourg	2					
Nederland	79	78	74	95 %	1	1 %
Österreich	8	8	5	63 %	1	13 %
Polka	74	74	61	82 %	2	3 %
Portugal	556	12	11	92 %	1	8 %
Slovenija	8					
Slovensko	27					
Suomi/Finland	1					
Sverige	1	1			1	100 %
United Kingdom	3759	26	18	69 %	4	15 %
Total	<b>7832</b>	<b>452</b>	<b>379</b>	<b>84 %</b>	<b>30</b>	<b>7 %</b>
					<b>43</b>	<b>10 %</b>

**Chart B8: Number of BSE cases submitted to discriminatory testing in the EU-28 from 2001 to 2012**



**Chart B9: Evolution of the number of confirmed classical and atypical BSE cases in the EU-28 from 2010 to 2012**



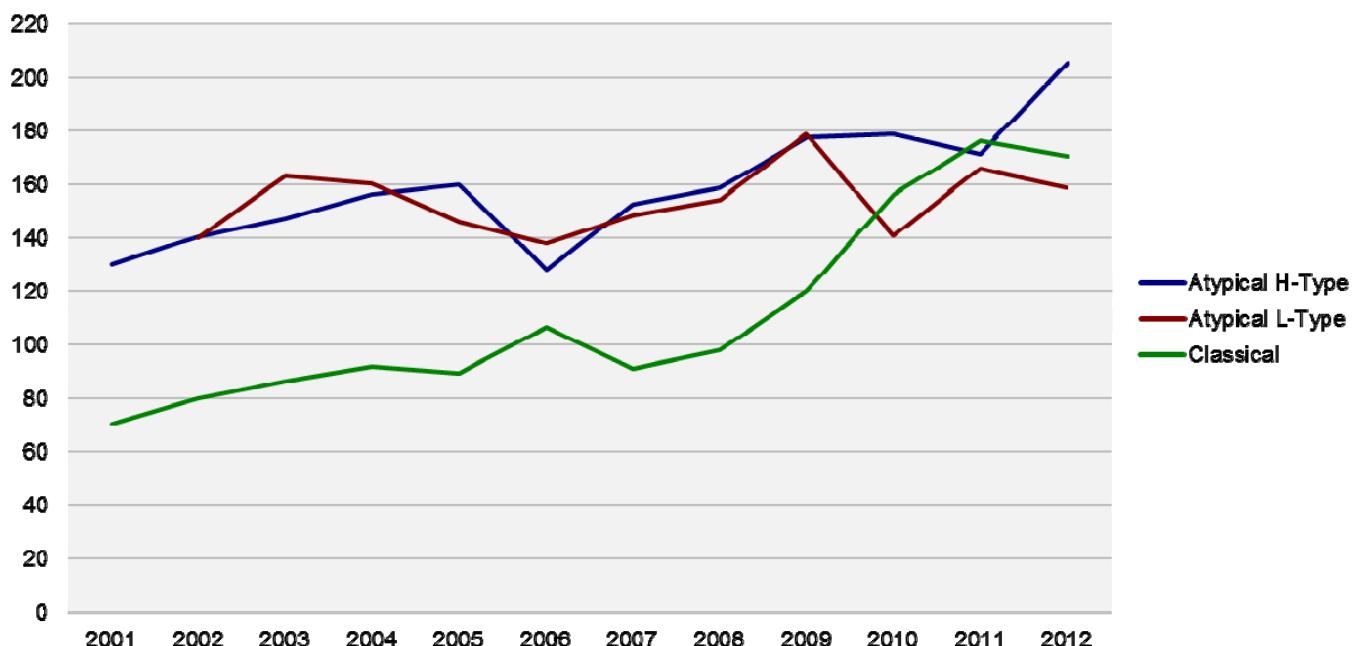
**Table B34: Number of BSE cases (all types) and atypical BSE cases reported by the Member State in 2012 in each target group**

	Fallen stock		Healthy slaughtered animals	
	All BSE cases	Atypical BSE cases	All BSE cases	Atypical BSE cases
España	2	1	4	2
France	1	1		
Ireland	3			
Polska			3	2
Portugal	1		1	
United Kingdom	3	1		
Total	10	3	8	4

**Table B35: Proportion in each target group of BSE cases submitted to further discriminatory testing and, within those, of the cases reported as atypical BSE, by Member State, from 2001 to 2012**

	Clinical signs at AM		Emergency slaughter		Eradication Measures		Fallen stock		Healthy slaughtered animals		Suspects subject to laboratory examination	
	BSE cases submitted to discriminatory testing	Atypical BSE cases	BSE cases submitted to discriminatory testing	Atypical BSE cases	BSE cases submitted to discriminatory testing	Atypical BSE cases	BSE cases submitted to discriminatory testing	Atypical BSE cases	BSE cases submitted to discriminatory testing	Atypical BSE cases	BSE cases submitted to discriminatory testing	Atypical BSE cases
Belgique/België							32.26%		36.51%		27.78%	
Ceská Republika												
Danmark							16.67%	100.00%				
Deutschland									1.23%	100.00%		
Elias												
España							3.38%	16.67%	5.00%	14.29%		
France			100.00%	100.00%			6.74%	84.00%	2.24%	80.00%		
Ireland							1.42%	37.50%	0.65%	100.00%		
Italia	100.00%		100.00%				100.00%	9.09%	100.00%	3.57%	100.00%	
Luxembourg												
Nederland	100.00%		100.00%				95.24%	5.00%	100.00%	7.69%	100.00%	
Österreich							100.00%	50.00%	100.00%	25.00%		
Polska	100.00%		100.00%	25.00%	100.00%		100.00%	22.22%	100.00%	17.54%	100.00%	
Portugal							2.44%	20.00%	4.38%			
Slovenija												
Slovensko												
Suomi/Finland												
Sverige							100.00%	100.00%				
United Kingdom							4.21%	30.77%				
Total EU 28	24.63%	0%	1.54%	13.04%	2.08%	0%	6.00%	30.77%	17.40%	11.02%	0.66%	0%

**Chart B10: Average age (in months) of the Classical, L and H-type BSE cases confirmed in the EU, per year of detection, from 2001 to 2012**



### Comments on atypical BSE

The TSE regulation did not require the Member States to conduct discriminatory testing of all BSE cases before July 2013. The present data reflect the tests conducted by some Member States on a voluntary basis. Except for Austria, Italy, Poland and to a large extend the Netherlands, only part of the past BSE cases have been submitted by the contributing Member States to discriminatory testing. The present results should therefore be interpreted with caution.

The present results suggest that the background noise of atypical BSE is close to 8 detectable cases per year.

L-BSE appears to be more frequent than H-BSE. In terms of target group proportion of atypical BSE cases (H and L together) appears to be higher in the fallen stock than in the healthy slaughtered cattle.

Chart B10 also suggests that the average age of atypical L-type cases has been quite stable since 2001, while that of H-type cases may have been slowly increasing. When it comes to the average age in H-type BSE in 2012, one should however use great caution since it is based on a single case.

## 5. SUMMARY OF TSE TESTING IN OVINE AND CAPRINE ANIMALS DURING 2011

### 5.1. Sampling

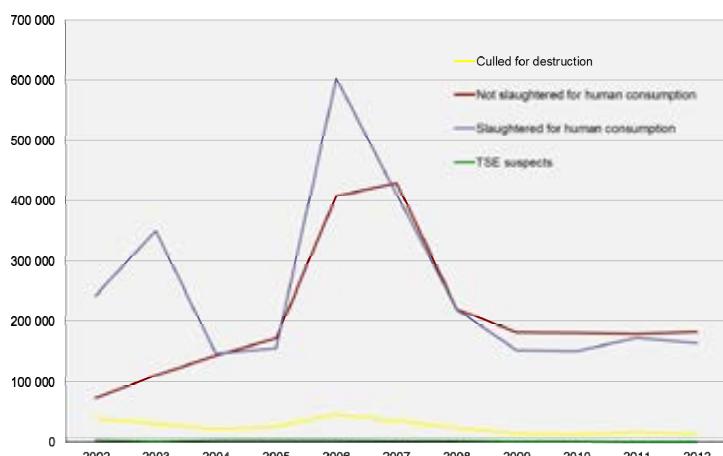
#### Comments on sampling

A slight decline of the overall number of small ruminants tested for TSE can be noted in 2012 compared to 2011. However, the level of testing remains fairly stable since 2009.

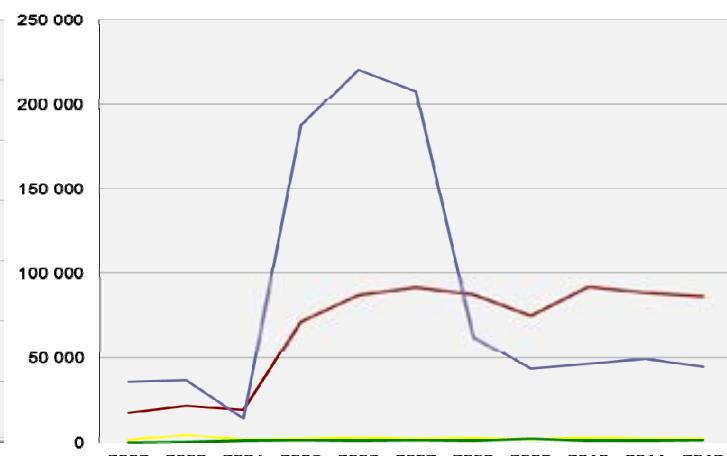
The total number of samples and the number of samples per target group and per Member State can be found in the following tables and charts

#### Charts SR1 and SR2: Evolution of TSE testing in sheep and goats in the EU 28 from 2002 to 2012

**Chart SR1: sheep**



**Chart SR2: goats**



SHEEP	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Culled for destruction	39 767	31 122	22 126	26 606	46 704	35 241	24 946	14 491	12 260	17 520	13 150
Not slaughtered for human consumption	71 817	110 675	142 854	171 879	408 503	430 372	220 727	181 586	180 754	178 772	182 148
Slaughtered for human consumption	242 932	349 609	146 187	155 159	602 655	411 402	219 534	152 062	150 433	172 770	163 385
TSE suspects	2 759	1 294	2 660	2 371	2 657	1 784	1 589	844	734	367	167
Total	357 275	492 700	313 827	356 015	1 060 519	878 799	466 796	348 983	344 181	369 429	358 850

GOATS	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Culled for destruction	1 580	4 571	2 008	2 377	2 846	2 296	2 664	2 019	3 038	2 136	2 377
Not slaughtered for human consumption	17 539	21 769	19 463	71 689	87 271	91 435	87 588	75 197	92 103	88 499	86 488
Slaughtered for human consumption	35 746	36 628	14 301	187 539	220 640	207 965	62 346	43 521	46 414	48 984	44 834
TSE suspects	65	429	1 032	1 560	1 129	1 517	1 249	2 198	1 126	1 231	1 476
Total	54 930	63 397	36 804	263 165	311 886	303 213	153 847	122 935	142 681	140 850	135 175

## 5.2. TSE cases

**Table SR1: Classical scrapie (CS) and atypical scrapie (AS) cases detected in ovine and caprine animals and prevalence rate in animals tested in 2012**

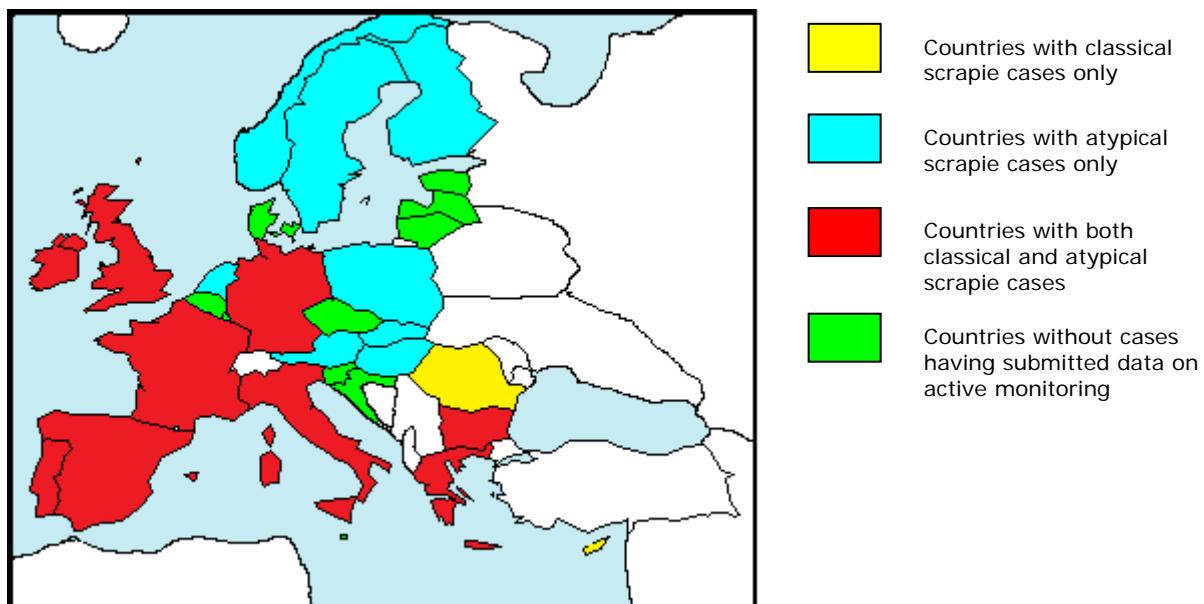
SHEEP	Animals Tested	All scrapie cases (CS + AS)	CS cases*	AS cases	Ratio CS**	Ratio AS**
Belgique/België	1596					
Bulgaria	13403	4	2	2	1.5	1.5
Ceská Republika	1529					
Danmark	3090					
Deutschland	20810	8	1	7	0.5	3.4
Eesti	572					
Elias	22337	570	565	5	252.9	2.2
España	23266	53	33	20	14.2	8.6
France	56238	24	2	22	0.4	3.9
Hrvatska	3234					
Ireland	21361	12	8	4	3.7	1.9
Italia	23480	197	192	5	81.8	2.1
Kypros	3483	9	9		25.8	
Latvija	65					
Lietuva	2655					
Luxembourg	485					
Magyarország	14747	11		11		7.5
Malta	317					
Nederland	21336	5		5		2.3
Österreich	5399	3		3		5.6
Polska	16310	2		2		1.2
Portugal	30484	48	4	44	1.3	14.4
Romania	38304	114	114		29.8	
Slovenija	510					
Slovensko	2914	3		3		10.3
Suomi/Finland	1387	1		1		7.2
Sverige	7403	3		3		4.1
United Kingdom	22135	34	6	28	2.7	12.6
Total EU 28	358 850	1 101	936	165	26.1	4.6
Norway	13983	6		6		4.3
Total Others	13 983	6	0	6	0.0	4.3

GOATS	Animals Tested	All scrapie cases (CS + AS)	CS cases*	AS cases	Ratio CS**	Ratio AS**
Belgique/België	157					
Bulgaria	1700					
Ceská Republika	240					
Danmark	681					
Deutschland	3396					
Eesti	10					
Elias	8852	69	69		77.9	
España	11977	6	3	3	2.5	2.5
France	68365	11	5	6	0.7	0.9
Hrvatska	864					
Ireland	63					
Italia	13077	7	7		5.4	
Kypros	4529	1102	1102		2433.2	
Latvija	10					
Lietuva	113					
Luxembourg	368					
Magyarország	195					
Malta	168					
Nederland	519					
Österreich	1674					
Polska	2312					
Portugal	8520	2		2		2.3
Romania	5893	1	1		1.7	
Slovenija	103					
Slovensko	47					
Suomi/Finland	200					
Sverige	26					
United Kingdom	1116	21	21		188.2	
Total EU 28	135 175	1 219	1 208	11	89.4	0.8
Norway	400					
Total Others	400	0	0	0	0.0	0.0

\* reported as CS or type unknown

\*\* number of cases per 10 000 tests

**Map 2: EU Member States (+ Norway) where TSE in small ruminants was reported in 2012**

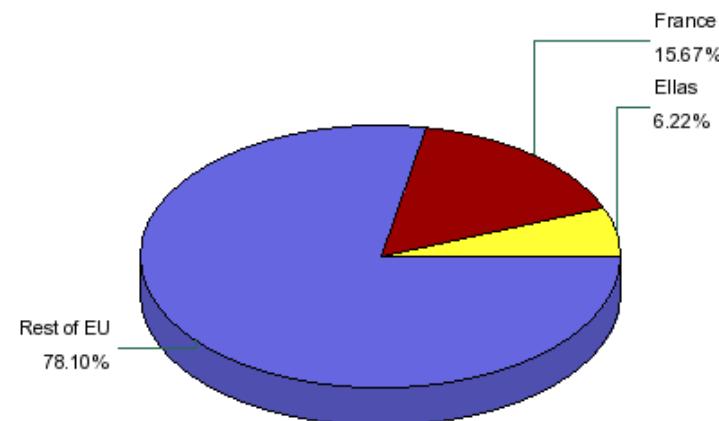


**Table SR2: Information on Index status of classical scrapie cases in 2012**

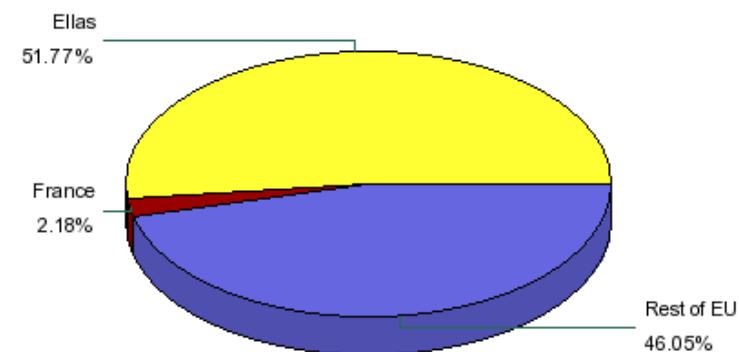
	Sheep				Goats			
	Number of cases reported as CS	and reported as Index cases	or reported as NOT Index cases	or reported as Index status unknown	Number of cases reported as CS	and reported as Index cases	or reported as NOT Index cases	or reported as NOT Index cases
Bulgaria	2		2					
Deutschland	1	1						
Elias	565	45	520		69	7	62	
España	33	7	26		3	3		
France	2	2			5	2	3	
Ireland	8	5	3					
Italia	136	46	90		4	3	1	
Kypros	9		9		1 102	13	1 089	
Portugal	1	1						
Romania	114	14	100		1	1		
United Kingdom	6	2	4		21	2	19	
Total EU 28	877	123	754	0	1 205	31	1 174	0

**Chart SR3: Distribution of TSE tests carried out and TSE cases (CS + AS) detected in 2012 in the EU 2**

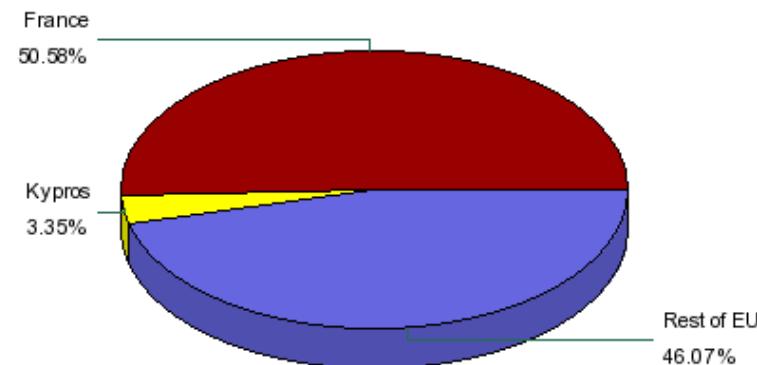
**TSE tests in Sheep**



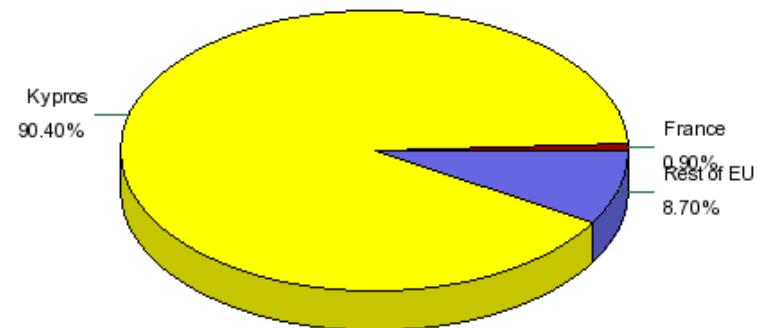
**TSE positives in Sheep (CS+AS)**



**TSE tests in Goats**



**TSE positives in Goats (CS+AS)**



**Table SR3: TSE cases (CS + AS) detected by active monitoring and passive surveillance (clinical suspects) in ovine and caprine animals in 2012**

	Sheep				Goats			
	Population*	TSE Positives		% detected by active monit.	Population*	TSE Positives		% detected by active monit.
		Act. Mon.	Suspects			Act. Mon.	Suspects	
<b>Belgique/België</b>	155 000				40 000			
Bulgaria	1 237 500	4		100 %	295 500			
Ceská Republika	159 091				19 850			
Danmark	108 500				14 800			
Deutschland	1 178 400	8		100 %	75 544			
Eesti	57 010				2 746			
Ellas	6 994 000	555	15	97 %	3 100 000	66	3	96 %
España	13 036 800	52	1	98 %	2 091 200	6		100 %
France	5 835 000	24		100 %	1 170 000	11		100 %
Hrvatska	499 000				55 000			
Ireland	2 450 800	12		100 %	7 000			
Italia	7 123 000	191	6	97 %	797 600	7		100 %
Kypros	247 400	9		100 %	207 000	176	926	16 %
Latvija	48 333				9 951			
Lietuva	32 400				9 300			
Luxembourg	5 000				3 300			
Magyarország	821 000	11		100 %	47 000			
Malta	10 500				4 100			
Nederland	559 000	5		100 %	251 000			
Österreich	225 600	3		100 %	48 300			
Polska	143 800	2		100 %	81 000			
Portugal	1 740 100	48		100 %	350 600	2		100 %
Romania	7 441 400	93	21	82 %	1 012 100		1	
Slovenija	92 000				30 000			
Slovensko	315 400	3		100 %	31 900			
Suomi/Finland	67 400	1		100 %	3 038			
Sverige	282 400	3		100 %	8 578			
United Kingdom	14 208 000	34		100 %	46 926	13	8	62 %
<b>Total EU 28</b>	<b>65 073 834</b>	<b>1 058</b>	<b>754</b>	<b>96 %</b>	<b>9 813 333</b>	<b>281</b>	<b>938</b>	<b>23 %</b>
Norway	790 000	6		100 %	51 000			
<b>Total Others</b>	<b>790 000</b>	<b>6</b>	<b>0</b>	<b>100 %</b>	<b>51 000</b>	<b>0</b>	<b>0</b>	<b>0 %</b>

\* Update for 2011 from Eurostat and Member States sources; count of ewes and goats for reproduction

### 5.3. Classical scrapie cases

**Table SR4: Classical scrapie cases\* in ovine and caprine animals slaughtered for human consumption in 2012 and prevalence rate in that stream from 2010 to 2012**

Sheep	Total tests	2012		2011	2010
		Number CS cases	Prevalence rate**	Prevalence rate**	Prevalence rate**
Belgique/België					
Bulgaria	11 609	2	1.7		1.5
Ceská Republika					
Danmark					
Deutschland	9 438			1.0	
Eesti					
Elias	7 426	13	17.5	39.3	34.9
España	10 867	6	5.5	2.7	2.8
France	12 457	1	0.8		
Hrvatska					
Ireland	10 958	1	0.9		
Italia	11 171	12	10.7	11.6	5.5
Kypros	3 295	8	24.3		
Latvija					
Lietuva	2 650				
Luxembourg	205				
Magyarország	5 338				
Malta	1				
Nederland	11 377			0.9	1.0
Österreich	34				
Polska	10 350				
Portugal	17 430			1.0	0.4
Romania	30 271	52	17.2	4.9	8.3
Slovenija					
Slovensko	815			19.2	27.0
Suomi/Finland	9				
Sverige	87				
United Kingdom	7 597	2	2.6	2.7	1.2
Total EU 28	163 385	97	5.9	4.7	4.6
Norway	8 629				
Total Others	8 629	0	0.0	0.0	0.0

\* All cases reported as classical scrapie or type unknown

\*\* CS cases per 10 000 tests

Goats	Total tests	2012		2011	2010
		Number CS cases	Prevalence rate**	Prevalence rate**	Prevalence rate**
Belgique/België					
Bulgaria	1 466				6.4
Ceská Republika					
Danmark					
Deutschland	1 581				
Eesti					
Elias	3 394			8.8	5.9
España	5 144				5.0
France	11 029				
Hrvatska					
Ireland					
Italia	8 239	2	2.4		1.3
Kypros	2 840	131	461.3	447.8	333.3
Latvija					
Lietuva	112				
Luxembourg	237				
Magyarország	72				
Malta	9				
Nederland	20				
Österreich	1				
Polska	148				
Portugal	6 642				1.5
Romania	3 530				
Slovenija					
Slovensko	19				
Suomi/Finland					
Sverige					
United Kingdom	351			114.0	40.7
Total EU 28	44 834	140	31.2	2.4	1.7
Norway	2				
Total Others	2	0	0.0	0.0	0.0

**Table SR5: Classical scrapie cases\* in ovine and caprine animals not slaughtered for human consumption (risk animals, mainly fallen stock) in 2012 and prevalence rate in that stream from 2010 to 2012**

Sheep	Total tests	2012		2011	2010
		Number CS cases	Prevalence rate**	Prevalence rate**	Prevalence rate**
Belgique/België	1 596				
Bulgaria	1 794				5.9
Ceská Republika	1 527				
Danmark	3 090				
Deutschland	11 295	1	0.9	2.5	3.7
Eesti	572				
Ellas	8 291	79	95.3	161.5	128.9
España	11 352	20	17.6	18.7	40.5
France	43 068	1	0.2	0.8	0.4
Hrvatska	3 234				
Ireland	10 339	4	3.9	18.3	8.7
Italia	10 116	42	41.5	65.1	41.0
Kypros	188	1	53.2	149.3	235.8
Latvija	65				
Lietuva	5				
Luxembourg	280				
Magyarország	7 292				
Malta	244				
Nederland	9 959				
Österreich	5 347				
Polska	5 959				
Portugal	12 954	4	3.1		
Romania	7 766	34	43.8	161.5	103.4
Slovenija	510				5.6
Slovensko	2 099			20.4	6.1
Suomi/Finland	1 378				
Sverige	7 316				
United Kingdom	14 512	4	2.8	62.1	
<b>Total EU 28</b>	<b>182 148</b>	<b>190</b>	<b>10.4</b>	<b>20.6</b>	<b>12.3</b>
<b>Norway</b>	5 187				
<b>Total Others</b>	<b>5 187</b>	<b>0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>

\* All cases reported as classical scrapie or type unknown

\*\* CS cases per 10 000 tests

Goats	Total tests	2012		2011	2010
		Number CS cases	Prevalence rate**	Prevalence rate**	Prevalence rate**
Belgique/België	156				
Bulgaria	234				82.3
Ceská Republika	240				
Danmark	681				
Deutschland	1 795				
Eesti	10				
Ellas	3 780	10	26.5	28.7	28.8
España	6 771	3	4.4	4.4	2.4
France	56 873	2	0.4		0.2
Hrvatska	864				
Ireland	63				
Italia	4 675	1	2.1	8.4	4.5
Kypros	264	45	1704.5	760.0	1091.5
Latvija	10				
Lietuva	1				
Luxembourg	131				
Magyarország	123				
Malta	159				
Nederland	499				
Österreich	1 673				
Polska	2 164				
Portugal	1 867				5.6
Romania	2 346				
Slovenija	103				
Slovensko	28				
Suomi/Finland	200				
Sverige	26				
United Kingdom	752	9	119.7	58.1	78.2
<b>Total EU 28</b>	<b>86 488</b>	<b>70</b>	<b>8.1</b>	<b>5.0</b>	<b>6.3</b>
<b>Norway</b>	398				
<b>Total Others</b>	<b>398</b>	<b>0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>

**Table SR6: Classical scrapie cases\* in suspect ovine and caprine animals in 2012 and prevalence rate in that stream from 2010 to 2012**

Sheep	Total tests	2012		2011	2010
		Number CS cases	Prevalence rate**	Prevalence rate**	Prevalence rate**
Belgique/België					
Bulgaria					
Ceská Republika	2				
Danmark					
Deutschland	32				
Eesti					
Elias	47	15	3191.5	5000.0	5000.0
España	2	1	5000.0	2500.0	2857.1
France	3				2500.0
Hrvatska					
Ireland	5			7142.9	5555.6
Italia	10	6	6000.0	7500.0	10000.0
Kypros				2250.0	846.8
Latvija					
Lietuva					
Luxembourg					
Magyarország	5				
Malta					
Nederland					
Österreich					
Polska					
Portugal					
Romania	56	21	3750.0	2000.0	2500.0
Slovenija					
Slovensko					
Suomi/Finland					
Sverige					
United Kingdom	5			9361.7	
Total EU 28	167	43	2574.9	2724.8	1294.3
Norway	21				
Total Others	21	0	0.0	0.0	0.0

\* All cases reported as classical scrapie or type unknown

\*\* CS cases per 10 000 tests

Goats	Total tests	2012		2011	2010
		Number CS cases	Prevalence rate**	Prevalence rate**	Prevalence rate**
Belgique/België	1				
Bulgaria					
Ceská Republika					
Danmark					
Deutschland	14				
Eesti					
Elias	4	3	7500.0		
España	1				
France					3333.3
Hrvatska					
Ireland					
Italia	1				
Kypros	1 425	926	6498.2	2268.8	2678.2
Latvija					
Lietuva					
Luxembourg					
Magyarország					
Malta					
Nederland					
Österreich					
Polska					
Portugal					
Romania	17	1	588.2		
Slovenija					
Slovensko					
Suomi/Finland					
Sverige					
United Kingdom	13	8	6153.8	1666.7	
Total EU 28	1 476	938	6355.0	2160.8	2611.0
Norway					
Total Others	0	0	0.0	0.0	0.0

**Table SR7: classical scrapie cases\* in ovine and caprine animals culled in the frame of TSE eradication in 2012 and prevalence rate in that stream from 2010 to 2012**

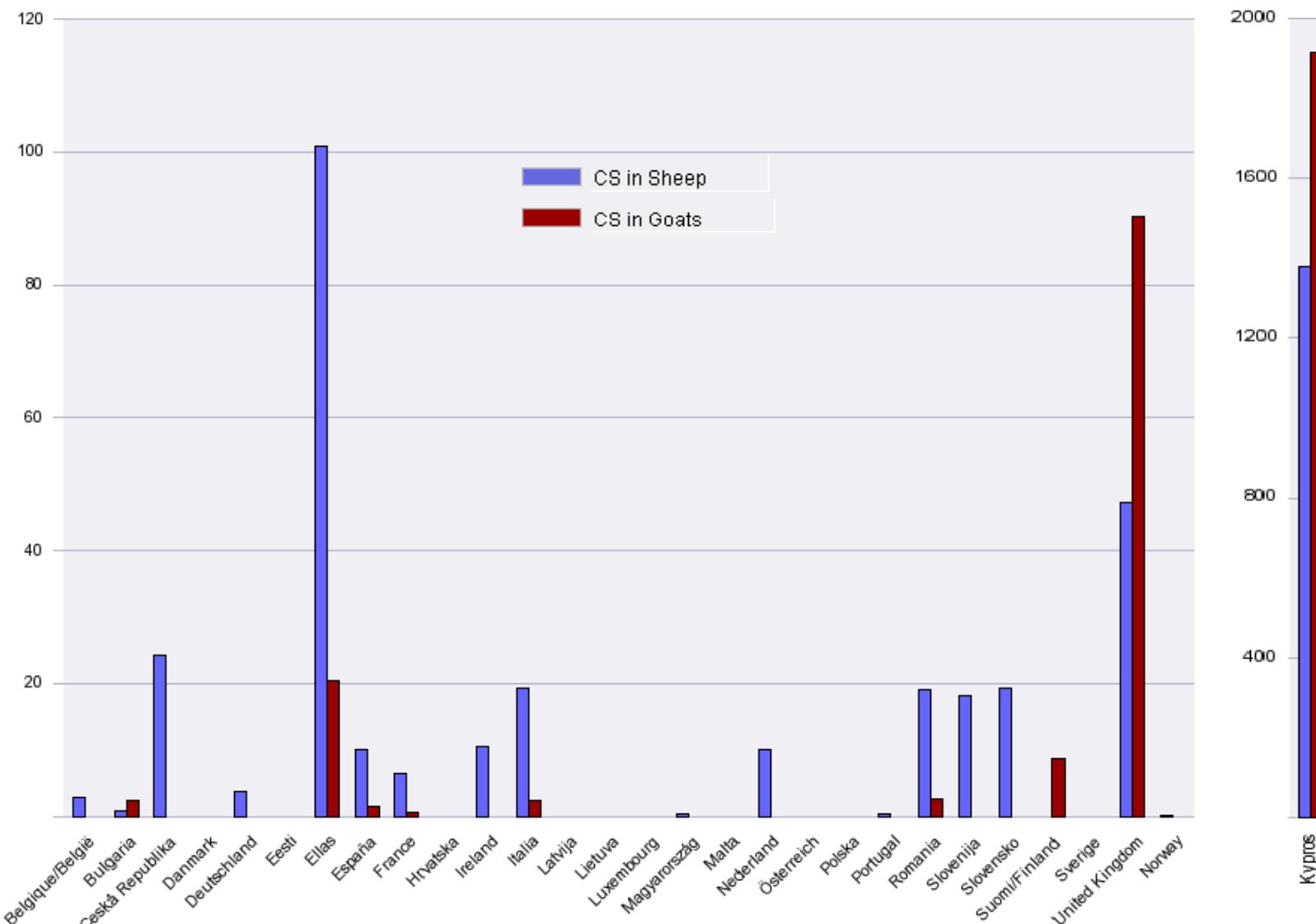
Sheep	Total tests	2012		2011	2010
		Number CS cases	Prevalence rate**	Prevalence rate**	Prevalence rate**
Belgique/België					
Bulgaria					
Ceská Republika					
Danmark					
Deutschland	45				
Eesti					
Elias	6573	458	696.8	696.3	1046.4
España	1045	6	57.4	83.4	257.6
France	710			12.4	75.9
Hrvatska					
Ireland	59	3	508.5	388.6	165.3
Italia	2183	132	604.7	431.3	199.5
Kypros					
Latvija					
Lietuva					
Luxembourg					
Magyarország	2112				
Malta	72				
Nederland					
Österreich	18				
Polska	1				
Portugal	100			14.6	
Romania	211	7	331.8	397.4	232.6
Slovenija					88.5
Slovensko					
Suomi/Finland					
Sverige					
United Kingdom	21				
Total EU 28	13 150	606	460.8	494.3	469.8
Norway	146				
Total Others	146	0	0.0	0.0	0.0

\* All cases reported as classical scrapie or type unknown

\*\* CS cases per 10 000 tests

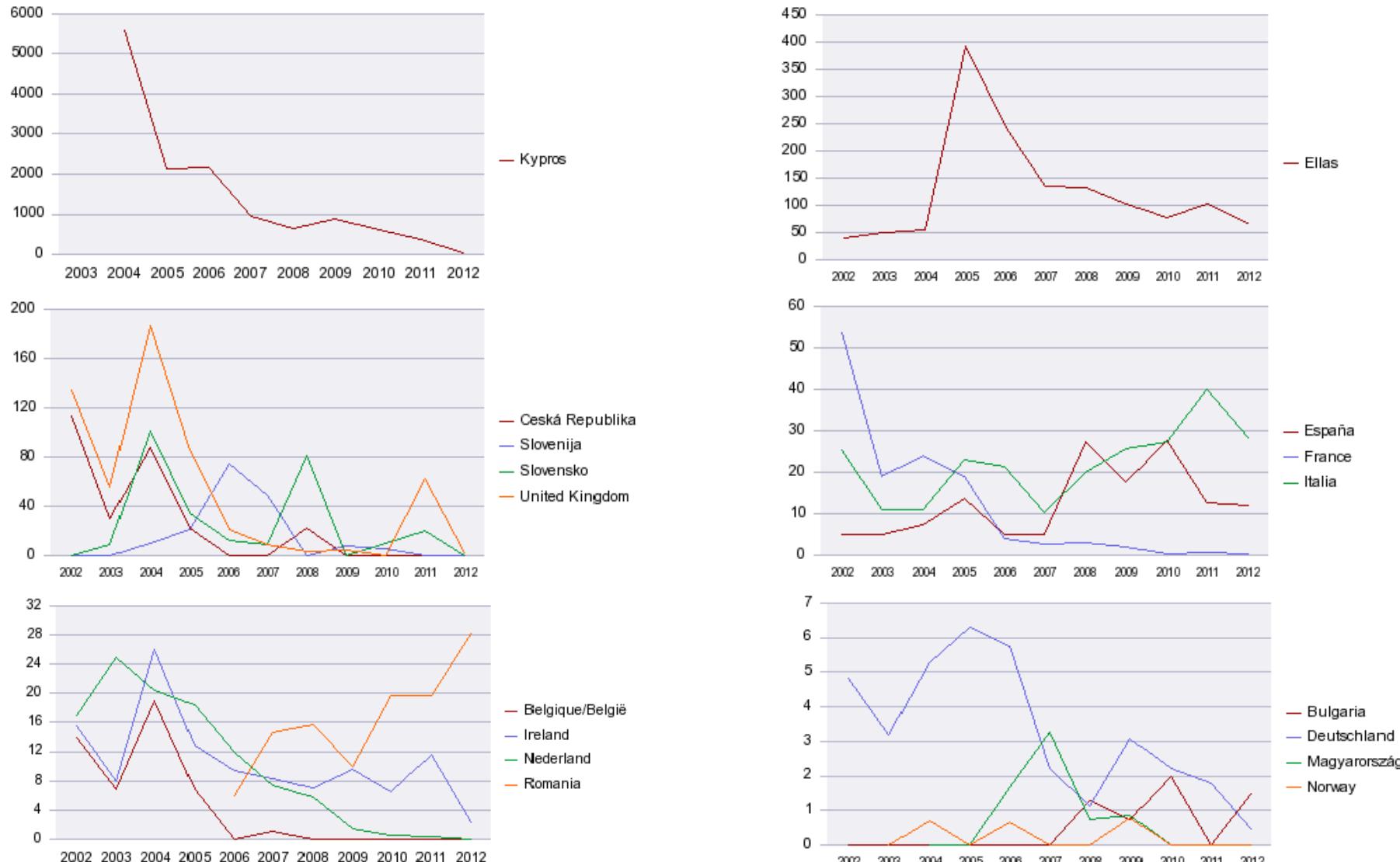
Goats	Total tests	2012		2011	2010
		Number CS cases	Prevalence rate**	Prevalence rate**	Prevalence rate**
Belgique/België					
Bulgaria					
Ceská Republika					
Danmark					
Deutschland	6				
Eesti					
Elias	1674	53	316.6	311.8	646.4
España		61		116.3	15.5
France	463	3	64.8		281.3
Hrvatska					
Ireland					
Italia	162	4	246.9	23.9	41.5
Kypros					
Latvija					
Lietuva					
Luxembourg					
Magyarország					
Malta					
Nederland					
Österreich					
Polska					
Portugal	11				
Romania					
Slovenija					
Slovensko					
Suomi/Finland					
Sverige					
United Kingdom					
Total EU 28	2 377	60	252.4	206.0	243.6
Norway					
Total Others	0	0	0.0	0.0	0.0

**Chart SR4: Prevalence rate of classical scrapie\* in tested ovine and caprine animals (cases per 10 000 tests, animals culled for destruction are excluded) in the Member States and Norway from 2002 to 2012**



\* All cases reported as classical scrapie or type unknown

**Chart SR5: Evolution of the overall prevalence rate (cases per 10 000 tested, animals culled for destruction are excluded) of classical scrapie\* in ovine animals in Member States individually from 2002 to 2012**

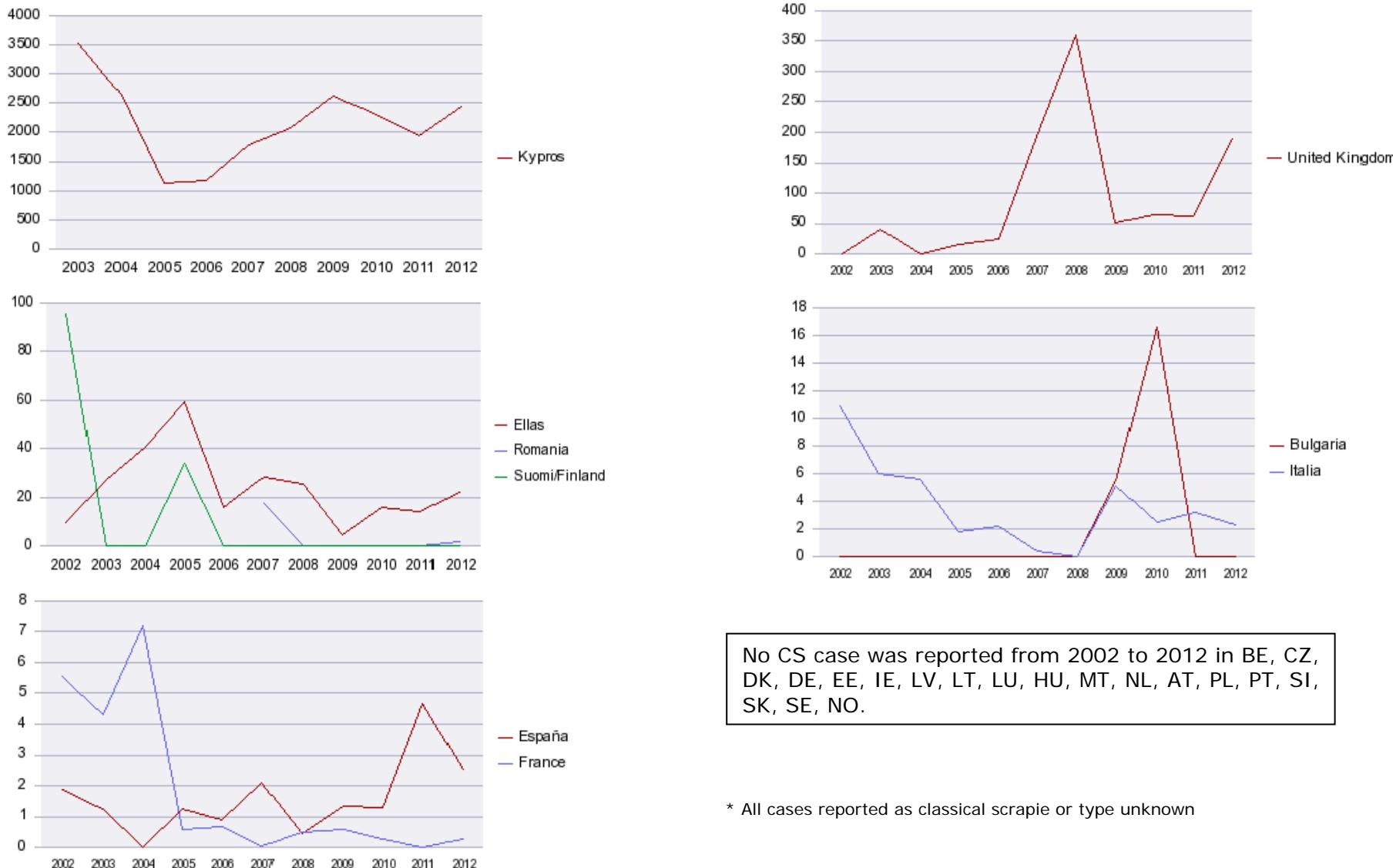


\* All cases reported as classical scrapie or type unknown

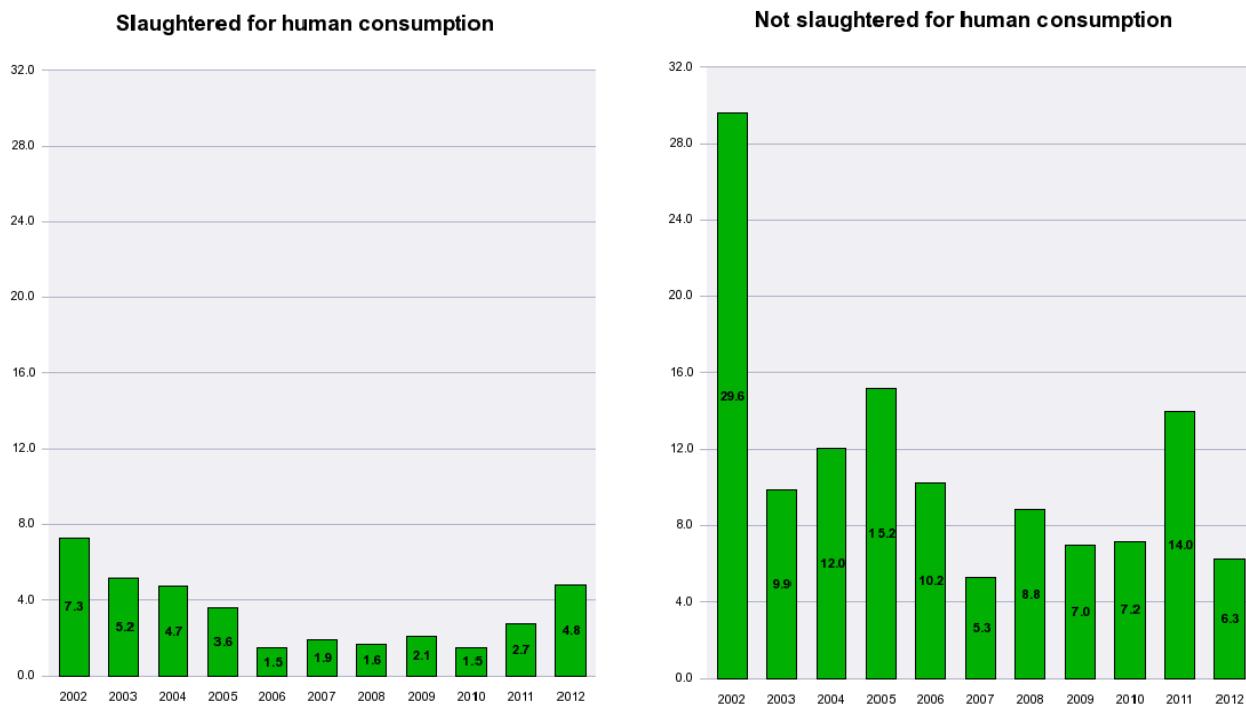
No CS case was reported from 2002 to 2012 in DK, EE, LV, LT, LU, MT, AT, PL, SE, FI.

Due to a different approach regarding the reporting dates, the data from Portugal did not allow interpretation.

**Chart SR6: Evolution of the overall prevalence rate (cases per 10 000 tested, animals culled for destruction are excluded) of classical scrapie\* in caprine animals in Member States individually from 2002 to 2012**

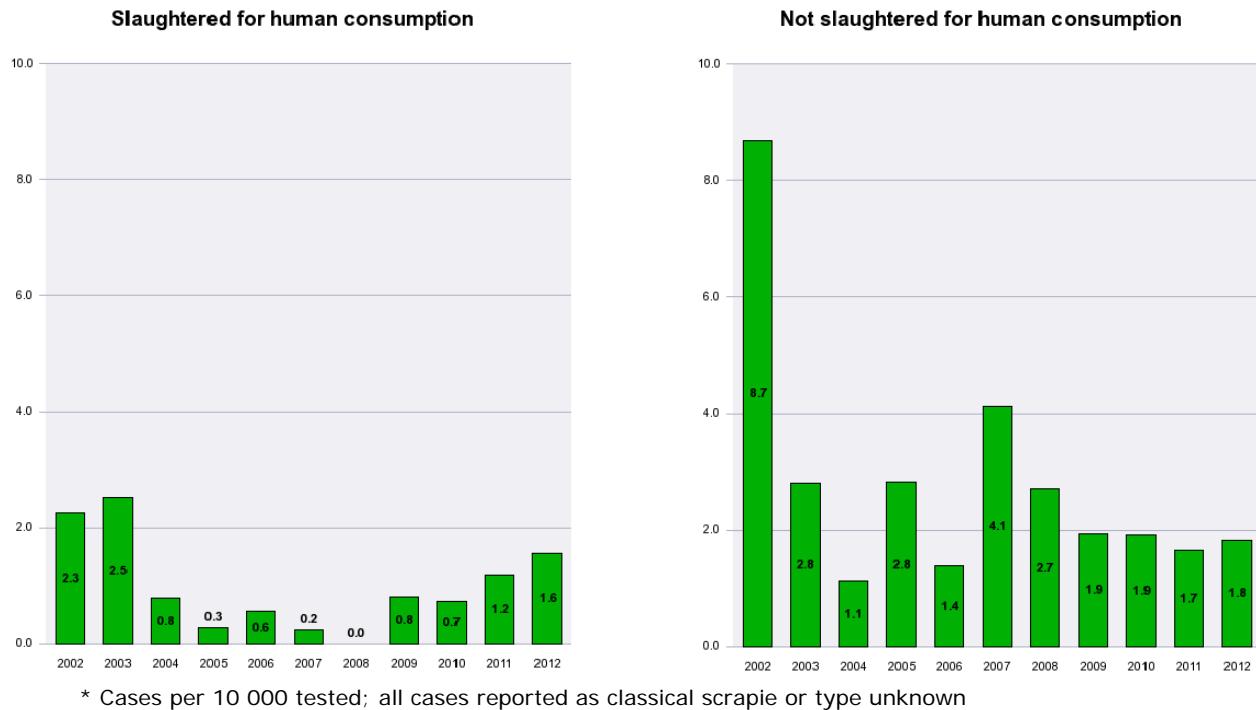


**Chart SR7: Prevalence rate of classical scrapie\* in ovine animals slaughtered and not slaughtered for human consumption in the EU 28 (except Cyprus and Ellas) and Norway tested from 2002 to 2012**



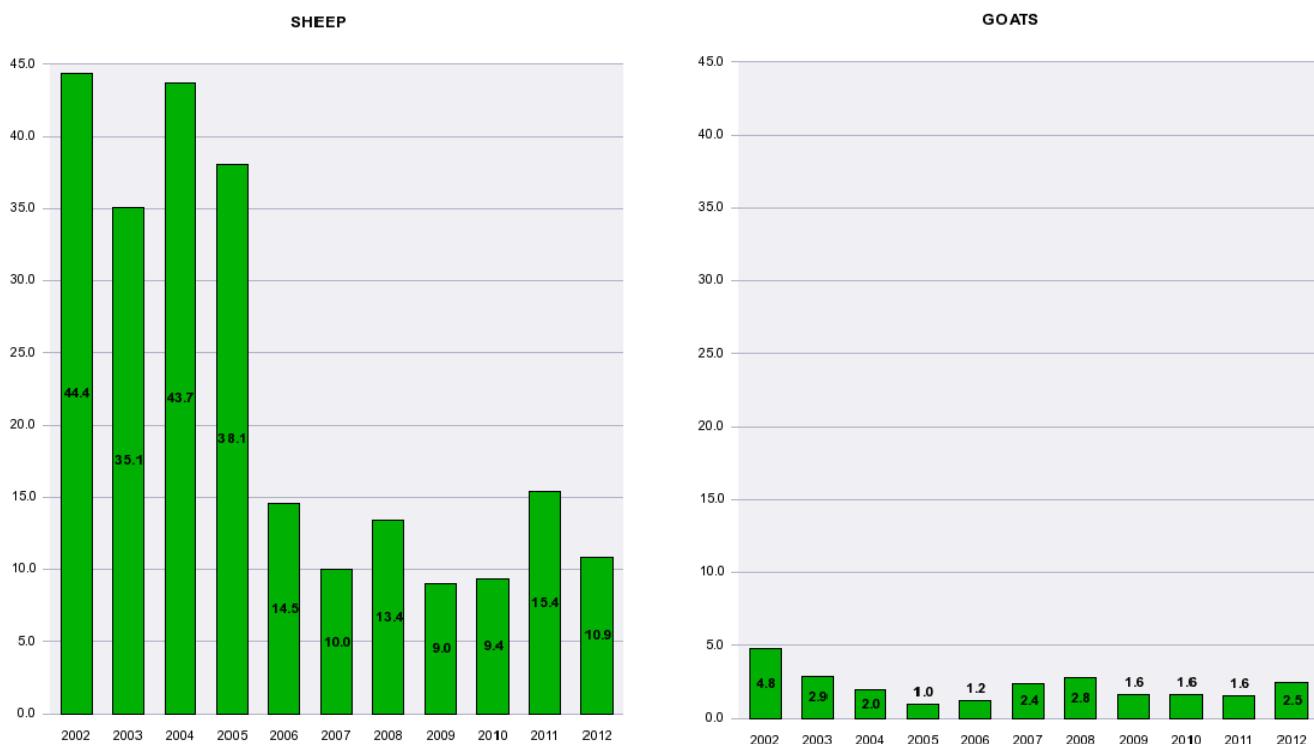
\* Cases per 10 000 tested; all cases reported as classical scrapie or type unknown

**Chart SR8: Prevalence rate of classical scrapie\* in caprine animals slaughtered and not slaughtered for human consumption in the EU 28 (except Cyprus and Ellas) and Norway tested from 2002 to 2012**



\* Cases per 10 000 tested; all cases reported as classical scrapie or type unknown

**Chart SR9: Evolution of the overall prevalence rate of classical scrapie\* in small ruminants in the EU 28 (except Cyprus and Ellas) from 2002 to 2012**



\* Cases per 10 000 tested; animals culled for destruction are excluded; all cases reported as classical scrapie or type unknown

### Comments on classical scrapie cases

The overall prevalence of TSE in sheep is higher than in goats in the EU (CY and EL excluded).

Prevalence in tested animals not slaughtered for human consumption (risk animals, mainly fallen stock) used to be significantly higher than in healthy slaughtered animals in the past. The difference between the two target groups is however very limited in 2012, both in sheep and goats.

Even though there is still no clear trend with regard to the evolution of the overall prevalence of TSE in tested animals of both species at the EU level (CY and EL excluded), the series of charts in Chart SR5 and Chart SR6 show that the evolution of classical scrapie differs widely from one Member State to the other. Positive evolutions can actually be observed in sheep in most Member States, while a few are still struggling to get the situation under control. Though a smaller number of Member States are having an issue with classical scrapie in goats, the evolution of the situation is still not favourable in many of them.

In the sheep sector, CY and to a lesser extent EL have a higher prevalence of TSE than the other Member States. However, results show a very significant improvement of the situation in CY and also a positive evolution in EL.

CY appears to have a significantly higher prevalence of TSE in goats than any other Member States, with no clear evolution.

#### **5.4. Atypical scrapie cases**

**Table SR8: TSE cases reported as atypical scrapie from 2004 to 2012 (animals culled in the frame of TSE eradication are excluded)**

SHEEP	2004			2005			2006			2007			2008			2009			2010			2011			2012			
	Total cases	Atypicals	%																									
Belgique/België	4	1	25 %	2	1	50 %	3	3	100 %	3	2	67 %																
Bulgaria													4	2	50 %	1			3							4	2	50 %
Ceská Republika	9			1						1	1	100 %	2															
Danmark							3	3	100 %				2	2	100 %				2	2	100 %	5	5	100 %				
Deutschland	43			28			24			15	6	40 %	7	4	57 %	12	4	33 %	13	8	62 %	19	15	79 %	8	7	88 %	
Eesti																			1	1	100 %	1	1	100 %				
Elias	48			258			230	2	1 %	124	1	1 %	188	3	2 %	184	4	2 %	161	1	1 %	181	4	2 %	112	5	4 %	
España	20	1	5 %	43	2	5 %	63	17	27 %	50	25	50 %	101	22	22 %	70	18	26 %	89	20	22 %	48	18	38 %	47	20	43 %	
France	59	9	15 %	79	13	16 %	380	186	49 %	263	168	64 %	74	47	64 %	38	27	71 %	31	28	90 %	28	24	86 %	24	22	92 %	
Ireland	55	2	4 %	27			54			37	1	3 %	16			25	5	20 %	16	2	13 %	25	1	4 %	9	4	44 %	
Italia	24			58	7	12 %	134	15	11 %	117	22	19 %	75	7	9 %	62			62			105	7	7 %	65	5	8 %	
Kypros	1208			715			1327			798			535			185			47			12			9			
Magyarország							7	5	71 %	6	2	33 %	8	7	88 %	15	14	93 %	7	7	100 %	10	10	100 %	10	10	100 %	
Nederland	39			37	2	5 %	43			25	2	8 %	12			3			2	1	50 %	8	7	88 %	5	5	100 %	
Österreich																					4	4	100 %	3	3	100 %		
Polska																		4	4	100 %	2	2	100 %	4	4	100 %		
Portugal	28	28	100 %	57	57	100 %	65	69	106 %	95	91	96 %	89	78	88 %	46	36	78 %	47	46	98 %	42	40	95 %	48	44	92 %	
Romania							9			20			26			10			16			61			107			
Slovenija	1			4			13			9						3			4	2	50 %	1	1	100 %				
Slovensko	19			9			10	1	10 %	8			18			1	1	100 %	5	3	60 %	10	4	40 %	3	3	100 %	
Suomi/Finland	1	1	100 %	1	1	100 %	2	2	100 %	1	1	100 %							3	3	100 %				1	1	100 %	
Sverige	2	2	100 %	1	1	100 %	8	8	100 %	2	2	100 %				2	2	100 %	4	4	100 %	3	3	100 %				
United Kingdom	331	17	5 %	346	30	9 %	217	61	28 %	82	42	51 %	25	15	60 %	36	26	72 %	20	19	95 %	154	24	16 %	34	28	82 %	
Total EU 28	1891	61	3 %	1666	114	7 %	2592	371	14 %	1656	366	22 %	1182	187	16 %	697	141	20 %	535	149	28 %	721	171	24 %	493	163	33 %	
Norway	15	14	93 %	4	4	100 %	9	8	89 %	9	9	100 %	7	7	100 %	13	12	92 %	4	4	100 %	6	6	100 %	6	6	100 %	
Total Others	15	14	93 %	4	4	100 %	9	8	89 %	9	9	100 %	7	7	100 %	13	12	92 %	4	4	100 %	6	6	100 %	6	6	100 %	

**Table SR9: Ratio of TSE cases reported as atypical in ovine animals tested from 2004 to 2012 (animals culled in the frame of TSE eradication are excluded)**

SHEEP	2004			2005			2006			2007			2008			2009			2010			2011			2012		
	Animal Tested	Atypicals	Ratio*																								
Belgique/België	1587	1	6.3	1469	1	6.8	10167	3	3.0	9204	2	2.2	3221			1487			1610			1724			1596		
Bulgaria	1145			6934			10589			12725			15355	2	1.3	13740			15018			7172			13403	2	1.5
Ceská Republika	1029			451			1097			2839	1	3.5	914			582			726			744			1529		
Danmark	5349			4394			8067	3	3.7	6197			6950	2	2.9	6055			6069	2	3.3	6020	5	8.3	3090		
Deutschland	81173			44495			41771			40367	6	1.5	26539	4	1.5	25988	4	1.5	22679	8	3.5	22246	15	6.7	20765	7	3.4
Eesti	410			1251			2403			2918			745			654			718	1	13.9	850	1	11.8	572		
Elias	8738			6574			9356	2	2.1	9078	1	1.1	14074	3	2.1	17382	4	2.3	20402	1	0.5	17385	4	2.3	15764	5	3.2
Espana	25890	1	0.4	29193	2	0.7	89021	17	1.9	50998	25	4.9	28879	22	7.6	29320	18	6.1	24957	20	8.0	23393	18	7.7	22221	20	9.0
France	24619	9	3.7	34701	13	3.7	488254	186	3.8	338796	168	5.0	92755	47	5.1	58101	27	4.6	59573	28	4.7	58955	24	4.1	55528	22	4.0
Hrvatska																									3234		
Ireland	20344	2	1.0	21069			57245			43132	1	0.2	22449			20933	5	2.4	21458	2	0.9	20636	1	0.5	21302	4	1.9
Italia	21783			22606	7	3.1	55920	15	2.7	92263	22	2.4	33918	7	2.1	24291			22726			24594	7	2.8	21297	5	2.3
Kypros	2160			3337			6108			8499			8329			2109			750			320			3483		
Latvija	37			43			888			1456			64			81			48			84			65		
Lietuva	234			1028			1826			2781			3225			2119			2279			3180			2655		
Luxembourg	424			666			530			947			425			529			523			589			485		
Magyarország	5965			9044			12061	5	4.1	12182	2	1.6	13211	7	5.3	11756	14	11.9	12397	7	5.6	13709	10	7.3	12635	10	7.9
Malta	172			256			340			57			72			60			271			201			245		
Nederland	19081			18997	2	1.1	36102			30803	2	0.6	20454			19996			20226	1	0.5	21715	7	3.2	21336	5	2.3
Österreich	2498			4297			5947			6588			5938			5914			5539			4963	4	8.1	5381	3	5.6
Polska	667			2563			5617			7647			11174	4	3.6	15022	2	1.3	14222	4	2.8	16309	1	0.6			
Portugal	44224	28	6.3	72516	57	7.9	63711	69	10.8	85101	91	10.7	86380	78	9.0	37363	36	9.6	38131	46	12.1	45217	40	8.8	30384	44	14.5
Romania				14867			13718			16449			10079			8107			31099			38093					
Slovenija	1006			1878			1757			1845			1981			3584			3608	2	5.5	520	1	19.2	510		
Slovensko	1875			2615			7212	1	1.4	8358			2212			2168	1	4.6	2018	3	14.9	2999	4	13.3	2914	3	10.3
Suomi/Finland	1305	1	7.7	1294	1	7.7	3700	2	5.4	3020	1	3.3	1164			1138			949	3	31.6	1248			1387	1	7.2
Sverige	3154	2	6.3	3240	1	3.1	8769	8	9.1	9922	2	2.0	3840			4808	2	4.2	6500	4	6.2	7082	3	4.2	7403	3	4.1
United Kingdom	16822	17	10.1	37157	30	8.1	73544	61	8.3	44147	42	9.5	24660	15	6.1	23081	26	11.3	19617	19	9.7	21042	24	11.4	22114	28	12.7
Total EU 28	291701	61	2.1	329505	114	3.5	1013815	371	3.7	843558	366	4.3	441850	187	4.2	334492	141	4.2	331921	149	4.5	351909	171	4.9	345700	163	4.7
Norway	13845	14	10.1	14512	4	2.8	14931	8	5.4	13556	9	6.6	13143	7	5.3	13067	12	9.2	12994	4	3.1	13246	6	4.5	13837	6	4.3
Total Others	13845	14	10.1	14512	4	2.8	14931	8	5.4	13556	9	6.6	13143	7	5.3	13067	12	9.2	12994	4	3.1	13246	6	4.5	13837	6	4.3

\*cases per 10 000 tests

**Table SR10: Ratio of TSE cases reported as atypical in caprine animals tested from 2004 to 2012 (animals culled in the frame of TSE eradication are excluded)**

GOATS	2004			2005			2006			2007			2008			2009			2010			2011			2012		
	Animal Tested	Atypicals	Ratio*																								
Belgique/Belgie	272			908			1 063			749			365			222			216			217			157		
Bulgaria	724			1 867			2 640			2 511			1 813			1 800			1 805			921			1 700		
Ceská Republika	85			212			113			163			328			172			150			117			240		
Danmark	1 320			1 150			1 716			1 564			1 838			1 828			1 820			1 723			681		
Deutschland	5 684			4 641			4 604			3 928			3 615			3 159			3 701			3 570			3 390		
Eesti				17			61			55			11			6			9			10			10		
Ellas	3 190			4 371			6 341			5 298			6 313			8 471			8 748			10 565			7 178		
Espania	3 667			35 434			56 142	4	0.7	38 194	6	1.6	21 319	5	2.3	22 773	2	0.9	22 944	5	2.2	17 135	3	1.8	11 916	3	2.5
France	5 550			149 056	6	0.4	162 137	1	0.1	184 170	5	0.3	79 995	8	1.0	51 418	3	0.6	70 482	5	0.7	71 105	6	0.8	67 902	6	0.9
Hrvatska																									864		
Ireland	1			79			208			149			132			90			98			73			63		
Italia	3 520			28 000	3	1.1	27 275	6	2.2	24 749	3	1.2	14 636	1	0.7	13 591			11 946			12 592	4	3.2	12 915		
Kypros	1 335			3 387			6 025			6 715			5 259			3 048			1 408			1 485			4 529		
Latvija	1			40			17			66			10			11			5			15			10		
Lietuva	4			6			27			94			131			96			77			106			113		
Luxembourg	77			210			450			533			360			302			218			241			368		
Magyarország	332			262			208			413			282			294			265			244			195		
Malta	34			65			47			9			48			58			177			161			168		
Nederland	605			20 160			25 583			15 770			647			656			619			640			519		
Österreich	345			1 199			1 611			1 820			1 829			1 817			1 789			1 523			1 674		
Polska							167			717			1 011			1 151			1 402			1 811			2 312		
Portugal	7 287			5 638			6 367			8 634	1	1.2	8 567	1	1.2	6 874	3	4.4	8 486	2	2.4	10 373	1	1.0	8 509	2	2.4
Romania										576			929			516			664			2 406			5 893		
Slovenija	261			477			372			429			488			958			1 041			112			103		
Slovensko	5			105			68			83			12			25			24			50			47		
Suomi/Finland	261			593			516			431			274			350	1	28.6	270			216			200		
Sverige	89			266			248			86			55			54			28			19			26		
United Kingdom	147			2 645			5 034			3 011			916			1 176			1 251			1 284			1 116		
Total EU 28	34 796	0	0.0	260 788	9	0.3	309 040	11	0.4	300 917	15	0.5	151 183	15	1.0	120 916	9	0.7	139 643	12	0.9	138 714	14	1.0	132 798	11	0.8
Norway	304			2 804			5 651	1	1.8	3 462			354			360			325			390			400		
Total Others	304	0	0.0	2 804	0	0.0	5 651	1	1.8	3 462	0	0.0	354	0	0.0	360	0	0.0	325	0	0.0	390	0	0.0	400	0	0.0

\*cases per 10 000 tests

### Comments on atypical cases

Atypical TSE cases were confirmed in several Member States. Atypical TSE even accounts quite consistently, year after year, for a large majority (if not 100%) of the TSE cases in some Member States, e.g. in sheep in DK, HU, PL, PT, NO, etc. In some other Member States, e.g. France and the UK (except for 2011), the proportion of atypical TSE cases has been steadily growing since 2004, passing from a small share to a large majority of the TSE cases.

These results should however be interpreted with caution as the monitoring requirements have changed during this period and the testing and sampling methods have an influence on the detection of atypical cases.

## 5.5. TSE discriminatory tests

**Table SR11: Discriminatory testing on TSE cases confirmed in sheep and goats in 2012**

Results of primary molecular testing with a discriminatory immuno-blotting (Point 3.2 c(i), Chapter C , Annex X to Regulation (EC) 999/2001).

SHEEP	Total number of cases submitted to discriminatory testing	Excluding BSE	BSE like	Inconclusive
Deutschland	1	1		
Elias	75	75		
España	52	52		
France	2	2		
Ireland	7	7		
Italia	197	197		
Österreich	3	3		
Polska	2	1		1
Portugal	1	1		
Romania	114	114		
United Kingdom	34	34		
<b>Total EU 28</b>	<b>488</b>	<b>487</b>	<b>0</b>	<b>1</b>

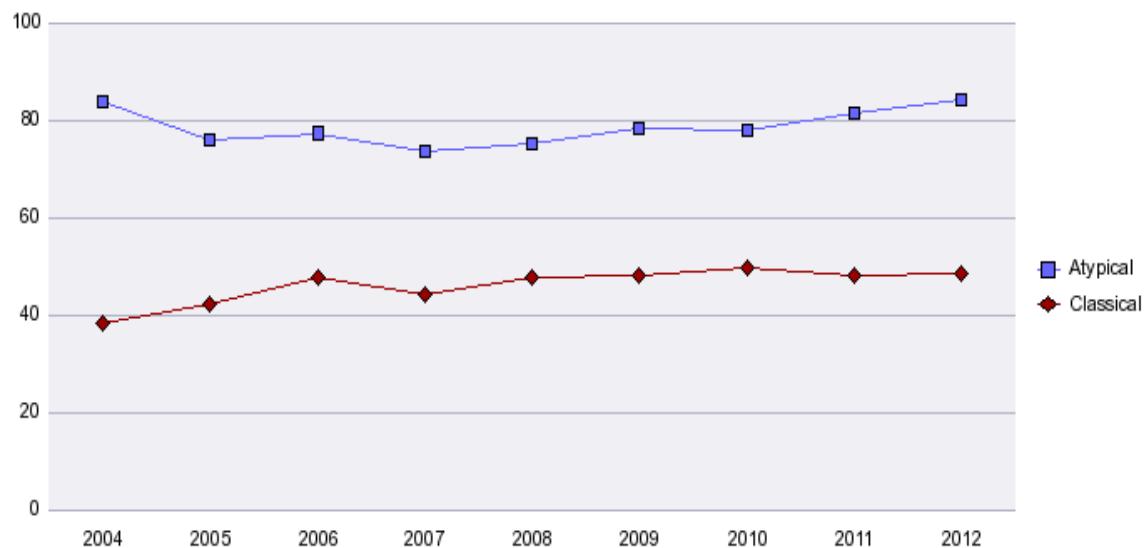
GOAT	Total number of cases submitted to discriminatory testing	Excluding BSE	BSE like	Inconclusive
Elias	12	12		
España	6	6		
France	5	5		
Italia	7	7		
Kypros	52	52		
Romania	1	1		
United Kingdom	21	21		
<b>Total EU 28</b>	<b>104</b>	<b>104</b>	<b>0</b>	<b>0</b>

### Comments on TSE / BSE discriminatory testing

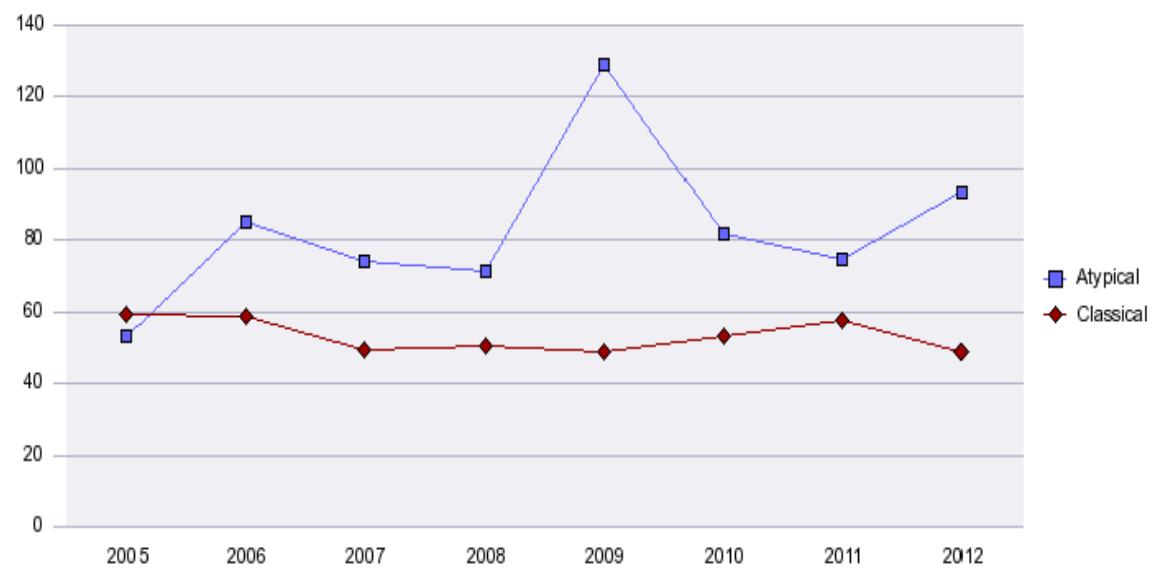
As in the previous years, the 2012 results provide no element suggesting the possible presence of BSE in sheep and goats.

## 5.6. Age distribution of TSE cases

**Chart SR10: Average age (months) of TSE cases in ovine animals tested from 2004 to 2012 in the EU Member States and Norway and reported as classical or atypical respectively**



**Chart SR11: Average age (months) of TSE cases in caprine animals tested from 2005 to 2012 in the EU Member States and Norway and reported as classical or atypical respectively**



**Chart SR12: Age (months) distribution of TSE cases in sheep detected since 2002 in the EU 28 and Norway, in cases reported as atypical and classical respectively**



### **Comments on the age distribution of TSE positive cases**

No clear trend over the years in the average age of atypical scrapie and classical scrapie cases can be identified in sheep or in goats.

Most classical scrapie cases are detected in animals between 2 and 6 years old, with a peak around 3 years of age. In atypical scrapie, the frequency of cases increases regularly with the age of the animals.

## 5.7. Genotyping

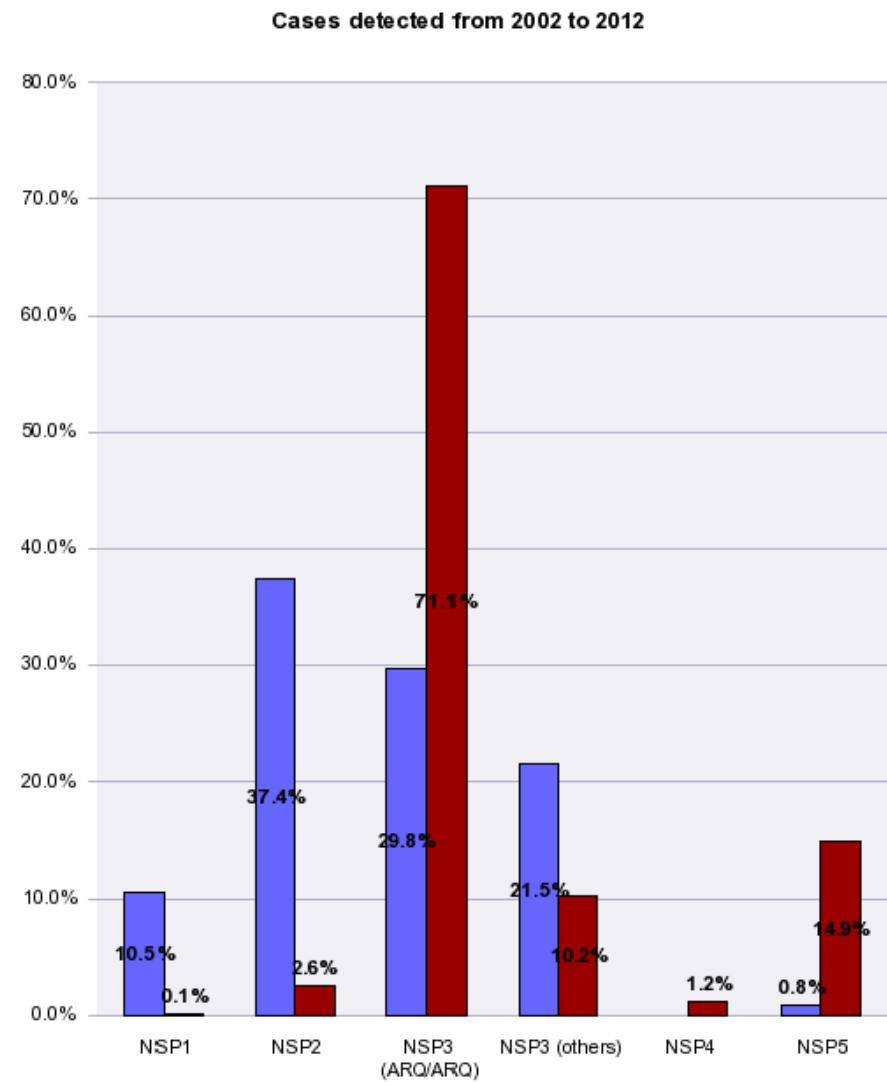
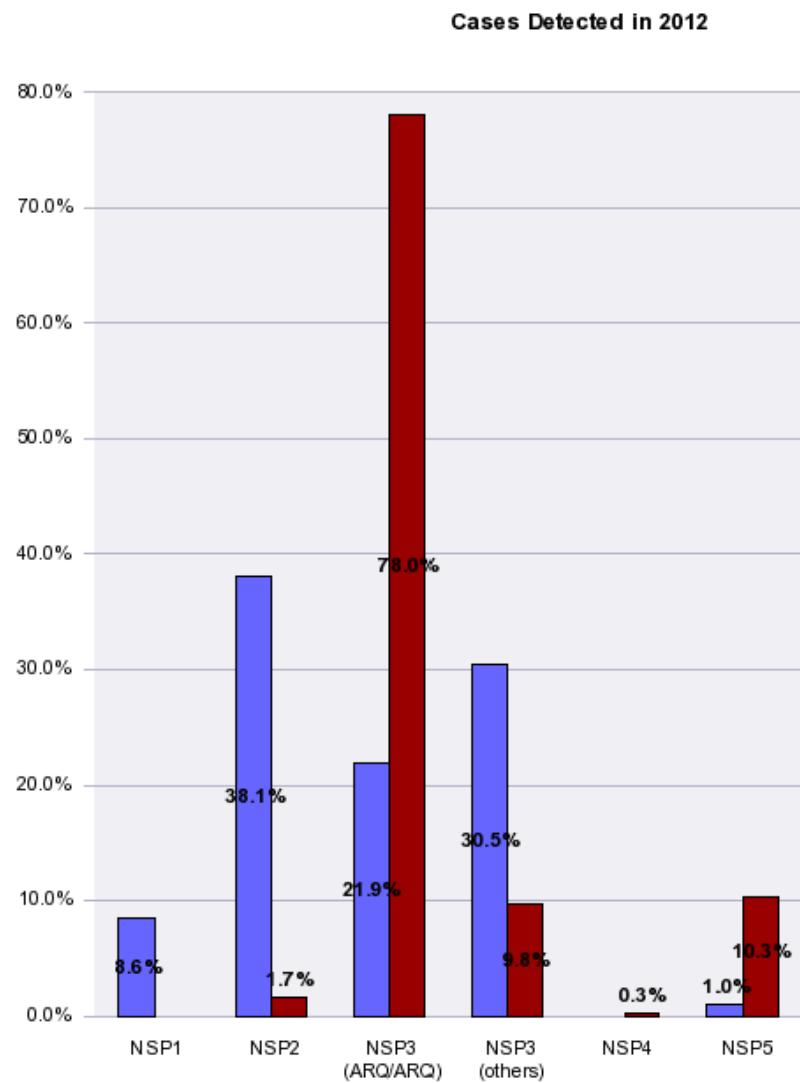
The genotypes found in positive cases and by random sampling were grouped in accordance with the NSP classification system used in the United Kingdom for genetic resistance to classical scrapie and BSE:

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

**Table SR12: Distribution of known genotypes in confirmed TSE cases in 2012, regardless of the scrapie type**

	Known number of TSE cases genotyped	% of the TSE cases submitted to genotyping	Distribution of known genotypes					
			NSP1	NSP2	NSP3		NSP4	NSP5
					ARQ/ARQ	Others		
Belgique/België								
Bulgaria								
Ceská Republika								
Danmark								
Deutschland	1	13 %				12.5%		
Eesti								
Elias	451	79 %		1.6%	62.6%	10.5%		1.4%
Espana	43	81 %	1.9%	5.7%	64.2%	5.7%		1.9%
France	17	71 %	4.2%	33.3%	20.8%	8.3%	4.2%	
Hrvatska								
Ireland	11	92 %			50.0%	16.7%		25.0%
Italia	194	98 %		1.0%	88.8%	7.1%		1.5%
Kypros	8	89 %		33.3%	55.6%			
Latvija								
Lietuva								
Luxembourg								
Magyarország	11	100 %		54.5%	18.2%	27.3%		
Malta								
Nederland	5	100 %		60.0%		40.0%		
Österreich	3	100 %	33.3%		33.3%	33.3%		
Polska	2	100 %		50.0%				50.0%
Portugal	14	31 %	2.2%	8.9%	13.3%	6.7%		
Romania	111	97 %		0.9%	39.5%	3.5%	0.9%	52.6%
Slovenija								
Slovensko	3	100 %	33.3%		33.3%	33.3%		
Suomi/Finland	1	100 %			100.0%			
Sverige	1	33 %				33.3%		
United Kingdom	24	71 %	8.8%	29.4%	8.8%	17.6%		5.9%
Norway	6	100 %	16.7%	33.3%		50.0%		

### Chart SR13: Genotype distribution in atypical cases compared to classical scrapie cases



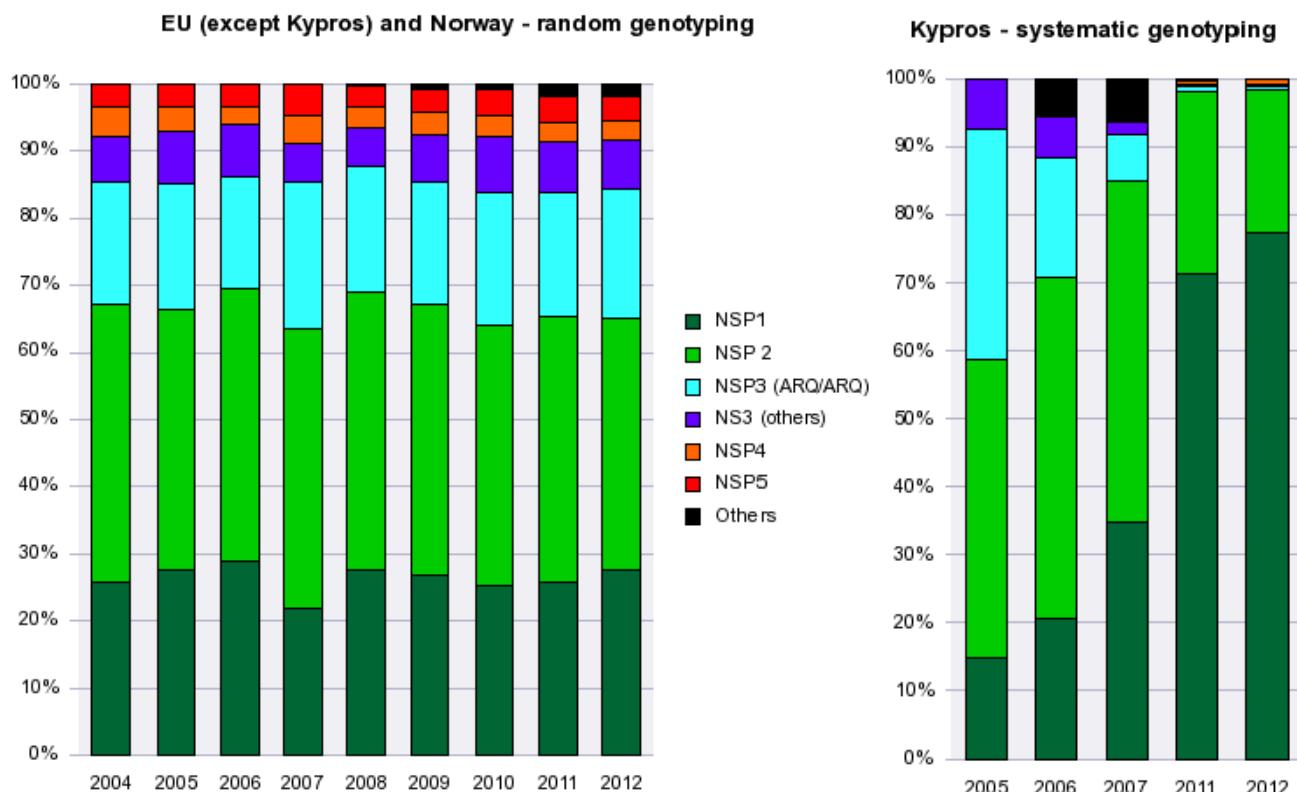
**Table SR13: Distribution of genotypes in randomly genotyped ovine animals in EU Member States and Norway in 2012**

	NSP1	NSP2	NSP3		NSP4	NSP5	Others	Number of Samples
			ARQ/ARQ	Others				
Belgique/België	49.8%	28.6%	4.1%	9.2%	4.6%	1.4%	2.3%	217
Bulgaria								0
Ceská Republika	25.8%	37.1%	20.2%	5.6%		5.6%	5.6%	89
Danmark	13.0%	28.0%		9.0%	1.0%	9.0%		100
Deutschland		25.2%	18.5%	1.7%	2.5%	0.0%		119
Eesti								0
Elias	9.4%	31.9%	29.4%	14.5%	1.8%	5.2%	7.8%	385
España	10.4%	35.7%	34.2%	5.0%	1.5%	2.7%	10.5%	740
France	39.4%	36.6%	12.5%	1.6%	3.4%	3.3%	3.2%	1 045
Hrvatska								0
Ireland	29.2%	45.1%	9.2%	9.1%	3.3%	4.0%		674
Italia	19.0%	39.6%	32.3%	6.8%	0.3%	2.0%		601
Latvija	22.5%	42.3%	33.3%		0.9%	0.9%		111
Lietuva								0
Luxembourg								0
Magyarország	48.0%	36.7%	8.2%	5.3%	1.3%	0.5%		600
Malta								0
Nederland	48.4%	34.9%	6.3%	5.0%	2.9%	2.6%		1 052
Österreich	5.8%	41.7%	24.3%	14.6%	1.0%	8.7%	3.9%	103
Polska	34.0%	39.3%	8.7%	0.7%	14.0%	3.3%		150
Portugal	16.3%	34.1%	36.6%	4.4%	4.3%	4.3%		607
Romania	11.2%	44.7%	32.4%	2.8%	2.2%	6.1%	0.6%	179
Slovenija	4.4%	25.7%	37.2%	21.2%	2.7%	8.8%		113
Slovensko	20.0%	43.0%	26.0%	6.0%	4.0%	1.0%		100
Suomi/Finland	4.0%	28.0%	56.0%	7.0%		5.0%		100
Sverige	18.0%	17.0%	50.0%	4.0%	2.0%	9.0%		100
United Kingdom	31.7%	40.8%	9.8%	12.0%	2.3%	3.3%		600
Norway	13.7%	41.0%	14.4%	17.4%	5.5%	8.1%		605
EU 28 - CY + NO	27.4%	36.9%	19.0%	7.1%	2.8%	3.6%	1.9%	8 390

**Table SR14: Distribution of genotypes reported in 2012 by Kypros, where the entire sheep population is being genotyped**

	NSP1	NSP2	NSP3		NSP4	NSP5	Others	Number of Samples
			ARQ/ARQ	Others				
Kypros	77.5%	20.8%	0.6%	0.1%	0.8%	0.0%	0.1%	79 927

## Chart SR14: Evolution since 2002 of the genotypic profile of the ovine population



### Comments on genotyping

No case of classical scrapie was submitted in 2012 in a sheep of the ARR/ARR genotype.

The results of the exhaustive genotyping of the sheep population in Cyprus show a very significant increase of the NSP1 and NSP2 groups since 2005.

In the rest of the EU as a whole, no trend in the genetic profile can be identified from 2004 to 2012 based on the results of the regulatory random genotyping of the ovine population. This general result should however be interpreted with caution as it probably masks favourable evolutions in individual member States where a breeding programme has been successfully applied.

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ISBN 978-92-79-33524-2



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