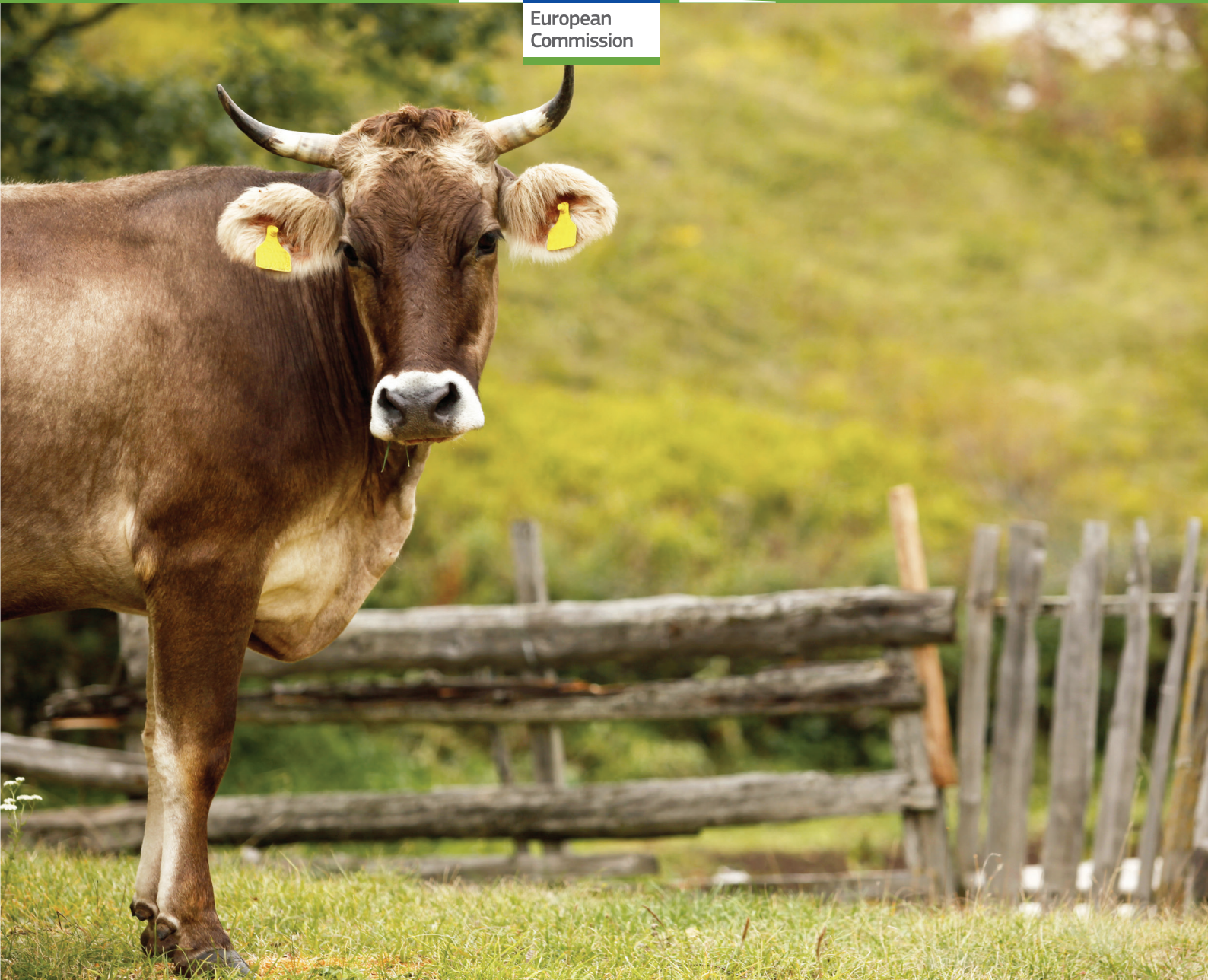European Commission

Report on the monitoring and testing of ruminants for the presence of

Transmissible Spongiform Encephalopathies (TSEs)

in the EU in 2014

Health and Food Safety

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Report on the monitoring and testing of ruminants for the presence of transmissible spongiform encephalopathies (TSEs) in the EU in 2014

Final version 17 May 2016

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LIST OF ACRONYMS

AM	Ante-mortem inspection
AS	Atypical scrapie
BSE	Bovine spongiform encephalopathy
CS	Classical scrapie
CWD	Chronic wasting disease
DNA	Deoxyribonucleic acid
EU 28	The 28 countries which are members of the European Union
Na	not available
NSP	National scrapie plan
TSE	Transmissible spongiform encephalopathy
TSE Regulation	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. In addition, Norway, Switzerland and Island submitted information on their TSE testing programmes. Switzerland and Island submitted information concerning only bovine animals.

1.1. Bovine animals

In 2014, a total of 2,287,785 bovine animals were tested in the EU 28 in the framework of BSE monitoring programmes. 11 bovine animals turned out positive.

All of the 11 BSE cases identified in 2014 were submitted to discriminatory testing by the Member States. These tests confirmed 3 cases of classical BSE, 2 cases of atypical H-type BSE and 6 cases of atypical L-type BSE.

902,249 risk bovine animals and 1,384,862 healthy animals slaughtered for human consumption were tested by rapid tests. 36 animals were tested in the framework of culling of animals with an epidemiological connection to a BSE case. In addition, 638 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).

The 11 BSE cases detected in 2014 were found in France, Germany, Spain, Romania, the United Kingdom and Portugal.

This report integrates the results of the EU retrospective typing exercise for historical BSE cases (BSE cases detected from 2003-2010). This data confirms that Atypical BSE has been present in the EU at a very low and constant level during the entire period for which data is available (2003-2014). By contrast, the number and prevalence date of Classical BSE have sharply declined during the same period.

1.2. Ovine and caprine animals

In 2014, a total of 325,530 ovine and 127,016 caprine animals were tested in the EU 28 in the framework of the TSE monitoring programmes. 1,015 ovine and 1,437 caprine animals turned out positive to classical scrapie.

325,326 ovine animals were tested by active monitoring, while 204 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 125,926 (active monitoring) and 1,090 (TSE suspects). Some 516 and 82 TSE cases in respectively sheep and goats confirmed in 2014 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 2014

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. Commission Implementing Decision 2013/76/EU of 4 February 2013, amending Commission Decision 2009/719/EC, authorised these 25 Member States to decide to stop testing healthy slaughtered bovine animals. Information on the implementation of this Decision by the concerned Member States in 2014 is available in Table 2.

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 2014 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 2014

	EU 25	EU 3: Romania, Bulgaria, Croatia
Legal provisions	Regulation (EC) No 999/2001 as amended Commission Decision 2009/719/EC as amended	Regulation (EC) No 999/2001 as amended
Bovine animals		
Special emergency slaughter	Member States can chose to increase the minimum testing age to 48 months	Minimum testing age: 24 months
Clinical signs at AM		
Fallen stock		
Animals culled under BSE eradication		
Animals slaughtered for human consumption	Member States can chose not to test these animals	Minimum testing age: 30 months
BSE suspects	All must be tested (no age limit)	All must be tested (no age limit)
Ovine and caprine animals		
Animals slaughtered for human consumption	Minimal annual sample size of animals over 18 months of age in MS with major populations	
Animals not slaughtered for human consumption	Minimal annual sample size of animals over 18 months of age depending on size of MS populations of ewes or goats	
Animals in infected flocks	Minimal sample size in animals over 18 months of age/ All animals over 18 months of age when those animals are slaughtered for human consumption	
Holdings subject to intensified TSE monitoring following the detection of TSE	During the period of intensified TSE monitoring: Animals slaughtered for human consumption over 18 months of age and fallen stock over 18 months of age, depending on the type of TSE detected in the holding and on the control and eradication measure chosen by the Member State in case of detection of Classical Scrapie.	
Other than bovine, ovine and caprine animals: voluntary		

- 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:

All BSE positive cases of 2014 have been submitted to further testing in order to discriminate classical BSE cases from atypical L or atypical H-BSE cases. Such discriminatory testing became mandatory according to the TSE Regulation in July 2013.

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.

- Ovine animals in holdings where TSE was detected (Chapter B of Annex VII to Regulation (EC) No 999/2001):

    (a)   If classical scrapie was detected: all ovine animals up to a maximum of 50 shall be genotyped if option 1 or option 3

are chosen, or all ovine animals on the holding must be genotyped if option 2 is chosen;

(b) If BSE was detected: all ovine animals up to a maximum of 50 shall be genotyped.

The alleles were defined by reference to the amino acids encoded by codons 136, 141, 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.

The data contained in the present report only refer to the testing of the samples taken from 1st January 2014 to 31st December 2014 in the EU 28, in Switzerland, Island 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 2014.

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 31 March 2016. Information on adult cattle population in 2014 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 2014 in accordance with 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) <u>Active Monitoring</u>

  - 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) <u>Passive surveillance</u>

  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 2014 are summarised in Table 2.

Table 2: Age limits used in sampling of bovine animals in 2014

		Age limit in months					
		Fallen Stock	Emergency slaughtered	Clinical signs at AM	Healthy slaughtered	BSE eradication	BSE suspects
Belgique/België	BE		> 48		No testing	> 24	No age limit
Bulgaria	BG		> 24		> 30	No age limit	No age limit
Ceská Republika	CZ		> 24		No testing	No age limit	No age limit
Danmark	DK		> 48		No testing	> 48	No age limit
Deutschland	DE		> 48		> 96 (No testing after 27/4/2015)	No age limit	No age limit
Eesti	EE		> 48		No testing	No age limit	No age limit
Ellas	EL		> 48		> 72	No age limit	No age limit
España	ES		> 48		Testing of animals born before 1/01/2001 and originating from BSE positive holdings	No age limit	No age limit
France	FR		> 48		> 72 (from 1/1/2015, testing of animals born after 1/1/2002)	> 24	No age limit
Hrvatska	HR		> 24		> 30	No age limit	No age limit
Ireland	IE		> 48		No testing	> 48	No age limit
Italia	IT		> 48		No testing	No age limit	No age limit
Kypros*	CY		> 48		Testing of 50% of animals > 72 months (No testing from 1/1/2015)	> 48	No age limit
Latvija	LV		> 24		No testing	No age limit	No age limit
Lietuva	LT		> 48		No testing	No age limit	No age limit
Luxembourg	LU	> 24	> 48		No testing	> 24	No age limit
Magyarország	HU		> 24		No testing	No age limit	No age limit
Malta	MT		> 48		> 72 until 15 May 2014 / No testing after 15 May 2014	No age limit	No age limit
Nederland	NL		> 48		No testing	No age limit	No age limit
Österreich	AT	> 48	> 24		No testing	No age limit	No age limit
Polska	PL		> 48		> 96	No age limit	No age limit
Portugal	PT		> 48		> 72 until 28 February 2014 / No testing from 1 March 2014	> 48	No age limit
Romania	RO		> 24		> 30	No age limit	No age limit
Slovenija	SI		> 24		No testing	No age limit	No age limit
Slovensko	SK		> 24		No testing	No age limit	No age limit
Suomi/Finland	FI		> 48		No testing	No age limit	No age limit
Sverige	SE		> 48		No testing	No age limit	No age limit
United Kingdom	UK		> 48		No testing	No age limit	No age limit
Norway	NO		> 24		> 30 for 10 000 randomly selected animals	No age limit	No age limit
Island	IS		>24		>24	No age limit	No age limit
Switzerland	CH		> 48	No age limit	No testing	No age limit	> 18

Ovine and caprine animals:

(c) 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.

(d) Passive Surveillance

Animals reported as official TSE suspects by the official veterinarian and subject to laboratory examination.

4. SUMMARY OF THE BSE TESTING IN BOVINE ANIMALS DURING 2014

4.1. Sampling

Comments on the sampling

Sampling decreased in 2014 from a little over 3.1 million cattle tested in 2013 to a little less than 2.3 million in 2014. This drop can be explained by the fact that Member States have made use of the authorisation given on 4 February 2013 to 25 Member States to stop testing healthy slaughtered cattle at different points in time, thus spreading the impact of this Decision over several years. Over 112 million cattle have been tested in the EU since 2001.

Chart B1: Total tests performed in the period 2001–2014 in the EU28
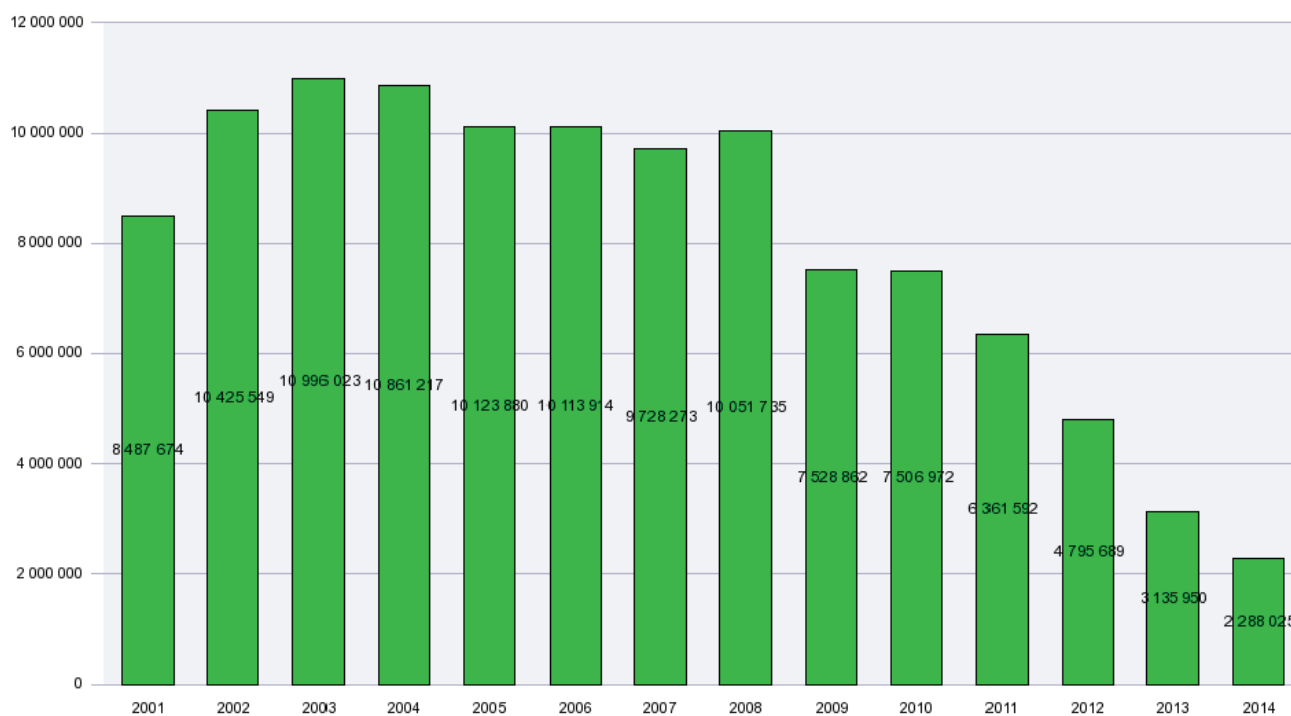
Table B1: Number of BSE tests performed by country and target group in 2014

	Clinical signs at AM	Emergency slaughter	Eradication Measures	Fallen stock	Healthy slaughtered animals	Suspects subject to laboratory examination	Total tests 2014
Belgique/België	6	719		23 634	103	18	24 480
Bulgaria	17	1 202		525	13 302		15 046
Ceská Republika	3	812		17 469	9		18 293
Danmark		1 122		20 392	43	2	21 559
Deutschland		7 717	8	137 791	217 318	457	363 291
Eesti	19	89		4 116	1		4 225
Ellas		6		2 968	11 521		14 495
España	41	304		56 481	267	1	57 094
France		16 051		186 068	857 253	2	1 059 374
Hrvatska	9	832		6 176	27 028		34 045
Ireland	787	9		49 177		2	49 975
Italia	611	10 052		39 623	831	1	51 118
Kypros				821	676		1 497
Latvija	1 709	140		2 374		7	4 230
Lietuva		285		2 762	2 479		5 526
Luxembourg				2 048		2	2 050
Magyarország	23	206		10 366	418	3	11 016
Malta		42		62	171		275
Nederland		4 416		43 894	89		48 399
Österreich	52	2 811		12 422	1 614	23	16 922
Polska	463	1 469		33 407	172 139	25	207 503
Portugal	3 100	1 718	1	16 693	5 749	1	27 262
Romania	17	1 223		1 976	73 651	76	76 943
Slovenija	163	444		7 617	116	12	8 352
Slovensko	7	100		7 335	19		7 461
Suomi/Finland	13	37		10 723	5		10 778
Sverige	62	229		9 153		3	9 447
United Kingdom	676	4 066	5	132 319	60	3	137 129
EU 28	7 778	56 101	14	838 392	1 384 862	638	2 287 785
Island				240			240
Norway	12	4 270		1 946	264	1	6 493
Suisse-Schweiz-Svizzera		5 413		7 421		3	12 837
Others	12	9 683		9 607	264	4	19 570

Table B2: Active monitoring in relation to the adult bovine population (>2 years of age) in 2014

	Adult cattle pop. in 2014*	Risk animals		Healthy slaughtered animals	
		N° Tests	% tests/adult cattle	N° Tests	% tests/adult cattle
Belgique/België	1 242 550	24 359	1.96%	103	n/a
Bulgaria	376 370	1 744	0.46%	13 302	3.53%
Ceská Republika	649 150	18 284	2.82%	9	n/a
Danmark	713 000	21 514	3.02%	43	n/a
Deutschland	5 822 760	145 508	2.50%	217 318	3.73%
Eesti	137 600	4 224	3.07%	1	n/a
Ellas	365 000	2 974	0.81%	11 521	3.16%
España	3 027 780	56 826	1.88%	267	0.01%
France	10 306 000	202 119	1.96%	857 253	8.32%
Hrvatska	221 000	7 017	3.18%	27 028	12.23%
Ireland	2 708 590	49 973	1.84%		n/a
Italia	3 105 790	50 286	1.62%	831	n/a
Kypros	27 550	821	2.98%	676	2.45%
Latvija	228 790	4 223	1.85%		n/a
Lietuva	395 100	3 047	0.77%	2 479	n/a
Luxembourg	100 180	2 048	2.04%		n/a
Magyarország	407 000	10 595	2.60%	418	n/a
Malta	7 240	104	1.44%	171	2.36%
Nederland	1 836 000	48 310	2.63%	89	n/a
Österreich	899 340	15 285	1.70%	1 614	n/a
Polska	2 765 400	35 339	1.28%	172 139	6.22%
Portugal	847 620	21 511	2.54%	5 749	0.68%
Romania	1 352 400	3 216	0.24%	73 651	5.45%
Slovenija	198 300	8 224	4.15%	116	0.06%
Slovensko	243 120	7 442	3.06%	19	n/a
Suomi/Finland	377 870	10 773	2.85%	5	n/a
Sverige	628 660	9 444	1.50%		
United Kingdom	4 520 000	137 061	3.03%	60	n/a
Total EU 28	**43 510 160**	**902 271**	**2.29%**	**1 384 862**	**4.91%**
Island	33 200	240	0.72%		
Norway	370 522	6 228	1.68%	264	0.07%
Suisse-Schweiz-Svizzera	825 021	12 834	1.56%		n/a
Total Others	**1 228 743**	**19 302**	**2.23%**	**264**	**0.79%**

*Eurostat July 2015

n/a: The number of tests per adult cattle is not relevant for those Member States which have stopped testing healthy slaughtered cattle, as the only healthy slaughtered cattle tested in such cases are those born in RO, BG and HR, i.e. unrelated to the cattle population of the Member State of slaughter.

Table B3: comparative active monitoring 2014 versus 2013

	Eradication Measures			Healthy slaughtered animals			Risk animals			Total active monitoring		
	2013	2014	Diff	2013	2014	Diff	2013	2014	Diff	2013	2014	Diff
Belgique/België				75	103	37.33%	24 206	24 359	0.63%	24,281	24,462	0.75%
Bulgaria				17 973	13 302	-25.99%	1 776	1 744	-1.80%	19,749	15,046	-23.81%
Ceská Republika				18 887	9	-99.95%	17 168	18 284	6.50%	36,055	18,293	-49.26%
Danmark				3 342	43	-98.71%	20 133	21 514	6.86%	23,475	21,557	-8.17%
Deutschland	2	8	300.00%	353 108	217 318	-38.46%	142 744	145 508	1.94%	495,854	362,834	-26.83%
Eesti				1 175	1	-99.91%	3 561	4 224	18.62%	4,736	4,225	-10.79%
Ellas				12 530	11 521	-8.05%	2 319	2 974	28.24%	14,849	14,495	-2.38%
España				133 239	267	-99.80%	58 063	56 826	-2.13%	191,302	57,093	-70.16%
France				835 427	857 253	2.61%	241 168	202 119	-16.19%	1,076,595	1,059,372	-1.60%
Hrvatska				28 852	27 028	-6.32%	7 392	7 017	-5.07%	36,244	34,045	-6.07%
Ireland				36 537		-100.00%	71 561	49 973	-30.17%	108,098	49,973	-53.77%
Italia				115 754	831	-99.28%	51 643	50 286	-2.63%	167,397	51,117	-69.46%
Kypros				1 332	676	-49.25%	620	821	32.42%	1,952	1,497	-23.31%
Latvija				2 300		-100.00%	3 309	4 223	27.62%	5,609	4,223	-24.71%
Lietuva				45 184	2 479	-94.51%	3 436	3 047	-11.32%	48,620	5,526	-88.63%
Luxembourg				534		-100.00%	2 062	2 048	-0.68%	2,596	2,048	-21.11%
Magyarország				9 173	418	-95.44%	11 747	10 595	-9.81%	20,920	11,013	-47.36%
Malta				1 518	171	-88.74%	312	104	-66.67%	1,830	275	-84.97%
Nederland				14 302	89	-99.38%	47 707	48 310	1.26%	62,009	48,399	-21.95%
Österreich				25 294	1 614	-93.62%	19 326	15 285	-20.91%	44,620	16,899	-62.13%
Polska				280 145	172 139	-38.55%	38 666	35 339	-8.60%	318,811	207,478	-34.92%
Portugal	6	1	-83.33%	35 349	5 749	-83.74%	24 441	21 511	-11.99%	59,796	27,261	-54.41%
Romania				75 367	73 651	-2.28%	3 793	3 216	-15.21%	79,160	76,867	-2.90%
Slovenija				3 937	116	-97.05%	8 707	8 224	-5.55%	12,644	8,340	-34.04%
Slovensko				7 820	19	-99.76%	5 761	7 442	29.18%	13,581	7,461	-45.06%
Suomi/Finland				4 435	5	-99.89%	11 475	10 773	-6.12%	15,910	10,778	-32.26%
Sverige				9 412		-100.00%	10 764	9 444	-12.26%	20,176	9,444	-53.19%
United Kingdom	21	5	-76.19%	65 111	60	-99.91%	162 913	137 061	-15.87%	228,045	137,126	-39.87%
Total EU 28	29	14	-51.72%	2 138 112	1 384 862	-35.23%	996 773	902 271	-9.48%	3 134 914	2 287 147	-27.04%
Island								240			240	
Norway				9 421	264	-97.20%	11 135	6 228	-44.07%	20,556	6,492	-68.42%
Suisse-Schweiz-Svizzera				232		-100.00%	16 218	12 834	-20.87%	16,450	12,834	-21.98%
Total Others				9 653	264	-97.27%	27 353	19 302	-29.43%	37 006	19 566	-47.13%

4.2. BSE cases and results of the BSE retrospective typing exercise

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 revision of their BSE monitoring programmes. Despite the fact that the number of tests remained stable between 2002 and 2008, and decreased since 2009, the prevalence of Classical BSE in tested animals "at risk" (ratio of positives per 10 000 tests in the target groups fallen stock, emergency slaughter and animals with clinical signs at ante mortem inspection) has been steadily dropping since 2002, due to the decline in positive cases, with a statistically negligible increase from 0.02 cases per 10 000 animals tested in 2013 to 0.03 in 2014 (Chart B4b).

The data presented below include, for the first time, the results of an EU exercise of retrospective typing of historical BSE cases. Indeed, while discriminatory testing of BSE cases became mandatory on from July 2013 on, EU Member States and the Commission jointly decided to submit to discriminatory testing stored samples of BSE cases detected between 2003 and 2010, so as to have complete data on the cases of BSE cases detected in the EU since 2003 and to obtain more information on Atypical BSE. At the time of finalising this report, the results of this retrospective typing exercise are almost complete, however the results for 97 cases detected in Portugal are not yet available, and therefore not presented in this report.

This retrospective typing exercise confirms that Atypical BSE has been present in the EU at a very low and relatively constant level during the entire period. Between 5 and 13 Atypical BSE cases per year detected in the EU (Chart B3), with a low and relatively constant level of prevalence, between 0.04 and 0.09 cases per 10 000 animals tested, in the target group "animals at risk" (Chart B4). By contrast, the number and prevalence rate of Classical BSE cases has steadily dropped since 2003.

79% of the BSE cases detected between 2003 and 2014 were Classical BSE cases, in 18.1% of the cases, the case type could not be identified (e.g. insufficient material available, deficient sample quality), 1.6% of cases detected were of L-type and 1.3% were of H-type (Table B9). If cases of unknown type are disregarded, 96,4% out of the BSE cases for which the case is known were Classical BSE cases, 1,6% Atypical H-type BSE cases, and 2% Atypical L-type BSE cases.

All known Atypical BSE cases in the EU were detected in cattle older than 6 years of age (the youngest Atypical BSE case detected was 75 months old). Furthermore, the geographical distribution of Atypical BSE cases is overall consistent, with a prevalence rate at population level varying between 0 and 0.61 cases per 1 million adult cattle for Atypical H-BSE and varying between 0 and 0.26 for Atypical L-BSE (Table B9). Atypical BSE cases are found as frequently among healthy slaughtered animals as among fallen stock (Table B8).

All these elements (low and constant prevalence, consistent geographical distribution and cases found in older animals) reinforce the hypothesis that Atypical BSE is a spontaneous and sporadic disease.

Table B4: Number of BSE cases confirmed in 2014 and prevalence rate

	Adult cattle population*	N° of tests	All BSE cases			Classical BSE cases			Atypical BSE cases		
			N° of cases	Ratio positives per tests**	Prevalence rate pop***	N° of cases	Ratio positives per tests**	Prevalence rate pop***	N° of cases	Ratio positives per tests**	Prevalence rate pop***
Belgique/België	1 242 550	24 480									
Bulgaria	376 370	15 046									
Ceská Republika	649 150	18 293									
Danmark	713 000	21 559									
Deutschland	5 822 760	363 291	2	0.06	0.34				2	0.06	0.34
Eesti	137 600	4 225									
Ellas	365 000	14 495									
España	3 027 780	57 094	2	0.35	0.66	1	0.18	0.33	1	0.18	0.33
France	10 306 000	1 059 374	3	0.03	0.29				3	0.03	0.29
Hrvatska	221 000	34 045									
Ireland	2 708 590	49 975									
Italia	3 105 790	51 118									
Kypros	27 550	1 497									
Latvija	228 790	4 230									
Lietuva	395 100	5 526									
Luxembourg	100 180	2 050									
Magyarország	407 000	11 016									
Malta	7 240	275									
Nederland	1 836 000	48 399									
Österreich	899 340	16 922									
Polska	2 765 400	207 503									
Portugal	847 620	27 262	1	0.37	1.18	1	0.37	1.18			
Romania	1 352 400	76 943	2	0.26	1.48				2	0.26	1.48
Slovenija	198 300	8 352									
Slovensko	243 120	7 461									
Suomi/Finland	377 870	10 778									
Sverige	628 660	9 447									
United Kingdom	4 520 000	137 129	1	0.07	0.22	1	0.07	0.22			
Total EU 28	43 510 160	2 287 785	11	0.05	0.25	3	0.01	0.07	8	0.03	0.18
Island	33 200	240									
Norway	370 522	6 493									
Suisse-Schweiz-Svizzer	825 021	12 837									
Total Others	1 228 743	19 570	0	0	0						

* Cattle > 24 months old; Eurostat July 2015; ** 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 2014

Countries with classical BSE cases only

Countries with both classical and atypical BSE cases

Countries with atypical BSE cases only

Countries with no BSE case
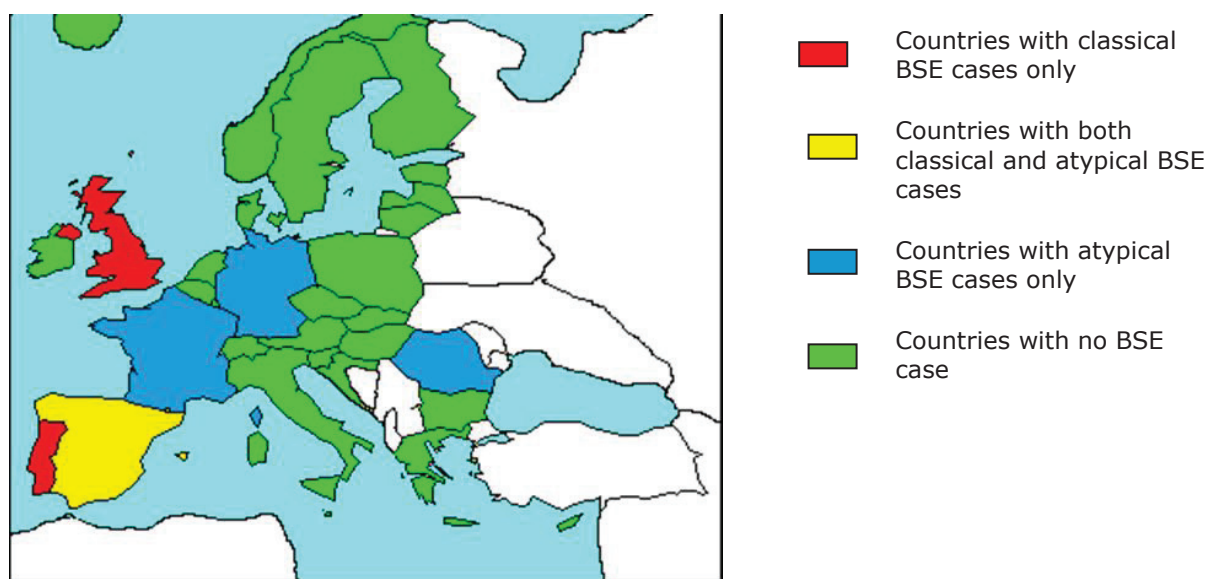
Table B5: Results of the BSE discriminatory tests reported by the 28 Member States in 2014

	All BSE cases	BSE cases subject to Discriminatory testing	Results of discriminatory testing					
			Classical BSE cases		H-BSE cases		L-BSE cases	
Deutschland	2	2			1	50 %	1	50 %
España	2	2	1	50 %			1	50 %
France	3	3			1	33 %	2	67 %
Portugal	1	1	1	100 %				
Romania	2	2					2	100 %
United Kingdom	1	1	1	100 %				
Total	11	11	3	27 %	2	18 %	6	55 %

Table B6: Comparison of the number of Classical BSE cases and the prevalence rate in animals tested in 2014 and 2013

	Positives			Prevalence rate*		
	2013	2014	Diff	2013	2014	Diff
Belgique/België						
Bulgaria						
Ceská Republika						
Danmark						
Deutschland						
Eesti						
Ellas						
España		1			0.175	
France						
Hrvatska						
Ireland						
Italia						
Kypros						
Latvija						
Lietuva						
Luxembourg						
Magyarország						
Malta						
Nederland						
Österreich						
Polska						
Portugal		1			0.367	
Romania						
Slovenija						
Slovensko						
Suomi/Finland						
Sverige						
United Kingdom	2	1	-50 %	0.088	0.073	-17 %
EU 28	2	3	50 %	0.006	0.013	106 %
Island						
Norway						
Suisse-Schweiz-Svizze						
Others						

* positive cases per 10 000 bovine animals tested

Chart B2: Evolution of the number of BSE positive cases (all types) in the 28 EU Member States since 2001
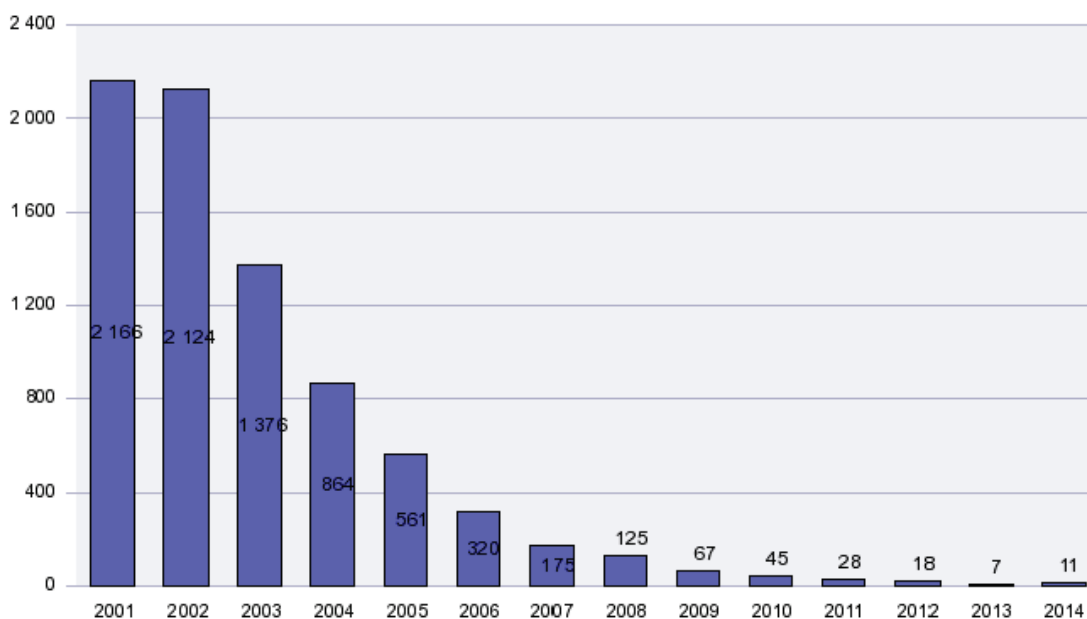
Chart B3a: Evolution of the number of confirmed classical and atypical BSE cases in the EU 28 from 2003 to 2014
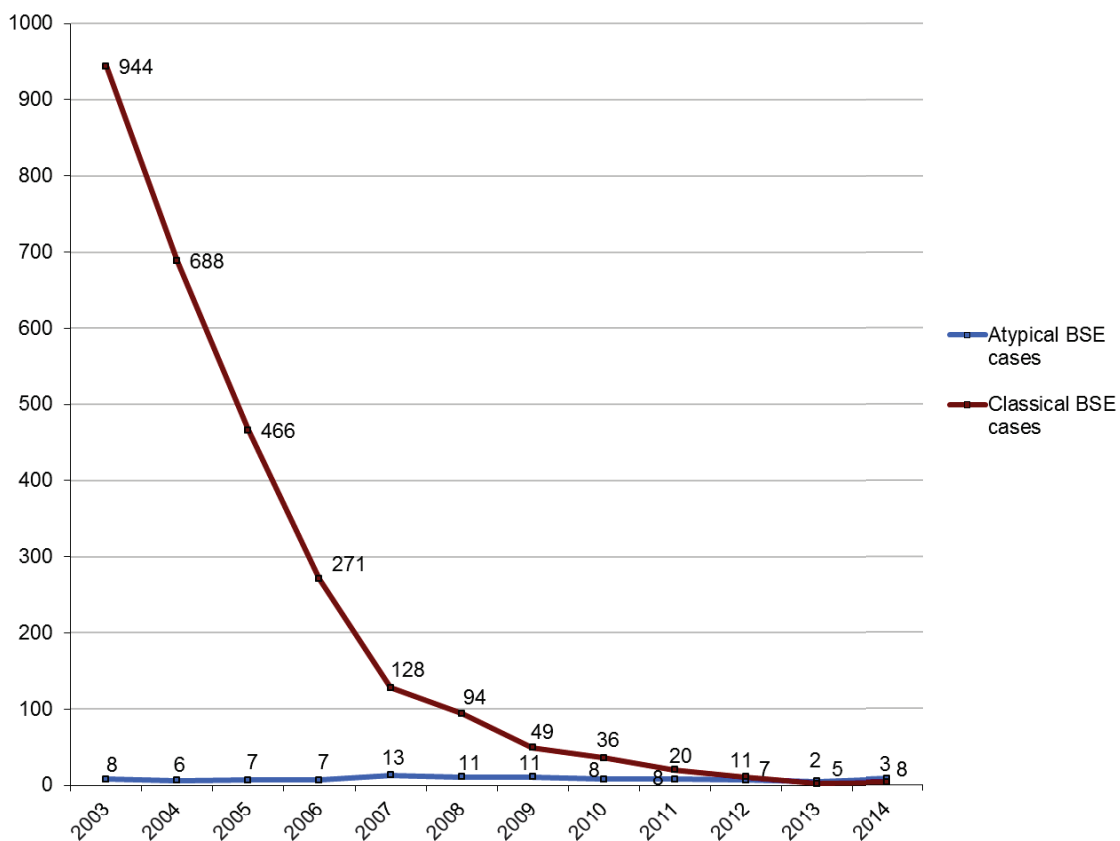
Chart B3b: Evolution of the number of confirmed classical and atypical BSE cases in the EU 28: zoom on the period 2009-2014
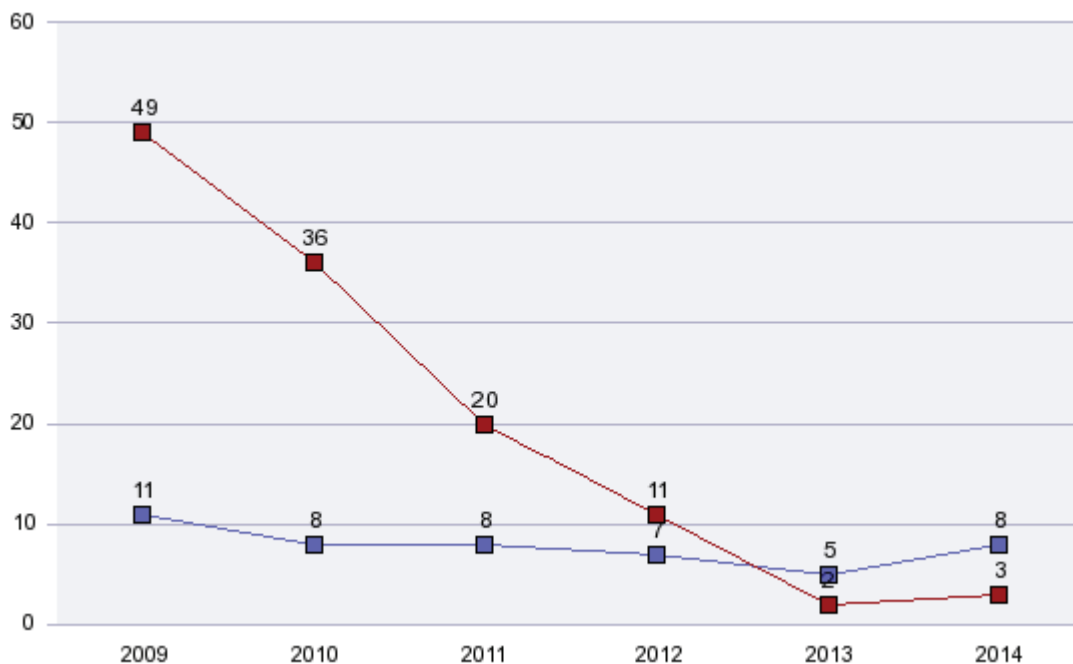
Chart B4a: Evolution of the prevalence rate* of BSE (all types) in the 28 EU Member States since 2001 in the target group "animals at risk"**
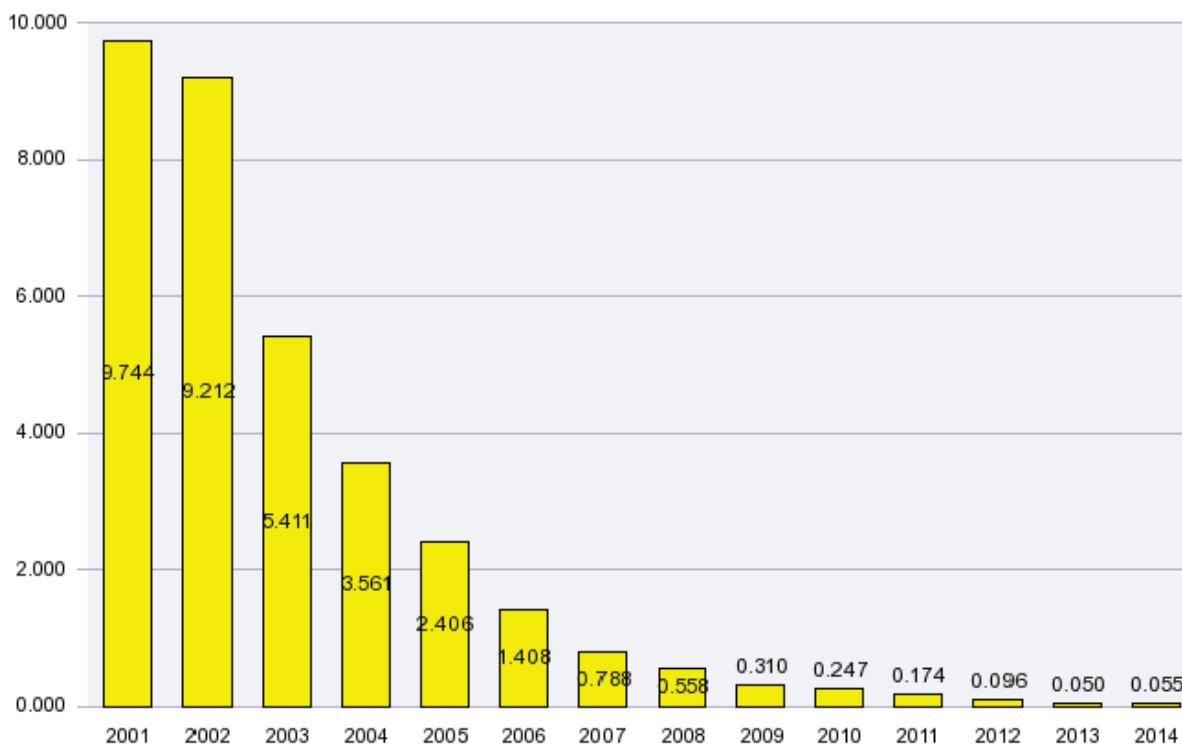
* Prevalence rate: ration of the number of positive cases per 10 000 animals tested; ** "animals at risk": Fallen stock, clinical signs at ante mortem inspection and emergency slaughter

Chart B4b: Evolution of the prevalence rate* of BSE cases (Classical and Atypical) in the 28 EU Member States since 2003 in the target group "animals at risk"**
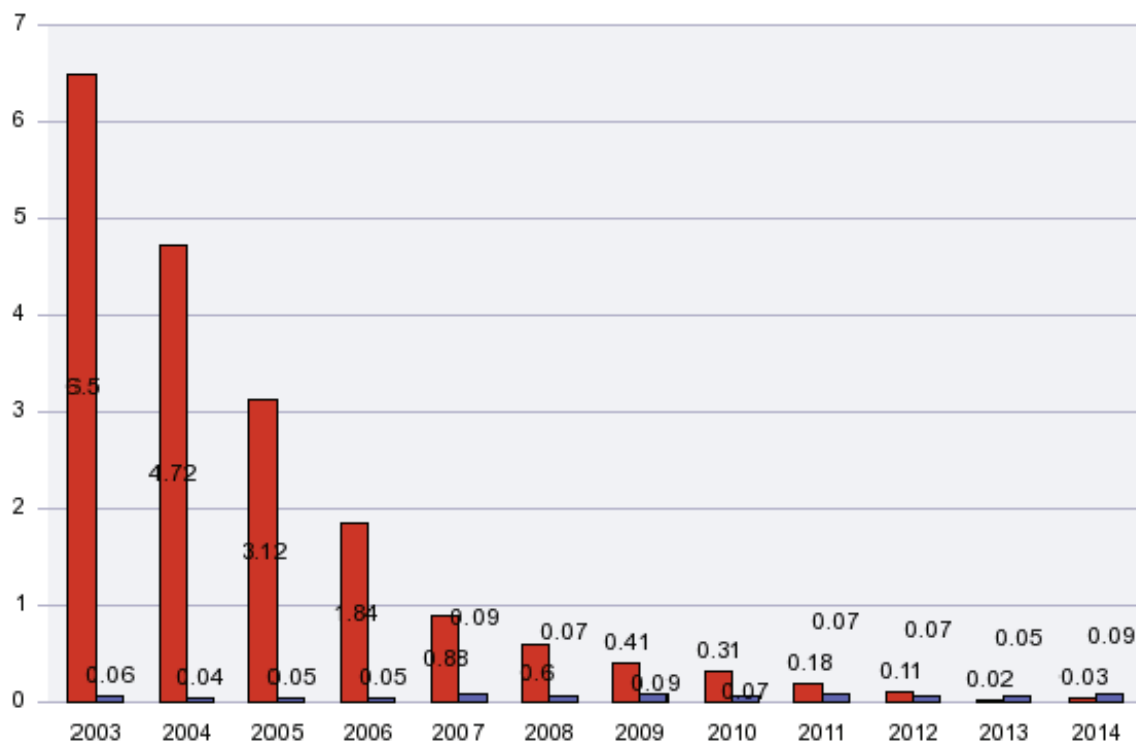
* Prevalence rate: ration of the number of positive cases per 10 000 animals tested; ** "animals at risk": Fallen stock, clinical signs at ante mortem inspection and emergency slaughter

Chart B4c: Evolution of the prevalence rate* of Atypical BSE in the 28 EU Member States since 2003 (all target groups)
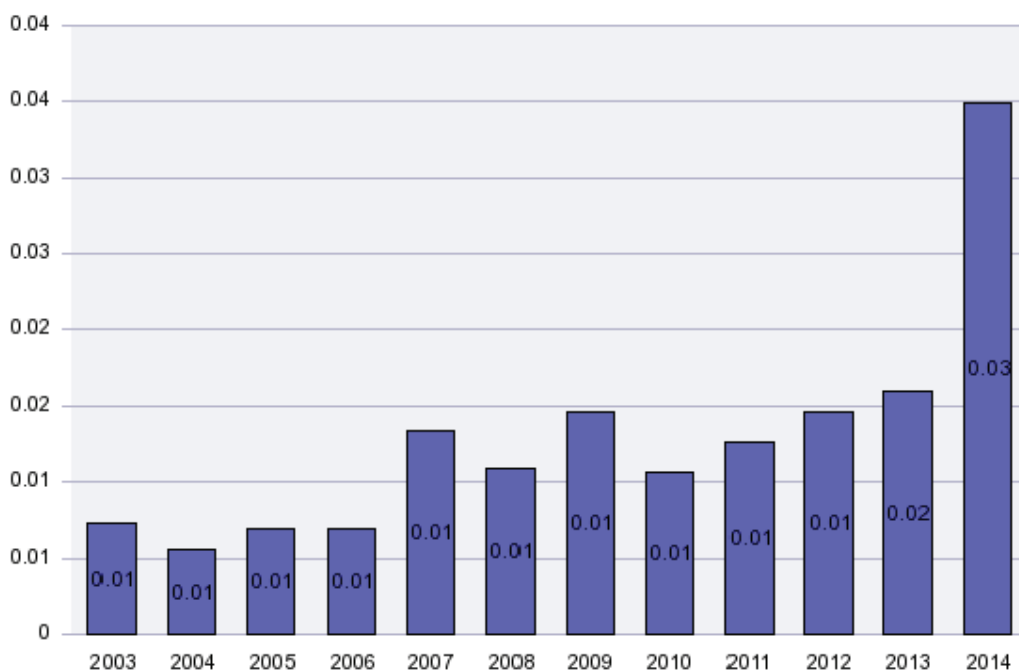
* Prevalence rate: ration of the number of positive cases per 10 000 animals tested

Table B7: 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	2013	2014	Total
Belgique/België											1	6	3	9	46	38	15	11	2	2									133
Bulgaria																													0
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					2	421
Eesti																													0
Ellas															1														1
España														2	83	134	173	138	103	68	40	25	18	13	7	6		2	812
France					5		1	4	3	12	6	18	31	162	277	240	138	54	31	8	8	8	10	5	3	1	2	3	1,030
Hrvatska																													0
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		1,651
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	1		75
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	1,091
Romania																											2		2
Slovenija															1	1	1	2	1	1	1								8
Slovensko															5	6	2	7	3		2	1		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	3	1	184,637
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	7	11	190,182

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	2013	2014	Total
Brazil																										1		1	2
Canada							1										1	1	1	5	3	4	1	1	1				19
Israel																1													1
Japan															3	2	4	5	7	10	3	1	1						36
Liechtenstein												2																	2
Switzerland				2	8	15	29	64	68	45	38	14	50	33	42	24	21	3	3	5					2	1			467
United States																	1		1	1						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	3	0	1	531

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 B5: Number of BSE cases submitted to discriminatory testing in the EU 28 from 2001 to 2014
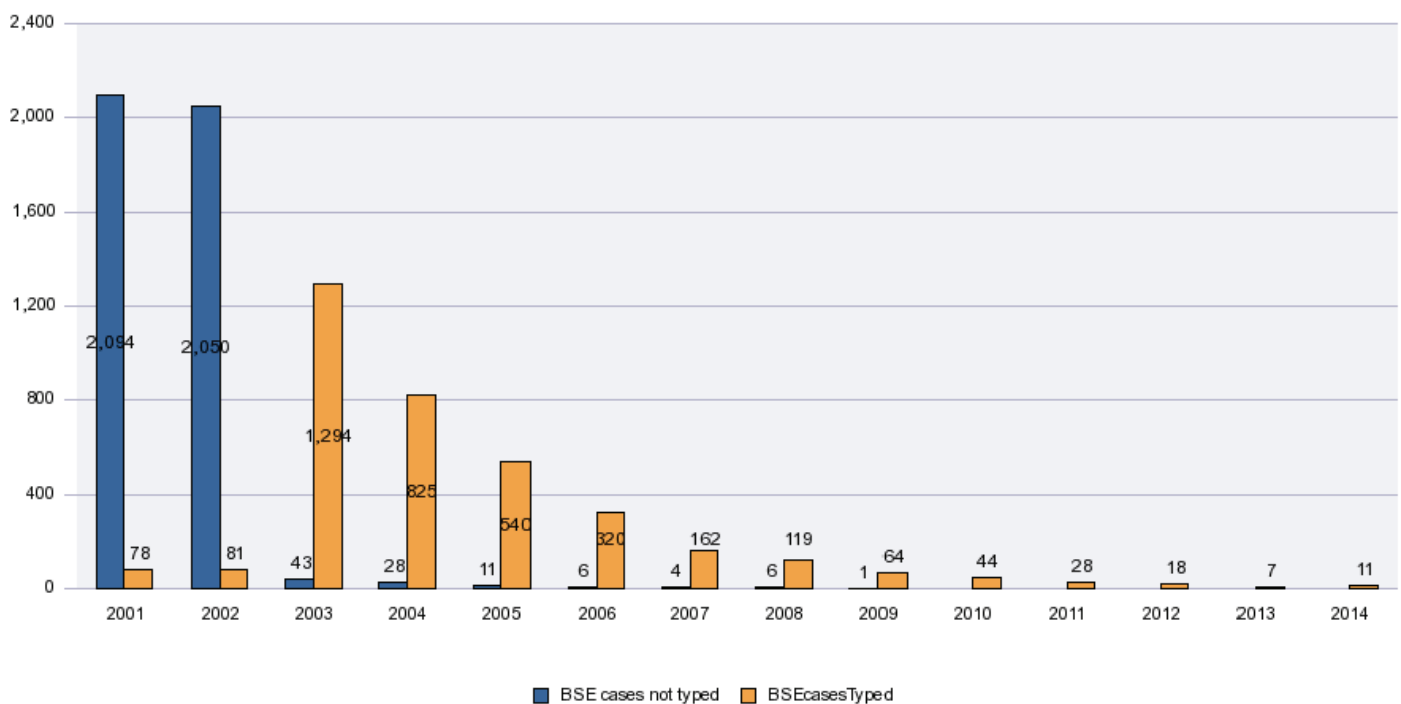
Table B8: Proportion in each target group of BSE cases submitted to further discriminatory testing and, within those, of the cases reported as atypical BSE, by Member State, from 2003 to 2014

	Clinical signs at AM			Emergency slaughter			Eradication Measures			Fallen stock			Healthy slaughtered animals			Suspects subject to laboratory examination		
	Number of BSE cases detected	BSE cases submitted to discriminatory testing	Atypical BSE cases	Number of BSE cases detected	BSE cases submitted to discriminatory testing	Atypical BSE cases	Number of BSE cases detected	BSE cases submitted to discriminatory testing	Atypical BSE cases	Number of BSE cases detected	BSE cases submitted to discriminatory testing	Atypical BSE cases	Number of BSE cases detected	BSE cases submitted to discriminatory testing	Atypical BSE cases	Number of BSE cases detected	BSE cases submitted to discriminatory testing	Atypical BSE cases
Belgique/België										8	100.00%		18	100.00%		4	100.00%	
Bulgaria																		
Ceská Republika				7	100.00%		1	100.00%		8	100.00%	12.50%	10	100.00%				
Danmark										2	100.00%	50.00%	2	100.00%		1	100.00%	
Deutschland				4	100.00%		3	100.00%		70	100.00%		86	98.84%	4.71%	14	100.00%	
Eesti																		
Ellas																		
España	15	100.00%		4	100.00%		7	100.00%		262	100.00%	3.44%	211	100.00%	1.90%	87	100.00%	1.15%
France				2	100.00%	100.00%				149	100.00%	13.42%	69	100.00%	8.70%	21	100.00%	
Hrvatska																		
Ireland				4	100.00%		4	100.00%		299	100.00%	1.00%	85	100.00%	1.18%	93	100.00%	
Italia	15	100.00%		2	100.00%					7	100.00%	28.57%	34	100.00%	5.88%	1	100.00%	
Kypros																		
Latvija																		
Lietuva																		
Luxembourg													1	100.00%				
Magyarország																		
Malta																		
Nederland	2	100.00%		1	100.00%					10	90.00%	11.11%	20	100.00%	5.00%	3	100.00%	
Österreich										4	100.00%	50.00%	3	100.00%	33.33%			
Polska	1	100.00%		4	100.00%	25.00%	1	100.00%		9	100.00%	22.22%	55	100.00%	18.18%	1	100.00%	
Portugal	25	88.00%		13	92.31%	8.33%	2	0.00%		172	86.05%	4.05%	103	79.61%		46	0.00%	
Romania													2	100.00%	100.00%			
Slovenija	1	100.00%								3	100.00%		2	100.00%				
Slovensko				1	100.00%		1	100.00%		4	100.00%		10	100.00%				
Suomi/Finland																		
Sverige										1	100.00%	100.00%						
United Kingdom	14	100.00%		615	100.00%	0.33%	10	100.00%		372	100.00%	2.96%	70	100.00%	2.86%	340	100.00%	
Total EU 28	73	95.89%	0%	657	99.85%	0.91%	29	93.10%	0%	1,380	98.19%	4.35%	781	97.18%	4.35%	611	92.47%	0.18%

Table B9: Results of the BSE discriminatory tests reported by the Member States from 2003 to 2014

| | Average adult cattle population* | All BSE cases | BSE cases subject to Discriminatory testing | Results of discriminatory testing | | | | | | | | | | | |
| | | | | Classical BSE cases | | | H-BSE cases | | | L-BSE cases | | | Unknown type | | |
				N° of cases	% of cases	Prevalence rate pop**	N° of cases	% of cases	Prevalence rate pop**	N° of cases	% of cases	Prevalence rate pop**	N° of cases	% of cases	Prevalence rate pop**
Belgique/België	1 330 187	30	30	19	63.3%	1							11	36.7 %	0.69
Bulgaria	377 959														
Ceská Republika	648 013	26	26	21	80.8%	2.3	1	3.8 %	0.11				4	15.4 %	0.51
Danmark	755 000	5	5	2	40.0%	0.18				1	20.0 %	0.09	2	40.0 %	0.22
Deutschland	5 842 833	177	176	167	94.9%	2.02	2	1.1 %	0.02	2	1.1 %	0.02	5	2.8 %	0.07
Eesti	130 258														
Ellas	348 417														
España	3 255 814	586	586	526	89.8%	11.42	7	1.2 %	0.15	7	1.2 %	0.15	46	7.8 %	1.18
France	10 399 434	241	241	200	83.0%	1.36	13	5.4 %	0.09	15	6.2 %	0.1	13	5.4 %	0.1
Hrvatska	211 333														
Ireland	2 987 905	485	485	143	29.5%	3.41	4	0.8 %	0.1				338	69.7 %	9.43
Italia	2 906 970	59	59	55	93.2%	1.34				4	6.8 %	0.1			
Kypros	25 780														
Latvija	211 354														
Lietuva	437 725														
Luxembourg	95 779	1	1	1	100.0%	0.74									
Magyarország	376 833														
Malta	8 139														
Nederland	1 740 189	36	35	33	94.3%	1.35				2	5.7 %	0.08			
Österreich	930 676	7	7	4	57.1%	0.3	1	14.3 %	0.08	2	28.6 %	0.15			
Polska	2 973 950	71	71	58	81.7%	1.38	2	2.8 %	0.05	11	15.5 %	0.26			
Portugal	823 045	361	264	249	94.3%	21.79	7	2.7 %	0.61				8	3.0 %	0.81
Romania	1 593 637	2	2							2	100.0 %	0.1			
Slovenija	200 219	6	6	6	100.0%	2.12									
Slovensko	253 432	16	16	15	93.8%	4.1							1	6.3 %	0.33
Suomi/Finland	379 390														
Sverige	654 839	1	1				1	100.0 %	0.11						
United Kingdom	4 682 266	1 421	1 421	1213	85.4%	18.37	6	0.4 %	0.09	9	0.6 %	0.14	193	13.6 %	3.43
Total	**44 581 375**	**3 531**	**3 432**	**2712**	**79.0 %**	**4.33**	**44**	**1.3 %**	**0.07**	**55**	**1.6 %**	**0.09**	**621**	**18.1 %**	**1.16**

* based on data from Eurostat and Member States sources ; ** Cases per 1 Million adult bovine animals

4.3. Testing by target group

Table B11/B12/B15: Testing in 2014 of bovine animals with clinical signs at ante-mortem inspection / bovine animals culled in the frame of BSE eradication /healthy slaughtered bovine animals

Since no Classical BSE case was detected in these 3 testing streams in 2014, these tables were considered redundant and are therefore not displayed.

Table B10: Testing on emergency slaughtered bovine animals in 2014 (Classical BSE)

	N° tests 2014	Classical BSE cases 2014	Ratio*		
			2014	2013	Diff
Belgique/België	719				
Bulgaria	1 202				
Ceská Republika	812				
Danmark	1 122				
Deutschland	7 717				
Eesti	89				
Ellas	6				
España	304				
France	16 051				
Hrvatska	832				
Ireland	9				
Italia	10 052				
Kypros					
Latvija	140				
Lietuva	285				
Luxembourg					
Magyarország	206				
Malta	42				
Nederland	4 416				
Österreich	2 811				
Polska	1 469				
Portugal	1 718	1	5.821		
Romania	1 223				
Slovenija	444				
Slovensko	100				
Suomi/Finland	37				
Sverige	229				
United Kingdom	4 066				
EU 28	**56 101**	**1**	**0.178**		
Island					
Norway	4 270				
Suisse-Schweiz-Svizzera	5 413				
Others	**9 683**				

Table B13: Testing on bovine fallen stock in 2014 (Classical BSE)

	N° tests 2014	Classical BSE cases 2014	Ratio*		
			2014	2013	Diff
Belgique/België	23 634				
Bulgaria	525				
Ceská Republika	17 469				
Danmark	20 392				
Deutschland	137 791				
Eesti	4 116				
Ellas	2 968				
España	56 481	1	0.177		
France	186 068				
Hrvatska	6 176				
Ireland	49 177				
Italia	39 623				
Kypros	821				
Latvija	2 374				
Lietuva	2 762				
Luxembourg	2 048				
Magyarország	10 366				
Malta	62				
Nederland	43 894				
Österreich	12 422				
Polska	33 407				
Portugal	16 693				
Romania	1 976				
Slovenija	7 599				
Slovensko	7 335				
Suomi/Finland	10 723				
Sverige	9 153				
United Kingdom	132 319	1	0.076	0.127	-41 %
EU 28	**838 374**	**2**	**0.024**	**0.022**	**10 %**
Island	240				
Norway	1 946				
Suisse-Schweiz-Svizzera	7 421				
Others	**9 607**				

* positive Classical BSE cases per 10 000 bovine animals tested

Table B14: Testing on "at risk" bovine animals (fallen stock, emergency slaughter, animals with clinical signs at AM) in 2014 (Classical BSE)

	N° tests 2014	Classical BSE cases 2014	Ratio** 2014	Ratio** 2013	Ratio** Diff
Belgique/België	24 359				
Bulgaria	1 744				
Ceská Republika	18 284				
Danmark	21 514				
Deutschland	145 508				
Eesti	4 224				
Ellas	2 974				
España	56 826	1	0.176		
France	202 119				
Hrvatska	7 017				
Ireland	49 973				
Italia	50 286				
Kypros	821				
Latvija	4 223				
Lietuva	3 047				
Luxembourg	2 048				
Magyarország	10 595				
Malta	104				
Nederland	48 310				
Österreich	15 285				
Polska	35 339				
Portugal	21 511	1	0.465		
Romania	3 216				
Slovenija	8 224				
Slovensko	7 442				
Suomi/Finland	10 773				
Sverige	9 444				
United Kingdom	137 061	1	0.073	0.123	-41 %
EU 28	**902 271**	**3**	**0.033**	**0.020**	**10 %**
Island	240				
Norway	6 228				
Suisse-Schweiz-Svizzera	12 834				
Others	**19 302**				**0 %**

Table B16: Testing by active monitoring in 2014 (fallen stock, emergency slaughter, animals with clinical signs at AM, healthy slaughtered animals, animals culled in the frame of BSE eradication) (Classical BSE)

	N° tests 2014	Classical BSE cases 2014	Ratio* 2014	Ratio* 2013	Ratio* Diff
Belgique/België	24 462				
Bulgaria	15 046				
Ceská Republika	18 293				
Danmark	21 557				
Deutschland	362 834				
Eesti	4 225				
Ellas	14 495				
España	57 093	1	0.175		
France	1 059 372				
Hrvatska	34 045				
Ireland	49 973				
Italia	51 117				
Kypros	1 497				
Latvija	4 223				
Lietuva	5 526				
Luxembourg	2 048				
Magyarország	11 013				
Malta	275				
Nederland	48 399				
Österreich	16 899				
Polska	207 478				
Portugal	27 261	1	0.367		
Romania	76 867				
Slovenija	8 340				
Slovensko	7 461				
Suomi/Finland	10 778				
Sverige	9 444				
United Kingdom	137 126	1	0.073	0.088	-17 %
EU 28	**2 287 147**	**3**	**0.013**	**0.006**	**115 %**
Island	240				
Norway	6 492				
Suisse-Schweiz-Svizzera	12 834				
Others	**19 566**				**0 %**

Chart B6: Evolution of the BSE cases prevalence rate* (Classical BSE) in cattle tested in the EU 28 by active monitoring**, per target group, from 2006 to 2014
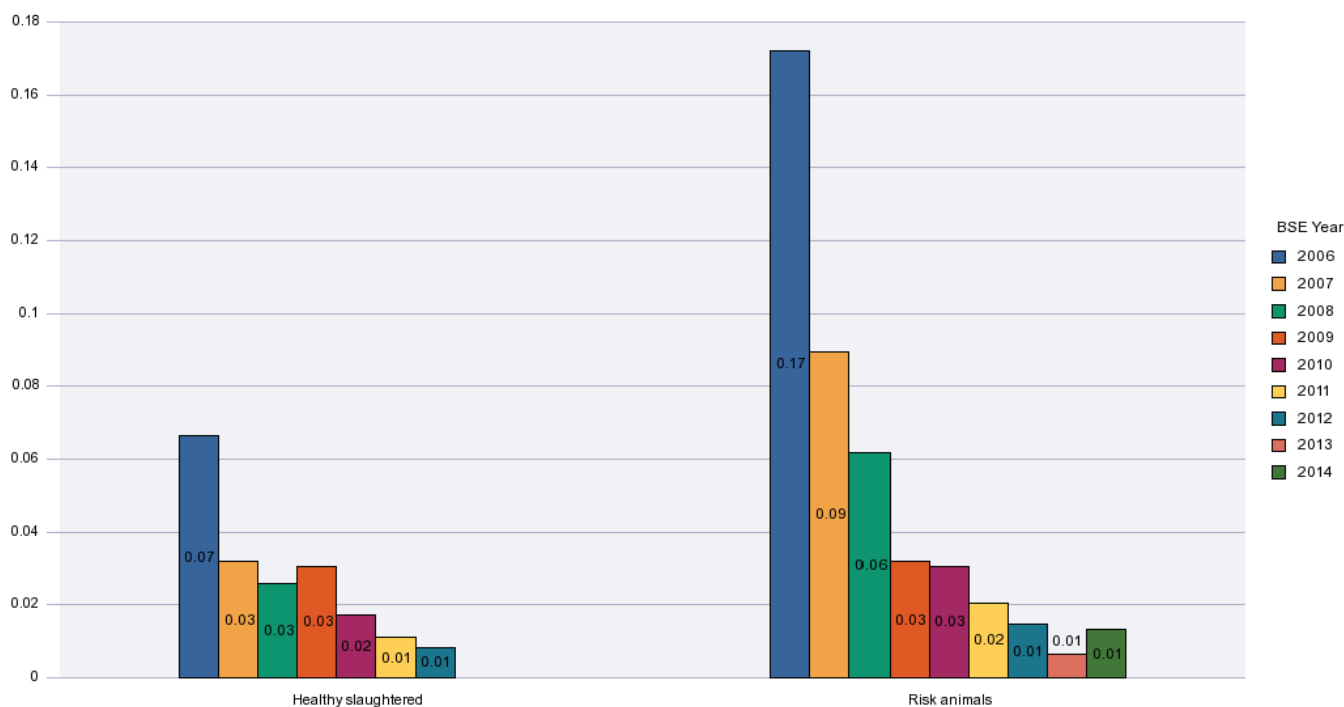
* positive cases per 10 000 bovine animals tested

** 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.

The figures illustrate that the likelihood of finding BSE cases is much higher in risk animals than in healthy slaughtered cattle. It can be noted that no BSE case was found in cattle with general clinical signs at ante-mortem since 2008 and in cattle culled under BSE eradication measures since 2010. No classical BSE cases were detected among healthy slaughtered animals in 2013 and in 2014.

4.4. Age distribution of BSE cases

Table B17: Age distribution (age group of months) of BSE cases in 2014

	Age (years old)	Unknown		6		10		11		>12	
	Age group (months)	Unknown		72-83		120-131		132-143		> 155	
	BSE type	Classical BSE	Atypical BSE	Classical BSE	Atypical BSE	Classical BSE	Atypical BSE	Classical BSE	Atypical BSE	Classical BSE	Atypical BSE
Deutschland	No of cases						1		1		
España	No of cases									1	1
France	No of cases						1				2
Portugal	No of cases									1	
Romania	No of cases	1		1							
United Kingdom	No of cases									1	
EU 28		1		1			2		1	3	3

Table B18: Age distribution (age group of months) of BSE cases (all types) in risk animals (fallen stock, emergency slaughter and clinical signs at Ante-Mortem inspection) in 2014

	Age (years old)	>12	
	Age group (months)	> 155	
	BSE type	Classical BSE	Atypical BSE
España	No of cases	1	1
France	No of cases		1
Portugal	No of cases	1	
United Kingdom	No of cases	1	
EU 28		3	2

Table B19: Age distribution (age group of months) of BSE cases (all types) in healthy slaughtered bovine animals in 2014

	Age (years old)	Unknown		6		10		11		>12	
	Age group (months)	Unknown		72-83		120-131		132-143		> 155	
	BSE type	Classical BSE	Atypical BSE	Classical BSE	Atypical BSE	Classical BSE	Atypical BSE	Classical BSE	Atypical BSE	Classical BSE	Atypical BSE
Deutschland	No of cases						1		1		
France	No of cases						1				1
Romania	No of cases	1		1							
EU 28		1		1			2		1		1

Table B20: Age distribution (age group of months) of BSE cases (all types) in BSE suspects in 2014

Table redundant - no case was detected in BSE suspects in 2014.

Table B21: Average age (in months) per target group of BSE cases detected in the EU 28 from 2001 to 2014

	BSE eradication				BSE suspects				Healthy slaughtered				Risk animals			
	Classical BSE		Atypical BSE		Classical BSE		Atypical BSE		Classical BSE		Atypical BSE		Classical BSE		Atypical BSE	
	Average age	Number of cases	Average age	Number of cases	Average age	Number of cases	Average age	Number of cases	Average age	Number of cases	Average age	Number of cases	Average age	Number of cases	Average age	Number of cases
2003	108	2			145	211			109	231	222	3	162	500	310	5
2004	189	2			161	119			112	148	262	2	134	419	312	4
2005	87	14			138	58			100	105	140	2	144	288	289	5
2006	82	1			140	29	90	1	138	63	254	3	153	172	263	3
2007	92	1			227	9			147	31	187	2	165	86	301	11
2008	322	1			198	5			138	26	150	2	198	62	372	8
2009					142	2			164	23	357	3	224	24	359	8
2010									187	13	345	2	191	23	311	6
2011									229	7	177	2	251	13	316	6
2012									312	4	337	4	255	7	186	3
2013											293	2	401	2	195	3
2014											234	6	338	3	448	2

Comments on the age distribution of BSE positive animals

The overall evolution of average age of positive cases appears favourable since 2001. While the average age of Classical BSE cases globally increased since 2001 (figures for 2013-2014 should be interpreted with great caution as they are based on a very small number of cases), the average age of Atypical BSE cases remained relatively stable (Chart B7).

Taking into consideration an average incubation period of 5-6 years for Classical BSE, these figures are an indication that measures taken to address Classical BSE (mainly feed ban) have been effective.

Chart B7a: Average age (in months) of Classical BSE cases detected in the EU 28 from 2001 to 2014 in the healthy slaughtered cattle and risk animals

Chart B7b: Average age (in months) of Atypical BSE cases detected in the EU 28 from 2001 to 2014 in the healthy slaughtered cattle and risk animals
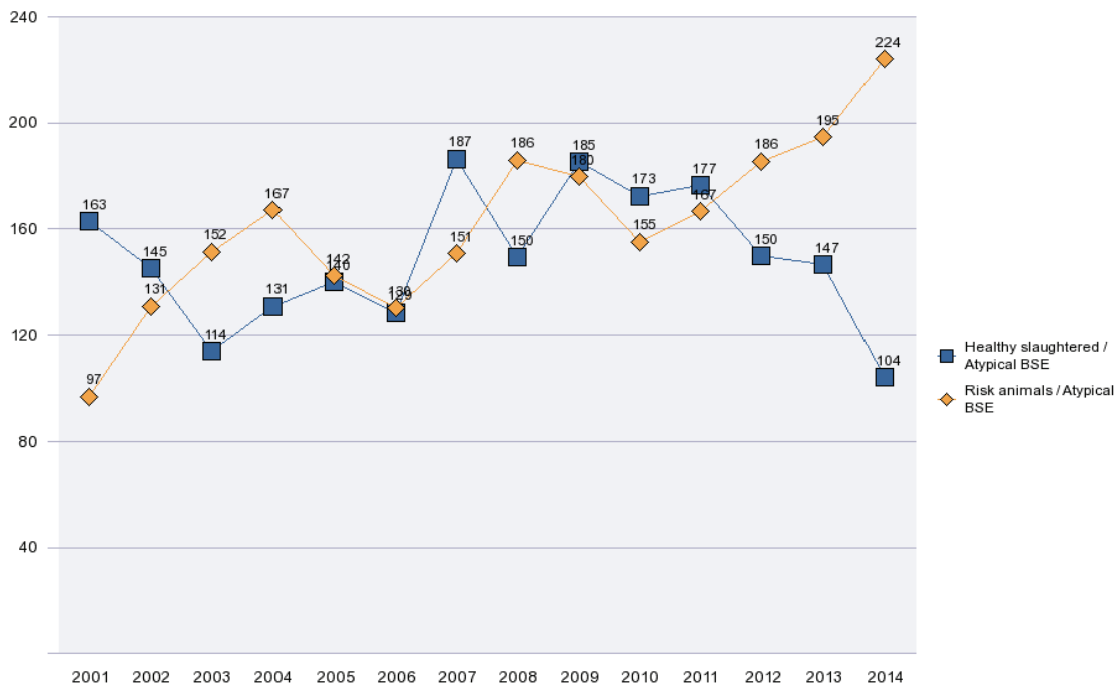
4.5. Year of birth distribution of BSE cases detected since 2001

Table B22: Year of birth distribution of cases (all types) detected from 2001 to 2014

No of cases	<1990	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Belgique/België			3	4	2	16	28	41	17	3										
Ceská Republika							4	3	3	2	3	12	1		1	1				
Danmark		1			1		1	7	2	2										
Deutschland	1	2	2	2	3	15	84	135	44	34	54	28	2	1	1					
Ellas								1												
España	12	5	1	8	38	42	101	117	159	140	86	78	4	2		1	2			
France	4	4	5	13	67	186	303	92	44	17	12	6	3			2				
Ireland	23	17	29	45	117	197	402	182	17	7	8	6	5	2	3	1				
Italia	3		1	4	4	14	27	53	27	4	5	2	1							
Luxembourg								1					1							
Nederland	1		2	2	1	5	7	33	14	6	3	4	1							
Österreich				1	1	1	1	2	1			1								
Polska		1		3	1	5	9	12	6	6	12	9	3	1	3	2	2			
Portugal	10	10	4	14	91	116	70	87	84	51	14	2	1	1						
Romania	1																			1
Slovenija							1	1		1	1	4								
Slovensko			1				9	4	1		1	5	5	1						
Suomi/Finland							1													
Sverige						1														
United Kingdom	265	108	205	389	640	974	854	119	58	53	35	15	9	9	5	2			1	1
Total	320	148	253	485	966	1,572	1,902	890	477	326	234	172	36	17	13	9	4	1	1	1

4.6. Prevalence of BSE in different age categories in 2014

Table B23: Reported age distribution (in months) of all bovines tested in the EU and Norway in 2014

	AT	BE	BG	CY	CZ	DE	DK	EE	EL	ES	FI	FR	HR	HU	IE	IT	LT	LU	LV	MT
< 24	2	10		4	18	903	14		4	10	4	311	138	32		11		1	12	
24-29	261	8	444		1 848	664	4	1	8	9	2	438	827	1 240	13	21			495	1
30-35	235	16	2 664		1 522	516	1	1	56	12	2	994	2 528	833	15	106			387	1
36-47	408	50	2 120	5	3 111	1 322	48	10	80	81	15	3 878	4 040	1 922	88	119			635	1
48-59	2 339	6 388	1 882	207	2 959	36 175	7 187	1 225	406	10 685	3 016	37 002	4 472	1 807	7 213	12 331	587	477	581	36
60-71	2 778	5 373	1 635	163	2 589	34 535	6 133	1 066	453	9 897	2 915	35 521	4 679	1 404	6 679	11 313	509	467	548	31
72-83	2 746	3 909	1 273	372	1 967	27 765	3 608	810	2 978	8 006	1 980	234 553	3 499	1 120	6 176	8 899	931	368	472	106
84-95	2 175	2 747	1 056	311	1 320	19 675	2 061	500	2 418	5 635	1 185	194 500	2 972	830	5 519	6 280	839	245	370	53
96-107	1 659	1 645	1 104	213	893	94 469	1 036	307	1 972	4 012	677	151 896	2 545	545	5 330	3 827	738	167	269	16
108-119	1 209	996	864	107	546	59 099	484	159	1 401	2 847	364	113 046	2 230	308	4 789	2 520	612	112	189	18
120-131	946	559	657	54	356	34 926	285	71	1 151	2 419	207	83 100	1 764	283	4 075	1 641	411	75	135	7
132-143	630	320	484	30	294	20 293	179	33	823	2 277	144	60 967	1 400	134	3 098	1 189	344	35	64	2
144-155	456	200	294	15	260	12 678	116	26	621	2 035	88	44 045	892	141	2 028	819	221	29	28	3
> 155	1 078	2 091	569	16	610	20 202	339	16	2 123	8 514	177	92 642	1 741	416	4 952	2 030	334	74	45	
Others and unknown		168				69	64		1	655	2	6 481	318			12				
Total	16 922	24 480	15 046	1 497	18 293	363 291	21 559	4 225	14 495	57 094	10 778	1 059 374	34 045	11 015	49 975	51 118	5 526	2 050	4 230	275

	LT	LU	LV	MT	NL	PL	PT	RO	SE	SI	SK	UK
< 24		1	12		22	8		34	22	7	2	1
24-29			495	1	25	8		285	92	925	650	55
30-35			387	1	42	2		6 904	107	866	638	153
36-47			635	1	172	2		10 306	589	1 175	1 337	638
48-59	587	477	581	36	9 949	7 257	3 663	8 390	2 049	1 085	1 222	22 496
60-71	509	467	548	31	11 336	7 006	3 100	6 626	2 196	1 044	1 060	22 340
72-83	931	368	472	106	9 185	5 627	3 930	5 889	1 665	954	834	19 687
84-95	839	245	370	53	6 962	4 292	3 172	5 063	1 056	691	567	16 134
96-107	738	167	269	16	4 291	46 609	2 358	5 034	625	454	424	12 928
108-119	612	112	189	18	2 521	39 056	1 884	5 182	330	356	235	10 199
120-131	411	75	135	7	1 484	26 762	1 619	3 735	201	274	154	7 919
132-143	344	35	64	2	872	20 361	1 593	3 539	145	168	123	6 108
144-155	221	29	28	3	452	17 316	1 204	3 530	108	127	76	4 550
> 155	334	74	45		1 050	33 197	4 739	12 424	240	226	139	13 786
Others and unknown					36				22			135
Total	5 526	2 050	4 230	275	48 399	207 503	27 262	76 941	9 447	8 352	7 461	137 129

	Total EU		NO
< 24	1 570	< 24	17
24-29	8 324	24-29	71
30-35	18 601	30-35	70
36-47	32 152	36-47	256
48-59	193 086	48-59	1 739
60-71	183 396	60-71	1 541
72-83	359 309	72-83	998
84-95	288 628	84-95	631
96-107	346 043	96-107	307
108-119	251 663	108-119	158
120-131	175 270	120-131	94
132-143	125 649	132-143	47
144-155	92 358	144-155	21
> 155	203 770	> 155	42
Others and unknown	7 963	Others and unknown	501
Total	2 287 782	**Total**	6 493

Table B24: Reported age distribution (in months) of risk animals tested in the EU and Norway in 2014

	AT	BE	BG	CY	CZ	DE	DK	EE	EL	ES	FI	FR	HR	HU	IE	IT
< 24		7		1	14	84	13		3	10	4	192	60	26		11
24-29	260	4	444		1 847	139	4	1	6	9	2	401	624	1 234	13	20
30-35	159	12	191		1 522	124	1	1	9	9	1	922	580	812	15	18
36-47	224	38	188	4	3 108	563	48	10	15	79	15	3 742	971	1 863	88	73
48-59	2 143	6 359	120	205	2 959	34 955	7 170	1 225	365	10 676	3 015	36 426	1 013	1 748	7 213	12 286
60-71	2 550	5 354	112	163	2 589	33 418	6 125	1 066	418	9 888	2 915	34 961	1 052	1 369	6 679	11 267
72-83	2 465	3 890	95	152	1 966	26 769	3 600	809	438	8 000	1 980	30 601	669	1 068	6 176	8 785
84-95	1 990	2 734	109	133	1 320	18 757	2 060	500	338	5 622	1 184	23 857	576	785	5 519	6 087
96-107	1 536	1 638	93	66	893	11 824	1 032	307	305	4 009	677	17 863	382	515	5 330	3 712
108-119	1 083	995	95	39	546	7 118	481	159	165	2 841	363	12 987	332	288	4 789	2 454
120-131	856	558	82	25	356	4 055	285	71	191	2 417	207	9 485	198	264	4 074	1 601
132-143	576	319	69	15	294	2 542	178	33	141	2 276	143	7 277	180	121	3 098	1 153
144-155	422	199	67	9	260	1 637	115	26	110	2 031	88	5 390	99	134	2 027	803
> 155	1 021	2 090	79	9	610	3 475	338	16	469	8 309	177	14 653	235	367	4 952	2 004
Others and unknown		162				48	64		1	650	2	3 362	46			12
Total	15 285	24 359	1 744	821	18 284	145 508	21 514	4 224	2 974	56 826	10 773	202 119	7 017	10 594	49 973	50 286

	LT	LU	LV	MT	NL	PL	PT	RO	SE	SI	SK	UK
< 24			10		22			22	22	3	2	1
24-29			495	1	25	2		280	92	924	650	52
30-35			386	1	40			199	107	766	638	126
36-47			634	1	168			427	587	1 168	1 337	629
48-59	587	477	578	36	9 936	7 256	3 663	467	2 048	1 085	1 222	22 487
60-71	509	467	548	31	11 323	7 004	3 100	307	2 196	1 043	1 059	22 331
72-83	476	368	472	16	9 180	5 626	2 741	287	1 665	952	830	19 668
84-95	374	245	370	11	6 952	4 292	2 245	185	1 056	689	564	16 125
96-107	337	167	269	3	4 286	3 437	1 651	173	625	453	421	12 921
108-119	268	111	189	2	2 518	2 400	1 364	190	330	352	234	10 195
120-131	169	75	135	1	1 479	1 586	1 188	125	201	272	150	7 917
132-143	124	35	64	1	869	1 138	1 221	114	145	167	122	6 106
144-155	82	29	28		446	944	903	102	108	127	74	4 549
> 155	121	74	45		1 030	1 654	3 435	338	240	223	139	13 769
Others and unknown					36				22			135
Total	3 047	2 048	4 223	104	48 310	35 339	21 511	3 216	9 444	8 224	7 442	137 011

	Total EU
< 24	507
24-29	7,529
30-35	6,639
36-47	15,980
48-59	177,720
60-71	169,844
72-83	139,744
84-95	104,679
96-107	74,925
108-119	52,888
120-131	38,023
132-143	28,521
144-155	20,809
> 155	59,872
Others and unknown	4,540
Total	902 220

	NO
< 24	14
24-29	67
30-35	65
36-47	244
48-59	1,678
60-71	1,495
72-83	965
84-95	615
96-107	293
108-119	148
120-131	91
132-143	47
144-155	20
> 155	38
Others and unknown	447
Total	6 227

Table B25: Reported age distribution (in months) of healthy slaughtered animals tested in the EU and Norway in 2014

	AT	BE	BG	CY	CZ	DE	DK	EE	EL	ES	FI	FR	HR	HU	IE	IT
< 24	1	2		3	4	814	1		1			119	78	5		
24-29		1			1	522			2			37	203	6		1
30-35	76	3	2 473			390			47	3	1	71	1 948	21		88
36-47	182	7	1 932	1	3	755			65	2		135	3 069	58		46
48-59	193	24	1 762	2		1 102	17		41	9	1	576	3 459	59		44
60-71	224	18	1 523			1 038	6		35	9		560	3 627	35		46
72-83	275	18	1 178	220	1	909	8	1	2 540	6		203 952	2 830	51		114
84-95	184	13	947	178		873	1		2 080	13	1	170 643	2 396	45		193
96-107	122	6	1 011	147		82 617	4		1 667	3		134 033	2 163	30		115
108-119	124	1	769	68		51 955	3		1 236	6	1	100 059	1 898	20		66
120-131	90	1	575	29		30 847			960	2		73 615	1 566	19		40
132-143	54	1	415	15		17 739	1		682	1	1	53 690	1 220	13		36
144-155	34	1	227	6		11 034	1		511	4		38 655	793	7		16
> 155	55	1	490	7		16 704	1		1 654	204		77 989	1 506	49		26
Others and unknown		6				19				5		3 119	272			
Total	1 614	103	13 302	676	9	217 318	43	1	11 521	267	5	857 253	27 028	418	0	831

	LT	LU	LV	MT	NL	PL	PT	RO	SE	SI	SK	UK
< 24												
24-29								2				2
30-35						2		6 702		99		27
36-47						4		9 872		7		9
48-59						13		7 913				9
60-71						13		6 312			1	9
72-83	455			90	5		1 188	5 598			4	16
84-95	465			42	10		927	4 871		1	3	7
96-107	401			13	5	43 172	707	4 857		1	3	7
108-119	344			16	3	36 655	520	4 985		4	1	3
120-131	242			6	5	25 176	431	3 610			4	2
132-143	220			1	3	19 223	372	3 423		1	1	2
144-155	139			3	6	16 371	301	3 426			2	1
> 155	213				20	31 542	1 303	12 078		3		16
Others and unknown												
Total	2 479	0	0	171	89	172 139	5 749	73 649	0	116	19	110

	Total EU
< 24	1,028
24-29	777
30-35	11,951
36-47	16,147
48-59	15,224
60-71	13,456
72-83	219,459
84-95	183,893
96-107	271,084
108-119	198,737
120-131	137,220
132-143	97,114
144-155	71,538
> 155	143,861
Others and unknown	3,421
Total	1 384 910

	NO
< 24	3
24-29	4
30-35	5
36-47	12
48-59	61
60-71	45
72-83	33
84-95	16
96-107	14
108-119	10
120-131	3
132-143	0
144-155	1
> 155	4
Others and unknown	54
Total	265

Table B26: Reported age distribution (in months) of BSE suspects in the EU and Norway tested in 2014

	AT	BE	BG	CY	CZ	DE	DK	EE	EL	ES	FI	FR	HR	HU	IE	IT
< 24	1	1				3								1		
24-29	1	3				3										
30-35		1				2						1				
36-47	2	5				4						1			1	
48-59	3	5				118										1
60-71	4	1				79	2									
72-83	6	1				87								1		
84-95	1					45										
96-107	1	1				28										
108-119	2					25										
120-131						20									1	
132-143						11										
144-155						7									1	
> 155	2					23					1					
Others and unknown						2										
Total	23	18	0	0	0	457	2	0	0	0	1	2	0	2	3	1

	LT	LU	LV	MT	NL	PL	PT	RO	SE	SI	SK	UK		Total EU		NO
< 24		1	2			8		12		4			< 24	33	< 24	
24-29						6		3		1		1	24-29	18	24-29	
30-35			1			2		3		1			30-35	11	30-35	
36-47			1			2		7	2				36-47	25	36-47	
48-59			3			1		10	1				48-59	142	48-59	
60-71						2		7		1			60-71	96	60-71	1
72-83						1	1	4		2		1	72-83	104	72-83	
84-95								7		1			84-95	54	84-95	
96-107								4					96-107	34	96-107	
108-119		1				1		7				1	108-119	37	108-119	
120-131										2			120-131	23	120-131	
132-143								2					132-143	13	132-143	
144-155						1		2					144-155	11	144-155	
> 155						1		8					> 155	35	> 155	
Others and unknown													Others and unknown	2	Others and unknown	
Total	0	2	7	0	0	25	1	76	3	12	0	3	**Total**	638	**Total**	1

Table B27: Extrapolated age distribution (in months) of tested animals culled in the framework of BSE eradication in the EU in 2014

	DE	PT	UK	Total EU
< 24	2			2
24-29				
30-35				
36-47				
48-59				
60-71				
72-83			2	2
84-95			2	2
96-107				
108-119	1			1
120-131	4			4
132-143	1			1
144-155				
> 155		1	1	2
Others and unknown				
Total	**8**	**1**	**5**	**14**

Chart B8: Prevalence rate of BSE (all types), per target group, in cattle of different age (months) in the EU in 2014 (positive per 10.000 tests)
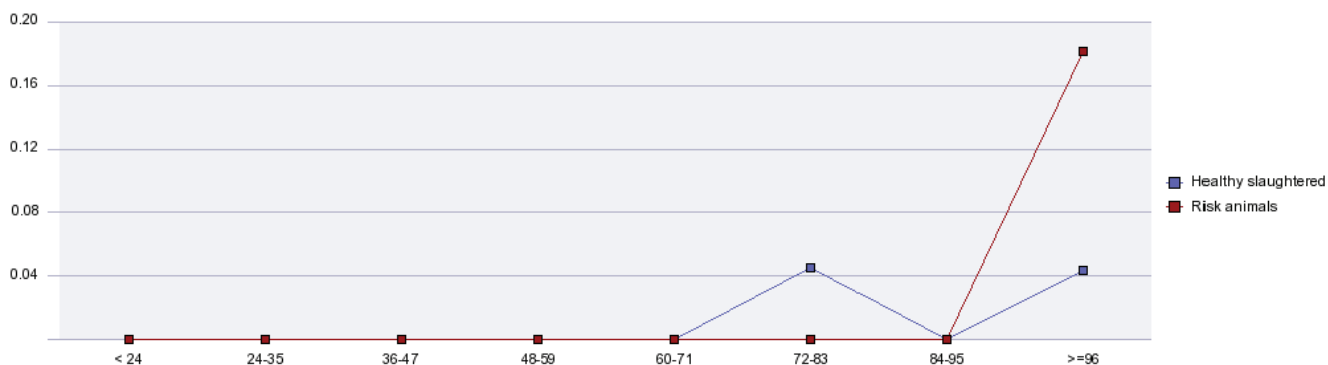
Chart B9: Prevalence rate of BSE (all types), per target group, in cattle of different age (months) in the EU from 2002 to 2014 (positive per 10.000 tests)
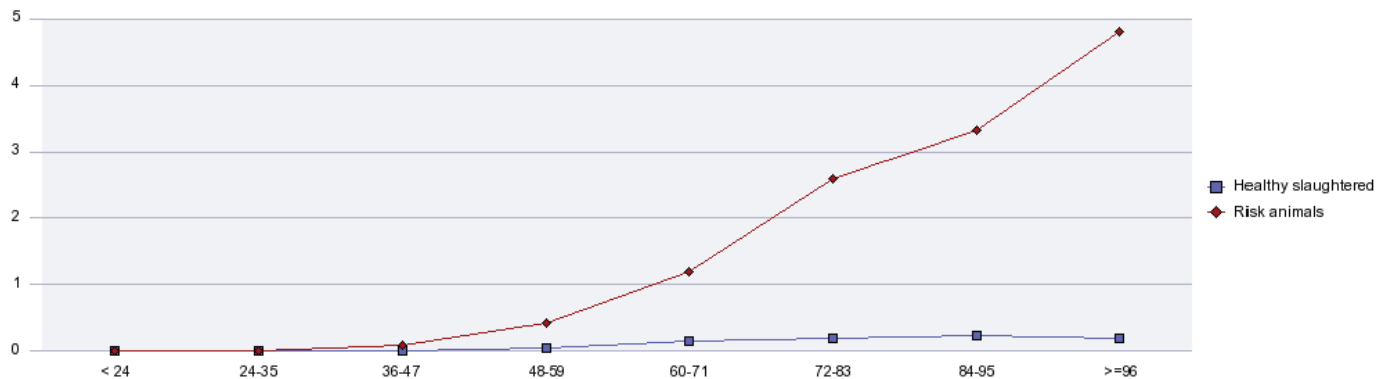
Chart B10: Average age (in months) of the Classical, L and H-type BSE cases confirmed in the EU, per year of detection, from 2001 to 2014
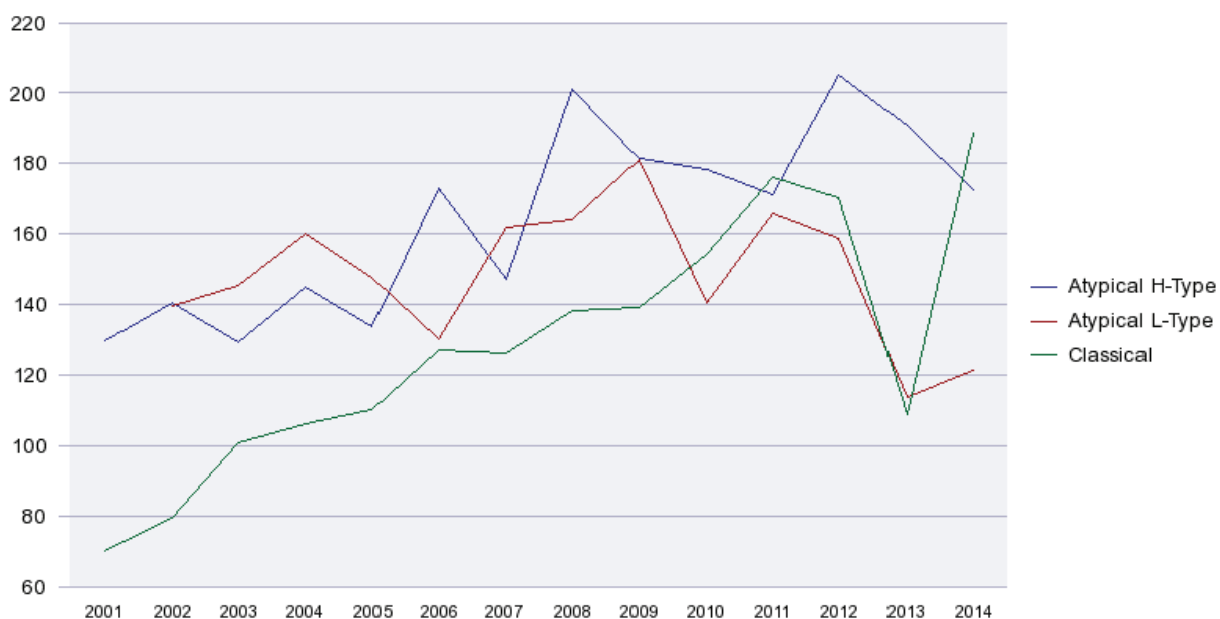
4.7. BSE in young animals

Table B28: Number of BSE cases (all types) below 60 months of age from 2001 to 2014

	59	58	57	56	55	54	53	52	51	50	49	48	47	46	45	44	43	42	41	39
2001	15	14	10	13	10	10	8	6	4	3	6	5	1	1	1	1	3	1		
2002	4	6	11	6	2	6	7	8	1	3	2	3	1	1	1				1	1
2003	4	4	4	7	4	3	5	5	2	2	1			3	1	2				
2004	7		3	3	6	4	4	3	5	5	2	2	1	2		1	1	1		
2005	5	9	4	5	1	1	3	1	2			2	1			2			1	1
2006											1									
2007													1							
2008				1														1		

Table B29: Details on BSE cases < 60 months detected in 2014

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

Table B30: Details on BSE cases in animals born after 31/12/2000 detected from 2001 to 2014

	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	Classical
42	Healthy slaughtered animals	Slovensko	2004	2/2001	Classical
43	Healthy slaughtered animals	Slovensko	2004	01/2001	Classical
44	Eradication Measures	United Kingdom	2005	9/2001	Classical
44	Fallen stock	Ireland	2005	9/2001	Unknown
47	Fallen stock	Deutschland	2005	5/2001	Classical
48	Healthy slaughtered animals	Luxembourg	2005	11/2001	Classical
48	Healthy slaughtered animals	Polska	2005	6/2001	Classical
51	Healthy slaughtered animals	Deutschland	2005	3/2001	Classical
52	Fallen stock	Ireland	2005	3/2001	Unknown
58	Clinical signs at AM	Nederland	2005	2/2001	Classical
58	Eradication Measures	Ceská Republika	2005	01/2001	Classical
58	Healthy slaughtered animals	Polska	2005	1/2001	Classical
60	Healthy slaughtered animals	France	2006	01/2001	Classical
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	Classical
62	Fallen stock	United Kingdom	2006	01/2001	Classical
62	Fallen stock	United Kingdom	2006	03/2001	Classical
64	Fallen stock	España	2006	01/2001	Classical
66	Fallen stock	United Kingdom	2006	06/2001	Classical
66	Suspects subject to laboratory examination	Ireland	2006	03/2001	Unknown
71	Fallen stock	United Kingdom	2007	04/2001	Classical
78	Healthy slaughtered animals	Slovensko	2007	03/2001	Classical
79	Suspects subject to laboratory examination	Ireland	2008	11/2001	Unknown
80	Healthy slaughtered animals	Slovensko	2007	03/2001	Unknown
81	Healthy slaughtered animals	Slovensko	2008	10/2001	Classical
82	Suspects subject to laboratory examination	Portugal	2007	02/2001	
85	Healthy slaughtered animals	España	2008	01/2001	Classical
85	Suspects subject to laboratory examination	España	2008	05/2001	Classical
86	Fallen stock	España	2008	09/2001	Classical
93	Fallen stock	United Kingdom	2008	00/2001	Classical
96	Fallen stock	Ireland	2009	02/2001	Unknown
105	Fallen stock	France	2010	12/2001	Atypical L-Type
162	Fallen stock	United Kingdom	2014	04/2001	Classical
167	Healthy slaughtered animals	France	2014	01/2001	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	Classical
41	Fallen stock	España	2005	1/2002	Unknown
49	Healthy slaughtered animals	United Kingdom	2006	08/2002	Classical
63	Fallen stock	United Kingdom	2008	10/2002	Classical
65	Fallen stock	Ireland	2007	05/2002	Classical
67	Fallen stock	United Kingdom	2007	04/2002	Classical
67	Fallen stock	United Kingdom	2007	05/2002	Classical
71	Fallen stock	España	2008	07/2002	Classical
74	Suspects subject to laboratory examination	United Kingdom	2008	07/2002	Classical
78	Eradication Measures	United Kingdom	2008	05/2002	Classical
83	Healthy slaughtered animals	Ireland	2009	11/2002	Classical
87	Emergency slaughter	United Kingdom	2009	09/2002	Classical
90	Fallen stock	Slovensko	2010	11/2002	Classical
136	Healthy slaughtered animals	Deutschland	2014	10/2002	Atypical H-Type
141	Fallen stock	United Kingdom	2013	01/2002	Classical

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	Classical
66	Fallen stock	Ireland	2008	03/2003	Unknown
66	Healthy slaughtered animals	Ceská Republika	2009	09/2003	Unknown
66	Healthy slaughtered animals	Polska	2008	06/2003	Classical
66	Healthy slaughtered animals	United Kingdom	2008	01/2003	Classical
68	Eradication Measures	Ireland	2008	02/2003	Unknown
68	Fallen stock	United Kingdom	2009	06/2003	Classical
71	Fallen stock	United Kingdom	2009	04/2003	Classical
74	Fallen stock	United Kingdom	2009	09/2003	Classical
97	Fallen stock	Ireland	2011	03/2003	Classical
114	Healthy slaughtered animals	Polska	2013	08/2003	Atypical L-Type
126	Healthy slaughtered animals	Deutschland	2014	07/2003	Atypical L-Type

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	Classical
66	Fallen stock	United Kingdom	2010	10/2004	Classical
67	Healthy slaughtered animals	Ireland	2009	04/2004	Classical
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
122	Healthy slaughtered animals	France	2014	02/2004	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

Born in 2007					
Age (Months)	Target Group	Member State	Year of Detection	Date of birth	BSE case type
77	Fallen stock	United Kingdom	2013	02/2007	Classical

Born in 2008					
Age (Months)	Target Group	Member State	Year of Detection	Date of birth	BSE case type
75	Healthy slaughtered animals	Romania	2014	09/2008	Atypical L-Type

5. SUMMARY OF TSE TESTING IN OVINE AND CAPRINE ANIMALS DURING 2014

5.1. Sampling

Comments on sampling

A slight decline of the overall number of small ruminants tested for TSE can be noted in 2014 compared to 2013. 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 2014

Chart SR1: sheep
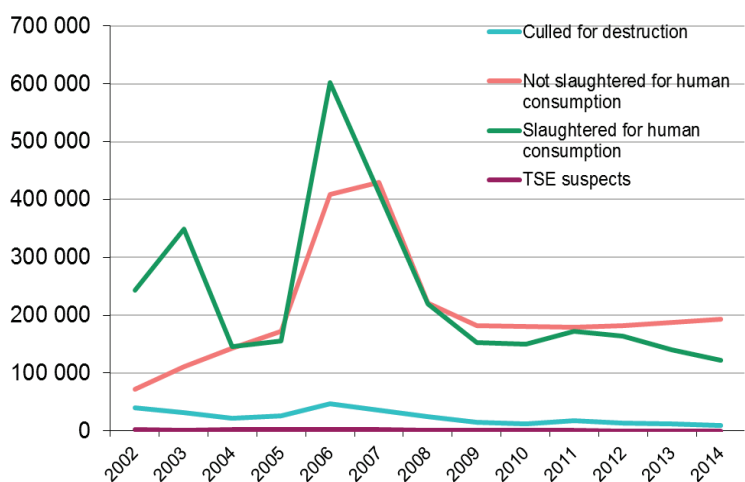
Chart SR2: goats
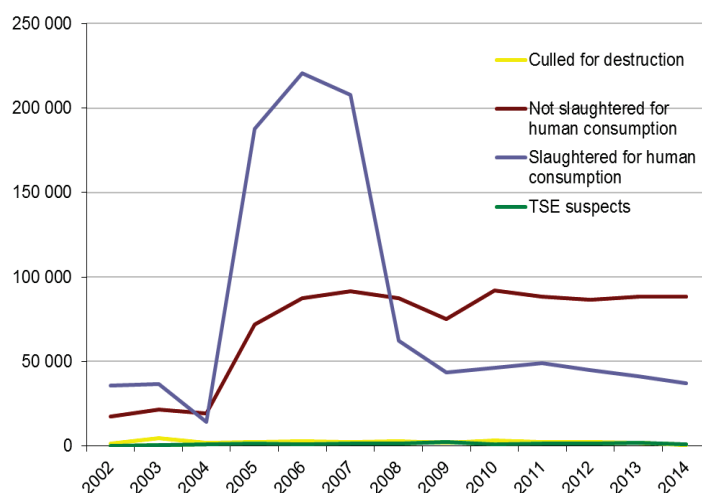
SHEEP	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Culled for destruction	39 767	31 122	22 126	26 606	46 704	35 241	24 946	14 491	12 260	17 520	13 150	12 006	9 561
Not slaughtered for human consumption	71 817	110 675	142 854	171 879	408 503	430 372	220 727	181 586	180 754	178 772	182 148	187 199	193 676
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	140 491	122 089
TSE suspects	2 759	1 294	2 660	2 371	2 657	1 784	1 589	844	734	367	167	271	204
Total	357 275	492 700	313 827	356 015	1 060 519	878 799	466 796	348 983	344 181	369 429	358 850	339 967	325 530

GOATS	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
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	1 763	586
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	88 185	88 420
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	41 180	36 920
TSE suspects	65	429	1 032	1 560	1 129	1 517	1 249	2 198	1 126	1 231	1 476	1 798	1 090
Total	54 930	63 397	36 804	263 165	311 886	303 213	153 847	122 935	142 681	140 850	135 175	132 926	127 016

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 2014

SHEEP	Animals Tested	All scrapie cases (CS + AS)	CS cases*	AS cases	Ratio CS**	Ratio AS**
Belgique/België	1,551					
Bulgaria	10,249	3	3		2.9	
Ceská Republika	1,578	1		1		6.3
Danmark	569					
Deutschland	19,374	10		10		5.2
Eesti	181					
Ellas	23,883	562	557	5	233.2	2.1
España	25,722	42	36	6	14.0	2.3
France	43,546	34	28	6	6.4	1.4
Hrvatska	1,741					
Ireland	21,660	26	19	7	8.8	3.2
Italia	25,906	243	241	2	93.0	0.8
Kypros	10,078	25	25		24.8	
Latvija	88					
Lietuva	4,214					
Luxembourg	151					
Magyarország	16,161	23	1	22	0.6	13.6
Malta	216					
Nederland	1,514					
Österreich	5,364	2		2		3.7
Polska	19,418	11		11		5.7
Portugal	23,065	20		20		8.7
Romania	26,707	93	93		34.8	
Slovenija	912	1		1		11.0
Slovensko	11,657	9	6	3	5.1	2.6
Suomi/Finland	1,305	1		1		7.7
Sverige	5,835	7		7		12.0
United Kingdom	22,885	11		11		4.8
Total EU 28	**325 530**	**1 124**	**1 015**	**109**	**31.2**	**3.3**
Norway	13,354	9		9		6.7
Total Others	**13 354**	**9**	**0**	**9**	**0.0**	**6.7**

* reported as CS or type unknown;   ** number of cases per 10 000 tests

GOATS	Animals Tested	All scrapie cases (CS + AS)	CS cases*	AS cases	Ratio CS**	Ratio AS**
Belgique/België	523					
Bulgaria	677					
Ceská Republika	131					
Danmark	134					
Deutschland	2,183	1		1		4.6
Eesti	14					
Ellas	3,609	32	31	1	85.9	2.8
España	15,309	15	8	7	5.2	4.6
France	61,668	5		5		0.8
Hrvatska	624					
Ireland	91					
Italia	13,336	7	7		5.2	
Kypros	10,935	1364	1364		1247.4	
Latvija	4					
Lietuva	152					
Luxembourg	126					
Magyarország	192					
Malta	231					
Nederland	520					
Österreich	1,554	1		1		6.4
Polska	2,790					
Portugal	3,859					
Romania	6,140	1	1		1.6	
Slovenija	246					
Slovensko	148					
Suomi/Finland	149					
Sverige	154					
United Kingdom	1,517	26	26		171.4	
Total EU 28	**127 016**	**1 452**	**1 437**	**15**	**113.1**	**1.2**
Norway	386					
Total Others	**386**	**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 2014

Countries with classical scrapie cases only

Countries with atypical scrapie cases only

Countries with both classical and atypical scrapie cases

Countries without cases having submitted data on active monitoring
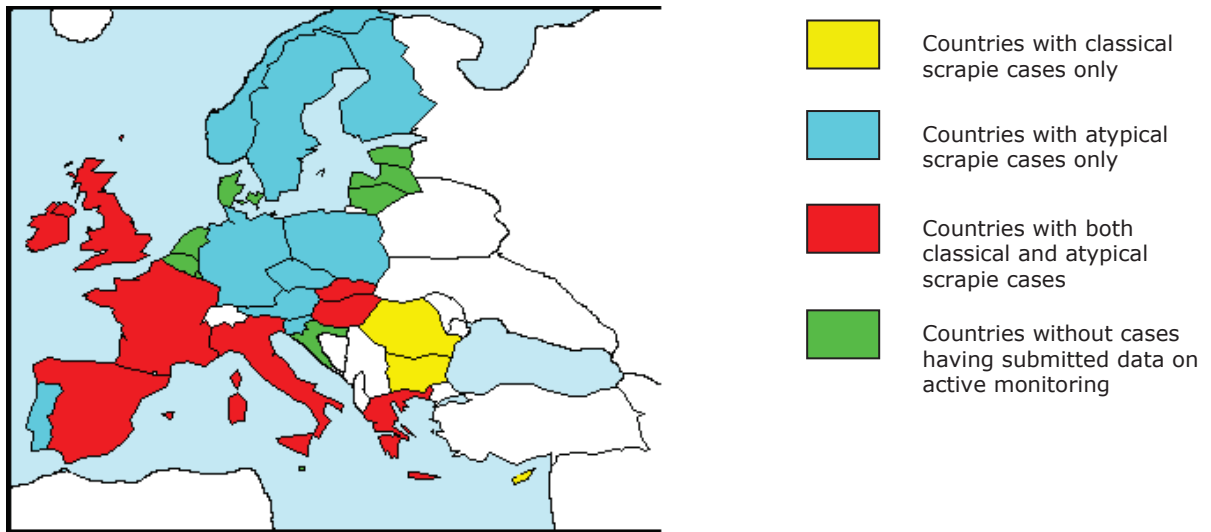
Map 3: EU Member States (+ Norway) where Classical scrapie was reported in the last 7 years (2008-2014)

Classical Scrapie cases were reported over the last 7 years (2008-2014)

No Classical Scrapie cases were reported over the last 7 years (2008-2014)
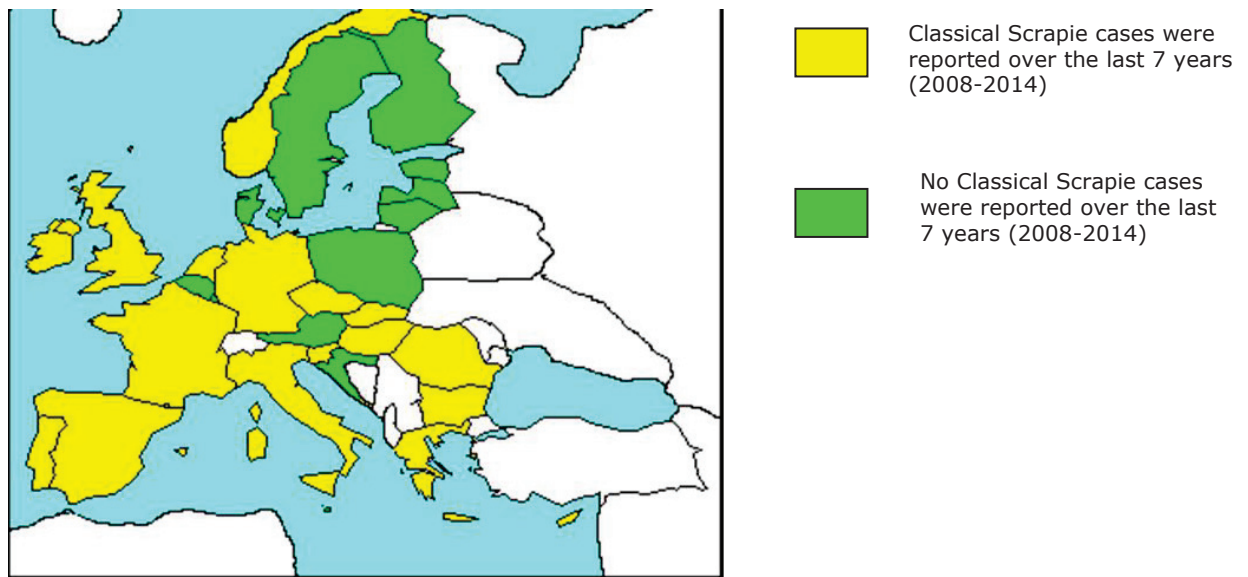
Table SR2: Information on Index status of classical scrapie cases in 2014

	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 Index status unknown
Bulgaria	3	3						
Ellas	557	89	468		31	7	24	
España	36	4	32		8	5	3	
France	28		28					
Ireland	19	5	14					
Italia	241	25	216		7	5	2	
Kypros	25	3	22		1,356	26	1,329	1
Magyarország	1		1					
Romania	93	9	84		1	1		
Slovensko	6	4	2					
United Kingdom					26		26	
Total EU 28	1,009	142	867		1,429	44	1,384	1
Norway								
Total Others								

Table SR3: TSE cases (CS + AS) detected by active monitoring and passive surveillance (clinical suspects) in ovine and caprine animals in 2014

	Sheep				Goats			
	Population*	TSE Positives		% detected by active monit.	Population*	TSE Positives		% detected by active monit.
		Act. Mon.	Suspects			Act. Mon.	Suspects	
Belgique/België	162 895				49 312			
Bulgaria	1 157 940	3		100 %	243 480			
Ceská Republika	209 890	1		100 %	12 917			
Danmark	93 833				13 449			
Deutschland	1 126 530	10		100 %	80 201	1		100 %
Eesti	56 887				3 151			
Ellas	6 697 000	478	84	85 %	3 051 000	31	1	97 %
España	11 281 200	42		100 %	1 939 730	15		100 %
France	5 479 000	34		100 %	1 078 000	5		100 %
Hrvatska	498 000				48 000			
Ireland	2 430 210	23	3	88 %	15 794			
Italia	6 203 160	242	1	100 %	739 480	7		100 %
Kypros	224 800	25		100 %	165 100	518	846	38 %
Latvija	34 976				4 587			
Lietuva	43 143				3 553			
Luxembourg	15 000				5 000			
Magyarország	855 000	23		100 %	36 000			
Malta	9 470				3 800			
Nederland	600 000				272 000			
Österreich	211 390	2		100 %	46 220	1		100 %
Polska	203 903	11		100 %	33 585			
Portugal	1 607 360	20		100 %	321 680			
Romania	8 161 000	88	5	95 %	1 128 900	1		100 %
Slovenija	77 460	1		100 %	19 560			
Slovensko	314 240	9		100 %	32 430			
Suomi/Finland	69 300	1		100 %	4 400			
Sverige	271 530	7		100 %	7 830			
United Kingdom	10 396 000	11		100 %	85 000	23	3	88 %
Total EU 28	58 491 117	1 031	93	92 %	9 444 159	602	850	41 %
Norway	882 000	8	1	89 %	64 400			
Total Others	882 000	8	1	89 %	64 400	0	0	0 %

* Update for 2014 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 2014 and prevalence rate in that stream from 2012 to 2014

Sheep	Total tests	2014 Number CS cases	2014 Prevalence rate**	2013 Prevalence rate**	2012 Prevalence rate**
Belgique/België					
Bulgaria	6 957	1	1.4		1.7
Ceská Republika	8				
Danmark					
Deutschland	8 040				
Eesti	1				
Ellas	4 010	26	64.8	29.9	17.5
España	9 503	9	9.5	6.1	5.5
France	10 538				0.8
Hrvatska	6				
Ireland	10 482	1	1.0		0.9
Italia	9 314	9	9.7	3.9	10.7
Kypros	3 450	2	5.8	13.0	24.3
Latvija					
Lietuva	4 071				
Luxembourg					
Magyarország	7 915	1	1.3	1.5	
Malta	15				
Nederland				0.9	
Österreich	30				
Polska	11 639				
Portugal	8 241			0.8	
Romania	18 063	43	23.8	39.4	17.2
Slovenija					
Slovensko	1 705				
Suomi/Finland	7				
Sverige	28				
United Kingdom	8 066				2.6
Total EU 28	**122 089**	**92**	**7.5**	**8.3**	**5.9**
Norway	8 212				
Total Others	**8 212**	**0**	**0.0**	**-1.2**	**0.0**

Goats	Total tests	2014 Number CS cases	2014 Prevalence rate**	2013 Prevalence rate**	2012 Prevalence rate**
Belgique/België					
Bulgaria	589				
Ceská Republika	1				
Danmark					
Deutschland	495				
Eesti	1				
Ellas	1 448	2	13.8	5.3	8.8
España	6 899			1.4	
France	8 811				
Hrvatska					
Ireland					
Italia	7 052	2	2.8		2.4
Kypros	4 531	169	373.0	478.6	461.3
Latvija					
Lietuva	150				
Luxembourg					
Magyarország	55				
Malta	103				
Nederland					
Österreich					
Polska	183				
Portugal	1 796				
Romania	4 291			7.5	
Slovenija					
Slovensko					
Suomi/Finland					
Sverige					
United Kingdom	515	8	155.3	262.2	114.0
Total EU 28	**36 920**	**181**	**49.0**	**54.4**	**31.2**
Norway	6				
Total Others	**6**	**0**	**0.0**	**0.0**	**0.0**

* All cases reported as classical scrapie or type unknown; ** CS cases per 10 000 tests

Table SR5: Classical scrapie cases* in ovine and caprine animals not slaughtered for human consumption (risk animals, mainly fallen stock) in 2014 and prevalence rate in that stream from 2012 to 2014

Sheep	Total tests	2014 Number CS cases	2014 Prevalence rate**	2013 Prevalence rate**	2012 Prevalence rate**
Belgique/België	1 551				
Bulgaria	3 291	2	6.1		
Ceská Republika	1 570				
Danmark	568				
Deutschland	11 300				0.9
Eesti	180				
Ellas	15 875	96	60.5	185.8	95.3
España	15 267	20	13.1	16.5	17.6
France	32 751				0.2
Hrvatska	1 734				
Ireland	10 912	9	8.2	4.8	3.9
Italia	12 488	15	12.0	25.4	41.5
Kypros	6 628	23	34.7	29.2	53.2
Latvija	87				
Lietuva	143				
Luxembourg	151				
Magyarország	8 243				
Malta	200				
Nederland	1 514			1.0	
Österreich	5 334				
Polska	7 778				
Portugal	14 824			0.7	3.1
Romania	8 605	45	52.3	10.2	43.8
Slovenija	912				
Slovensko	9 952	6	6.0		
Suomi/Finland	1 296				
Sverige	5 805				
United Kingdom	14 717			4.1	2.8
Total EU 28	**193 676**	**221**	**11.4**	**10.7**	**10.4**
Norway	4 996				
Total Others	**4 996**	**0**	**0.0**	**0.0**	**0.0**

Goats	Total tests	2014 Number CS cases	2014 Prevalence rate**	2013 Prevalence rate**	2012 Prevalence rate**
Belgique/België	523				
Bulgaria	88				
Ceská Republika	130				
Danmark	133				
Deutschland	1 671				
Eesti	13				
Ellas	1 793	5	27.9	35.8	26.5
España	8 391	7	8.3	1.3	4.4
France	52 837			0.4	0.4
Hrvatska	624				
Ireland	91				
Italia	6 108	3	4.9	3.7	2.1
Kypros	5 350	349	652.3	583.6	1704.5
Latvija	3				
Lietuva	2				
Luxembourg	126				
Magyarország	136				
Malta	126				
Nederland	520				
Österreich	1 554				
Polska	2 607				
Portugal	2 063				
Romania	1 843	1	5.4		
Slovenija	246				
Slovensko	148				
Suomi/Finland	149				
Sverige	153				
United Kingdom	992	15	151.2	88.0	119.7
Total EU 28	**88 420**	**380**	**43.0**	**9.2**	**8.1**
Norway	379				
Total Others	**379**	**0**	**0.0**	**0.0**	**0.0**

*   All cases reported as classical scrapie or type unknown ; ** CS cases per 10 000 tests

Table SR6: Classical scrapie cases* in suspect ovine and caprine animals in 2014 and prevalence rate in that stream from 2012 to 2014

Sheep	Total tests	2014 Number CS cases	2014 Prevalence rate**	2013 Prevalence rate**	2012 Prevalence rate**
Belgique/België					
Bulgaria	1				
Ceská Republika					
Danmark	1				
Deutschland	12				
Eesti					
Ellas	127	84	6614.2	5671.6	3191.5
España	4				5000.0
France				5714.3	
Hrvatska					
Ireland	7	2	2857.1		
Italia	2	1	5000.0	8000.0	6000.0
Kypros					
Latvija	1				
Lietuva					
Luxembourg					
Magyarország	3				
Malta	1				
Nederland					
Österreich					
Polska	1				
Portugal					
Romania	39	5	1282.1	4732.8	3750.0
Slovenija					
Slovensko					
Suomi/Finland	2				
Sverige	2				
United Kingdom	1				
Total EU 28	204	92	4509.8	3985.2	2574.9
Norway	3				
Total Others	3	0	0.0	0.0	0.0

Goats	Total tests	2014 Number CS cases	2014 Prevalence rate**	2013 Prevalence rate**	2012 Prevalence rate**
Belgique/België					
Bulgaria					
Ceská Republika					
Danmark	1				
Deutschland	6				
Eesti					
Ellas	5	1	2000.0	7142.9	7500.0
España	3				
France					
Hrvatska					
Ireland					
Italia					
Kypros	1 054	846	8026.6	8037.9	6498.2
Latvija	1				
Lietuva					
Luxembourg					
Magyarország	1				
Malta	2				
Nederland					
Österreich					
Polska					
Portugal					
Romania	6				588.2
Slovenija					
Slovensko					
Suomi/Finland					
Sverige	1				
United Kingdom	10	3	3000.0	1428.6	6153.8
Total EU 28	1 090	850	7798.2	7825.4	6355.0
Norway	1				
Total Others	1	0	0.0	0.0	0.0

*   All cases reported as classical scrapie or type unknown ; ** CS cases per 10 000 tests

Table SR7: classical scrapie cases* in ovine and caprine animals culled in the frame of TSE eradication in 2014 and prevalence rate in that stream from 2012 to 2014

Sheep	Total tests	2014 Number CS cases	2014 Prevalence rate**	2013 Prevalence rate**	2012 Prevalence rate**
Belgique/België					
Bulgaria					
Ceská Republika					
Danmark					
Deutschland	22				
Eesti					
Ellas	3871	351	906.7	676.7	696.8
España	948	7	73.8	386.6	57.4
France	257	28	1089.5		
Hrvatska	1				
Ireland	259	7	270.3	50.6	508.5
Italia	4102	216	526.6	583.8	604.7
Kypros					
Latvija					
Lietuva					
Luxembourg					
Magyarország					
Malta					
Nederland					
Österreich					
Polska					
Portugal				153.8	
Romania					331.8
Slovenija					
Slovensko					
Suomi/Finland					
Sverige					
United Kingdom	101				
Total EU 28	**9 561**	**609**	**637.0**	**559.7**	**460.8**
Norway	143			50.8	
Total Others	**143**	**0**	**0.0**	**50.8**	**0.0**

Goats	Total tests	2014 Number CS cases	2014 Prevalence rate**	2013 Prevalence rate**	2012 Prevalence rate**
Belgique/België					
Bulgaria					
Ceská Republika					
Danmark					
Deutschland	11				
Eesti					
Ellas	363	23	633.6	479.6	316.6
España	16	1	625.0		
France	20			414.3	64.8
Hrvatska					
Ireland					
Italia	176	2	113.6	463.0	246.9
Kypros					
Latvija					
Lietuva					
Luxembourg					
Magyarország					
Malta					
Nederland					
Österreich					
Polska					
Portugal					
Romania					
Slovenija					
Slovensko					
Suomi/Finland					
Sverige					
United Kingdom					
Total EU 28	**586**	**26**	**443.7**	**453.8**	**252.4**
Norway					
Total Others	**0**	**0**	**0.0**	**0.0**	**0.0**

*   All cases reported as classical scrapie or type unknown ; ** CS cases per 10 000 tests

Chart SR3: Prevalence rate of classical scrapie* in tested "at risk" ovine and caprine animals (cases per 10 000 tests, animals culled for destruction and slaughtered for human consumption are excluded) in the Member States and Norway from 2002 to 2014
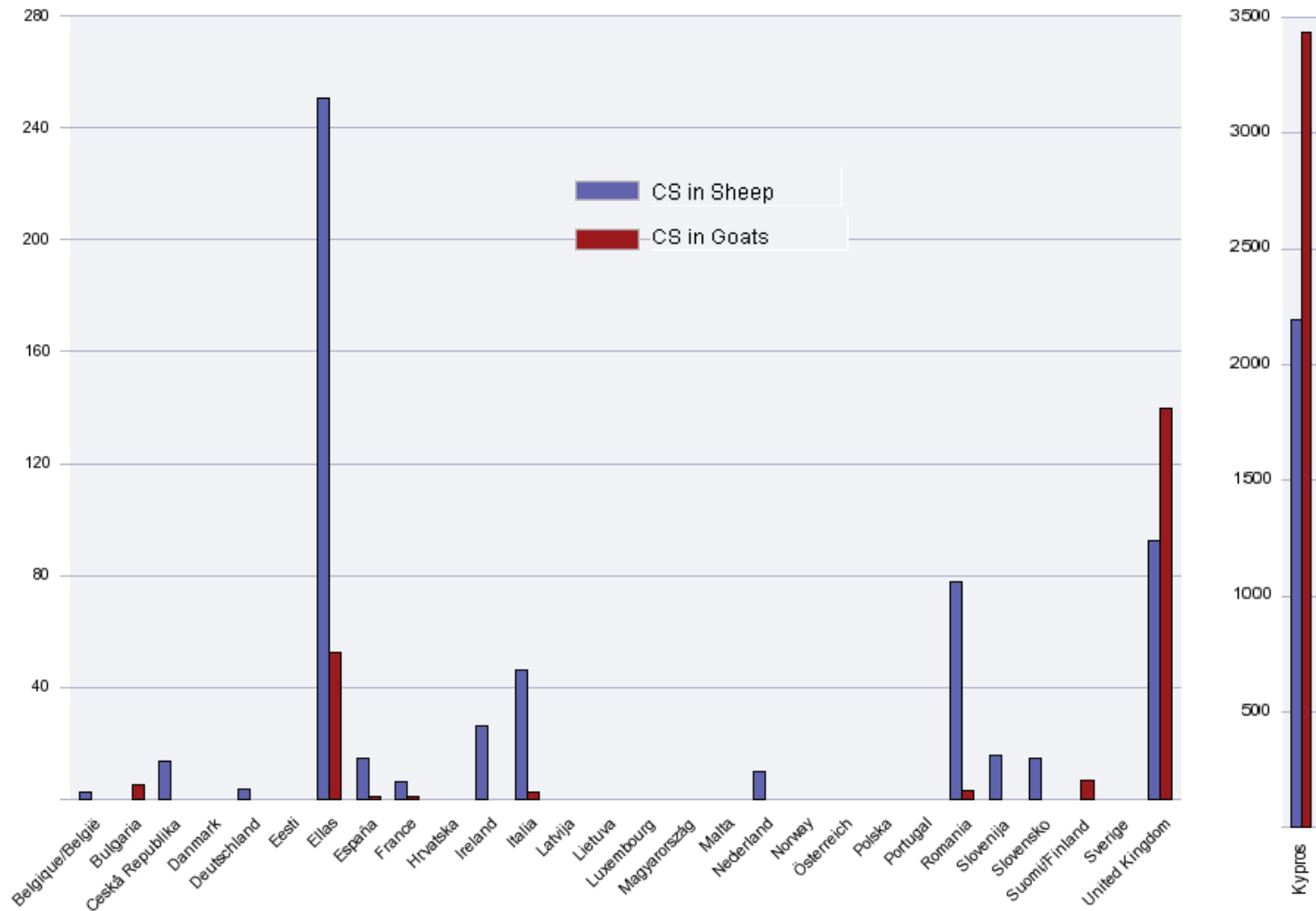
* All cases reported as classical scrapie or type unknown

Chart SR4: Prevalence rate of classical scrapie* in ovine animals slaughtered and not slaughtered for human consumption in the EU 28 (except Cyprus and Greece) and Norway tested since 2002

Slaughtered for human consumption

Year	Value
2002	7.3
2003	5.2
2004	4.7
2005	3.6
2006	1.6
2007	1.9
2008	1.6
2009	2.1
2010	1.5
2011	2.7
2012	4.8
2013	6.7
2014	5.2

Not slaughtered for human consumption

Year	Value
2002	29.6
2003	9.9
2004	12.0
2005	15.2
2006	10.3
2007	5.3
2008	8.8
2009	7.0
2010	7.0
2011	13.8
2012	6.3
2013	4.0
2014	5.8
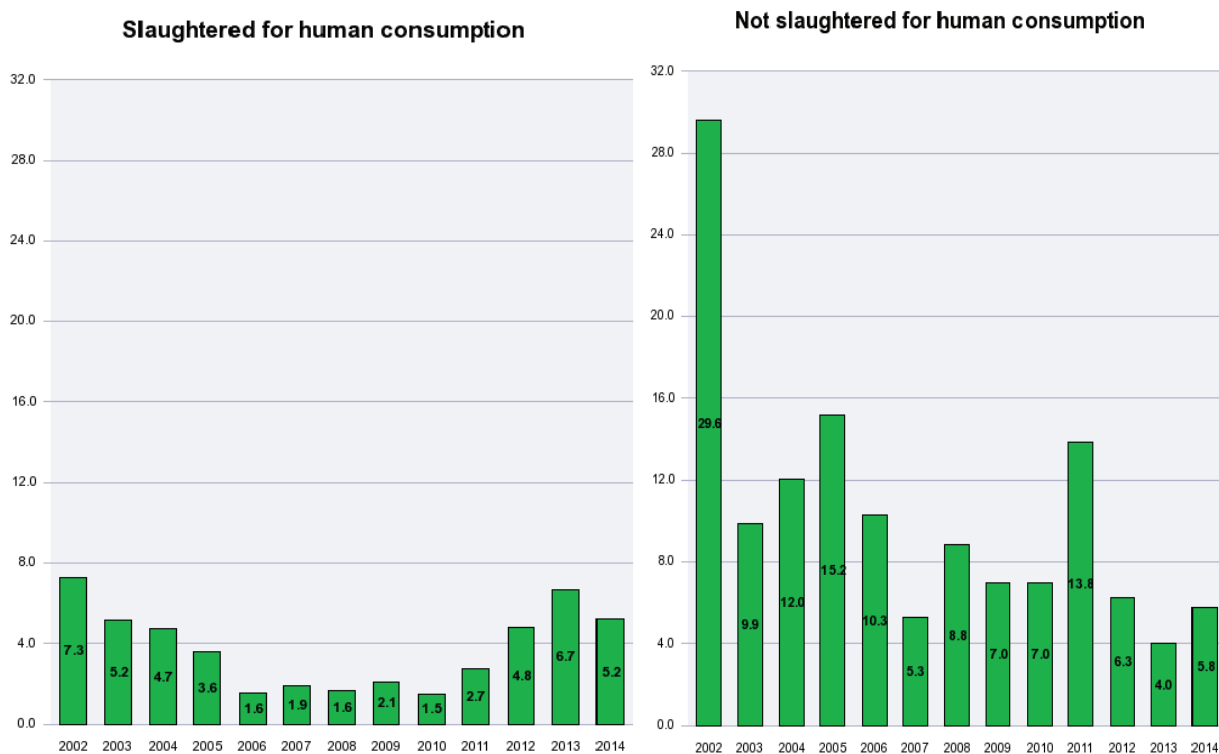
* Cases per 10 000 tested; all cases reported as classical scrapie or type unknown

Chart SR5: Prevalence rate of classical scrapie* in caprine animals slaughtered and not slaughtered for human consumption in the EU 28 (except Cyprus and Greece) and Norway tested since 2002

Slaughtered for human consumption

Year	Value
2002	2.3
2003	2.5
2004	0.8
2005	0.3
2006	0.6
2007	0.2
2008	0.0
2009	0.8
2010	0.7
2011	1.2
2012	1.6
2013	3.2
2014	3.2

Not slaughtered for human consumption

Year	Value
2002	8.7
2003	2.8
2004	1.1
2005	2.8
2006	1.4
2007	4.1
2008	2.7
2009	1.9
2010	1.9
2011	1.7
2012	1.8
2013	1.5
2014	3.2
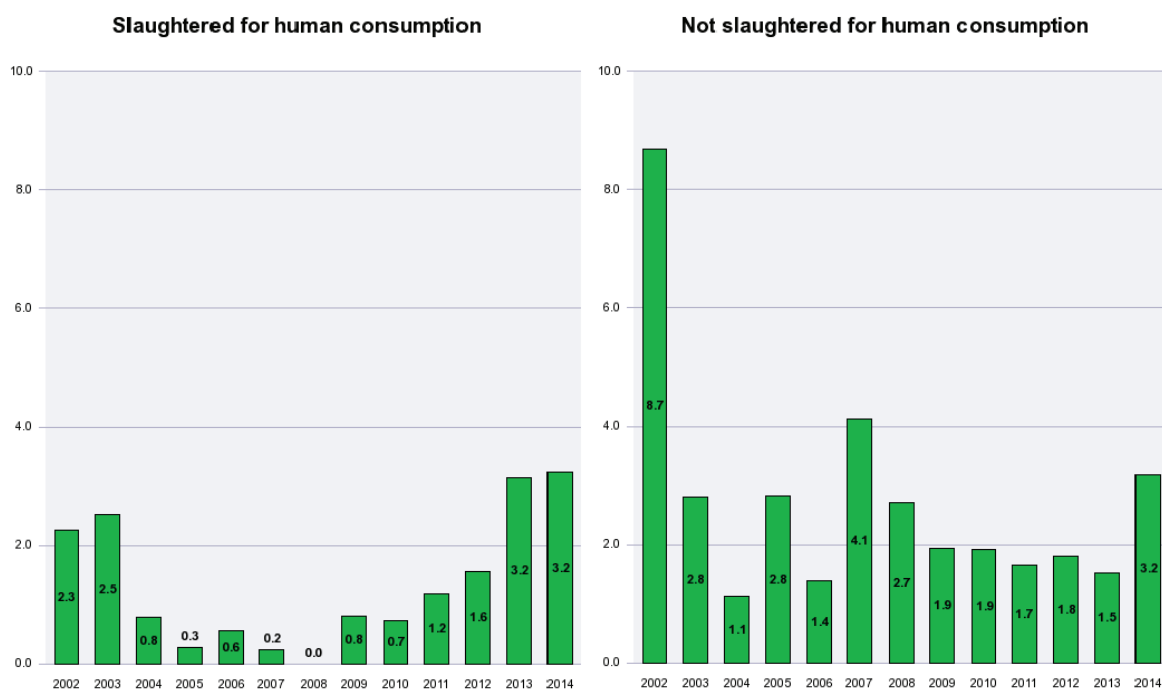
* Cases per 10 000 tested; all cases reported as classical scrapie or type unknown

Chart SR6: Evolution of the overall prevalence rate of classical scrapie* in small ruminants in the EU 28 (except Cyprus and Greece) since 2002

SHEEP

Year	Value
2002	44.4
2003	35.1
2004	43.7
2005	38.1
2006	14.6
2007	10.0
2008	13.4
2009	9.0
2010	9.3
2011	15.3
2012	10.9
2013	15.4
2014	14.9

GOATS

Year	Value
2002	4.8
2003	2.9
2004	2.0
2005	1.0
2006	1.2
2007	2.4
2008	2.8
2009	1.6
2010	1.6
2011	1.6
2012	2.5
2013	2.1
2014	3.5

* 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, however this difference is now less important or even inversed. This difference should however be treated with caution as cases have at times been classified in the group "slaughtered for human consumption" when slaughtering for human consumption has been chosen instead of culling in an infected flock.

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 excluded), and the evolution of classical scrapie differs widely from one Member State to another.

5.4. Atypical scrapie cases

Table SR8: TSE cases reported as atypical scrapie from 2005 to 2014 (animals culled in the frame of TSE eradication are excluded)

SHEEP	2005			2006			2007			2008			2009			2010			2011			2012			2013			2014		
	Total cases	Atypicals	%	Total cases	Atypicals	%	Total cases	Atypicals	%	Total cases	Atypicals	%	Total cases	Atypicals	%	Total cases	Atypicals	%	Total cases	Atypicals	%	Total cases	Atypicals	%	Total cases	Atypicals	%	Total cases	Atypicals	%
Belgique/België	2	1	50 %	3	3	100 %	3	2	67 %																					
Bulgaria										4	2	50 %	1			3									4	2	50 %	3		
Ceská Republika	1						1	1	100 %	2																		1	1	100 %
Danmark				3	3	100 %				2	2	100 %				2	2	100 %	5	5	100 %									
Deutschland	28			24			15	6	40 %	7	4	57 %	12	4	33 %	13	12	92 %	19	18	95 %	8	7	88 %	7	7	100 %	10	10	100 %
Eesti																1	1	100 %	1	1	100 %									
Ellas	258			230	2	1 %	124	1	1 %	188	3	2 %	184	4	2 %	161	1	1 %	181	4	2 %	112	5	4 %	183	3	2 %	211	5	2 %
España	43	2	5 %	63	17	27 %	50	25	50 %	101	22	22 %	70	18	26 %	89	20	22 %	48	18	38 %	47	20	43 %	44	18	41 %	35	6	17 %
France	79	13	16 %	380	186	49 %	263	168	64 %	74	47	64 %	38	27	71 %	31	28	90 %	28	24	86 %	24	22	92 %	14	10	71 %	6	6	100 %
Hrvatska																									1	1	100 %			
Ireland	27			54			37	1	3 %	16			25	5	20 %	16	2	13 %	25	1	4 %	9	4	44 %	9	4	44 %	19	7	37 %
Italia	58	7	12 %	134	5	4 %	117	22	19 %	75	7	9 %	62			62			105	7	7 %	65	5	8 %	44	7	16 %	27	2	7 %
Kypros	715			1327			798			535			185			47			12			9			8			25		
Magyarország				7	5	71 %	6	2	33 %	8	7	88 %	15	14	93 %	7	7	100 %	10	10	100 %	10	10	100 %	10	9	90 %	23	22	96 %
Nederland	37	2	5 %	43			25	2	8 %	12						3			2	1	50 %	8	7	88 %	5	5	100 %	3	1	33 %
Österreich																			4	4	100 %	3	3	100 %	2	2	100 %	2	2	100 %
Polska													4	4	100 %	2	2	100 %	4	4	100 %	1	1	100 %	3	3	100 %	11	11	100 %
Portugal	57	57	100 %	65	69	106 %	95	91	96 %	89	78	88 %	46	36	78 %	47	46	98 %	42	40	95 %	48	44	92 %	38	36	95 %	20	20	100 %
Romania				9			20			26			10			16			61			107			153			93		
Slovenija	4			13			9						3			4	2	50 %	1	1	100 %				1	1	100 %	1	1	100 %
Slovensko	9			10	1	10 %	8			18			1	1	100 %	5	3	60 %	10	4	40 %	3	3	100 %	4	4	100 %	9	3	33 %
Suomi/Finland	1	1	100 %	2	2	100 %	1	1	100 %							3	3	100 %				1	1	100 %	1	1	100 %	1	1	100 %
Sverige	1	1	100 %	8	8	100 %	2	2	100 %				2	2	100 %	4	4	100 %	3	3	100 %	3	3	100 %	3	3	100 %	7	7	100 %
United Kingdom	346	30	9 %	217	61	28 %	82	42	51 %	25	15	60 %	36	26	72 %	20	19	95 %	154	24	16 %	34	28	82 %	23	17	74 %	11	11	100 %
Total EU 28	**1 666**	**114**	**7 %**	**2 592**	**361**	**14 %**	**1 656**	**366**	**22 %**	**1 182**	**187**	**16 %**	**697**	**141**	**20 %**	**535**	**153**	**29 %**	**721**	**174**	**24 %**	**493**	**163**	**33 %**	**551**	**126**	**23 %**	**515**	**110**	**21 %**
Norway	4	4	100 %	9	8	89 %	9	9	100 %	7	7	100 %	13	12	92 %	4	4	100 %	6	6	100 %	6	6	100 %	10	11	110 %	9	9	100 %
Total Others	**4**	**4**	**100 %**	**9**	**8**	**89 %**	**9**	**9**	**100 %**	**7**	**7**	**100 %**	**13**	**12**	**92 %**	**4**	**4**	**100 %**	**6**	**6**	**100 %**	**6**	**6**	**100 %**	**10**	**11**	**110 %**	**9**	**9**	**100 %**

GOATS	2005			2006			2007			2008			2009			2010			2011			2012			2013			2014		
	Total cases	Atypicals	%	Total cases	Atypicals	%	Total cases	Atypicals	%	Total cases	Atypicals	%	Total cases	Atypicals	%	Total cases	Atypicals	%	Total cases	Atypicals	%	Total cases	Atypicals	%	Total cases	Atypicals	%	Total cases	Atypicals	%
Bulgaria										0			1			3														
Ellas	26			10			15			16			4			14			15			16			16	1	6 %	9	1	11 %
España	5			9	4	44 %	14	6	43 %	6	5	83 %	5	2	40 %	8	5	63 %	11	3	27 %	6	3	50 %	6	4	67 %	14	7	50 %
France	15	6	40 %	12	1	8 %	6	5	83 %	12	8	67 %	6	3	50 %	7	5	71 %	6	6	100 %	8	6	75 %	5	3	60 %	5	5	100 %
Italia	8	3	38 %	12	6	50 %	4	3	75 %	1	1	100 %	7			3			8	4	50 %	3			5	3	60 %	5		
Kypros	387			713			1203			1 095			800			325			287			1102			1672			1364		
Portugal								1		2	1	50 %	1	3	300 %	4	2	50 %	1	1	100 %	2	2	100 %	2	2	100 %			
Romania							1			0												1			3			1		
Suomi/Finland	2									0			1	1	100 %															
United Kingdom	4			13			58			33			6			8			8			21			16			26		
Total EU 28	**447**	**9**	**2 %**	**769**	**11**	**1 %**	**1 301**	**15**	**1 %**	**1 165**	**15**	**1 %**	**831**	**9**	**1 %**	**372**	**12**	**3 %**	**336**	**14**	**4 %**	**1 159**	**11**	**1 %**	**1 725**	**13**	**1 %**	**1 424**	**13**	**1 %**
Norway				1	1	100 %				0																				
Total Others	**0**	**0**	**0 %**	**1**	**1**	**100 %**	**0**	**0**	**0 %**	**0**	**0**	**0 %**	**0**	**0**	**0 %**	**0**	**0**	**0 %**	**0**	**0**	**0 %**	**0**	**0**	**0 %**	**0**	**0**	**0 %**	**0**		

Table SR9: Ratio of TSE cases reported as atypical in ovine animals tested from 2005 to 2014 (animals culled in the frame of TSE eradication are excluded)

SHEEP	2005			2006			2007			2008			2009			2010			2011			2012			2013			2014		
	Animal Tested	Atypicals	Ratio*	Animal Tested	Atypicals	Ratio*	Animal Tested	Atypicals	Ratio*	Animal Tested	Atypicals	Ratio*	Animal Tested	Atypicals	Ratio*	Animal Tested	Atypicals	Ratio*	Animal Tested	Atypicals	Ratio*	Animal tested	Atypicals	Ratio*	Animal tested	Atypicals	Ratio*	Animal tested	Atypicals	Ratio*
Belgique/België	1 469	1	6.8	10 167	3	3.0	9 204	2	2.2	3 221			1 487			1 610			1 724			1 596			1 651			1 551		
Bulgaria	6 934			10 589			12 725			15 355	2	1.3	13 740			15 018			7 172			13 403	2	1.5	9 874			10 249		
Ceská Republika	451			1 097			2 839	1	3.5	914			582			726			744			1 529			1 536			1 578	1	6.34
Danmark	4 394			8 067	3	3.7	6 197			6 950	2	2.9	6 055			6 069	2	3.3	6 020	5	8.3	3 090			540			569		
Deutschland	44 495			41 771			40 367	6	1.5	26 539	4	1.5	25 988	4	1.5	22 679	12	5.3	22 246	18	8.1	20 765	7	3.4	20 618	7	3.4	19 352	10	5.17
Eesti	1 251			2 403			2 918			745			654			718	1	13.9	850	1	11.8	572			246			181		
Ellas	6 574			9 356	2	2.1	9 078	1	1.1	14 074	3	2.1	17 382	4	2.3	20 402	1	0.5	17 385	4	2.3	15 764	5	3.2	12 480	3	2.4	20 012	5	2.5
España	29 193	2	0.7	89 021	17	1.9	50 998	25	4.9	28 879	22	7.6	29 320	18	6.1	24 957	20	8.0	23 393	18	7.7	22 221	20	9.0	21 978	18	8.19	24 774	6	2.42
France	34 701	13	3.7	488 254	186	3.8	338 796	168	5.0	92 755	47	5.1	58 101	27	4.6	59 573	28	4.7	58 955	24	4.1	55 528	22	4.0	55 639	10	1.8	43 289	6	1.39
Hrvatska																						3 234			1 118	1	8.94	1 740		
Ireland	21 069			57 245			43 132	1	0.2	22 449			20 933	5	2.4	21 458	2	0.9	20 636	1	0.5	21 302	4	1.9	20 609	4	1.94	21 401	7	3.27
Italia	22 606	7	3.1	55 920	5	0.9	92 263	22	2.4	33 918	7	2.1	24 291			22 726			24 594	7	2.8	21 297	5	2.3	21 638	7	3.24	21 804	2	0.92
Kypros	3 337			6 108			8 499			8 329			2 109			750			320			3 483			4 887			10 078		
Latvija	43			888			1 456			64			81			48			84			65			46			88		
Lietuva	1 028			1 826			2 781			3 225			2 119			2 279			3 180			2 655			3 339			4 214		
Luxembourg	666			530			947			425			529			523			589			485			286			151		
Magyarország	9 044			12 061	5	4.1	12 182	2	1.6	13 211	7	5.3	11 756	14	11.9	12 397	7	5.6	13 709	10	7.3	12 635	10	7.9	15 520	9	5.8	16 161	22	13.61
Malta	256			340			57			72			60			271			201			245			168			216		
Nederland	18 997	2	1.1	36 102			30 803	2	0.6	20 454			19 996			20 226	1	0.5	21 715	7	3.2	21 336	5	2.3	20 184	1	0.5	1 514		
Österreich	4 297			5 947			6 588			5 938			5 914			5 539			4 963	4	8.1	5 381	3	5.6	5 620	2	3.56	5 364	2	3.73
Polska	0			2 563			5 617			7 647			11 174	4	3.6	15 022	2	1.3	14 222	4	2.8	16 309	1	0.6	17 616	3	1.7	19 418	11	5.66
Portugal	72 516	57	7.9	63 711	69	10.8	85 101	91	10.7	86 380	78	9.0	37 363	36	9.6	38 131	46	12.1	45 217	40	8.8	30 384	44	14.5	26 298	36	13.69	23 065	20	8.67
Romania				14 867			13 718			16 449			10 079			8 107			31 099			38 093			30 490			26 707		
Slovenija	1 878			1 757			1 845			1 981			3 584			3 608	2	5.5	520	1	19.2	510			914	1	10.94	912	1	10.96
Slovensko	2 615			7 212	1	1.4	8 358			2 212			2 168	1	4.6	2 018	3	14.9	2 999	4	13.3	2 914	3	10.3	2 542	4	15.74	11 657	3	2.57
Suomi/Finland	1 294	1	7.7	3 700	2	5.4	3 020	1	3.3	1 164			1 138			949	3	31.6	1 248			1 387	1	7.2	1 431	1	6.99	1 305	1	7.66
Sverige	3 240	1	3.1	8 769	8	9.1	9 922	2	2.0	3 840			4 808	2	4.2	6 500	4	6.2	7 082	3	4.2	7 403	3	4.1	7 481	3	4.01	5 835	7	12
United Kingdom	37 157	30	8.1	73 544	61	8.3	44 147	42	9.5	24 660	15	6.1	23 081	26	11.3	19 617	19	9.7	21 042	24	11.4	22 114	28	12.7	23 212	17	7.32	22 784	11	4.83
Total EU 28	329 505	114	3.5	1 013 815	361	3.6	843 558	366	4.3	441 850	187	4.2	334 492	141	4.2	331 921	153	4.6	351 909	174	4.9	345 700	163	4.7	327 961	126	3.84	315 969	110	3.48
Norway	14 512	4	2.8	14 931	8	5.4	13 556	9	6.6	13 143	7	5.3	13 067	12	9.2	12 994	4	3.1	13 246	6	4.5	13 837	6	4.3	14 119	11	7.79	13 211	9	6.81
Total Others	14 512	4	2.8	14 931	8	5.4	13 556	9	6.6	13 143	7	5.3	13 067	12	9.2	12 994	4	3.1	13 246	6	4.5	13 837	6	4.3	14 119	11	7.79	13 211	9	6.81

*cases per 10 000 tests

Table SR10: Ratio of TSE cases reported as atypical in caprine animals tested from 2005 to 2014 (animals culled in the frame of TSE eradication are excluded)

GOATS	2005 Animal Tested	Atypicals	Ratio*	2006 Animal Tested	Atypicals	Ratio*	2007 Animal Tested	Atypicals	Ratio*	2008 Animal Tested	Atypicals	Ratio*	2009 Animal Tested	Atypicals	Ratio*	2010 Animal Tested	Atypicals	Ratio*	2011 Animal Tested	Atypicals	Ratio*	2012 Animal tested	Atypicals	Ratio*	2013 Animals tested	Atypicals	Ratio*	2014 Animal tested	Atypicals	Ratio*
Belgique/België	908			1 063			749			365			222			216			217			157			198			523		
Bulgaria	1 867			2 640			2 511			1 813			1 800			1 805			921			1 700			1 215			677		
Ceská Republika	212			113			163			328			172			150			117			240			182			131		
Danmark	1 150			1 716			1 564			1 838			1 828			1 820			1 723			681			97			134		
Deutschland	4 641			4 604			3 928			3 615			3 159			3 701			3 570			3 390			3 094			2,172	1	4.6
Eesti	17			61			55			11			6			9			10			10			2			14		
Ellas	4 371			6 341			5 298			6 313			8 471			8 748			10 565			7 178			4 398	1	2.3	3,246	1	3.1
España	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	14 656	4	2.7	15,293	7	4.6
France	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	65 022	3	0.5	61,648	5	0.8
Hrvatska																						864			227			624		
Ireland	79			208			149			132			90			98			73			63			80			91		
Italia	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			13 546	3	2.2	13,160		
Kypros	3 387			6 025			6 715			5 259			3 048			1 408			1 485			4 529			7 184			10,935		
Latvija	40			17			66			10			11			5			15			10			8			4		
Lietuva	6			27			94			131			96			77			106			113			101			152		
Luxembourg	210			450			533			360			302			218			241			368			144			126		
Magyarország	262			208			413			282			294			265			244			195			226			192		
Malta	65			47			9			48			58			177			161			168			225			231		
Nederland	20 160			25 583			15 770			647			656			619			640			519			522			520		
Österreich	1 199			1 611			1 820			1 829			1 817			1 789			1 523			1 674			1 630			1,554	1	6.4
Polska				167			717			1 011			1 151			1 402			1 811			2 312			2 747			2,790		
Portugal	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	6 378	2	3.1	3,859		
Romania							576			929			516			664			2 406			5 893			7 505			6,140		
Slovenija	477			372			429			488			958			1 041			112			103			234			246		
Slovensko	105			68			83			12			25			24			50			47			64			148		
Suomi/Finland	593			516			431			274			350	1	28.6	270			216			200			276			149		
Sverige	266			248			86			55			54			28			19			26			19			154		
United Kingdom	2 645			5 034			3 011			916			1 176			1 251			1 284			1 116			1 183			1,517		
Total EU 28	**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**	**131 163**	**13**	**1.0**	**126,430**	**15**	**1.2**
Norway	2 804			5 651	1	1.8	3 462			354			360			325			390			400			447			386		
Total Others	**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**	**447**	**0**	**0.0**	**386**	**0**	**0.0**

*cases per 10 000 tests

Comments on atypical cases

Atypical TSE cases were confirmed in several Member States. Atypical scrapie 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, FI, SE. In some other Member States, e.g. DE, FR and UK (except for 2011 in the UK and 2014 for FR), the proportion of atypical TSE cases has been steadily growing since 2005, 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 2014

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
Ellas	95	95		
España	42	42		
France	28	28		
Ireland	14	14		
Italia	231	217		14
Kypros	3	3		
Magyarország				
Nederland				
Österreich				
Portugal				
Romania	93	93		
United Kingdom				
Total EU 28	**506**	**492**	**0**	**14**

GOAT	Total number of cases submitted to discriminatory testing	Excluding BSE	BSE like	Inconclusive
Ellas	8	8		
España	15	15		
France				
Italia	7	7		
Kypros	26	26		
Romania	1	1		
United Kingdom	26	26		
Total EU 28	**83**	**83**	**0**	**0**

Comments on TSE / BSE discriminatory testing

As in the previous years, the 2014 results provide, at this stage, no element suggesting the possible presence of BSE in sheep and goats. The 14 TSE cases in sheep which led to inconclusive results at BSE discriminatory testing came all from holdings under TSE control and eradication measures, for which the exclusion of BSE was confirmed for the index case as well for other secondary cases.

5.6. Age distribution of TSE cases

Chart SR7: Average age (months) of TSE cases in ovine animals tested from 2004 to 2014 in the EU Member States and Norway and reported as classical or atypical respectively
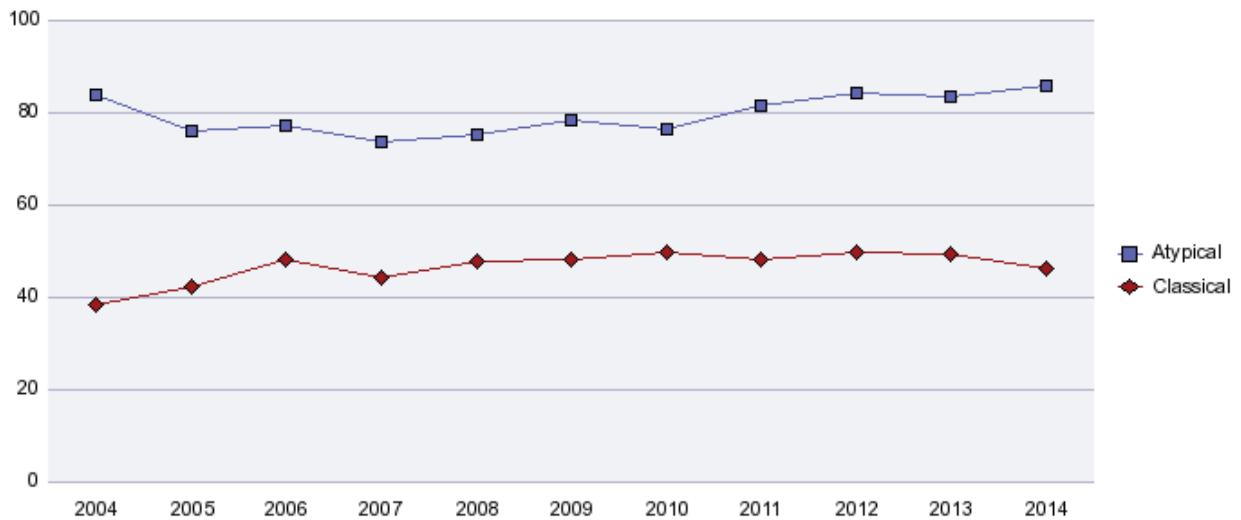

Chart SR11: Average age (months) of TSE cases in caprine animals tested from 2005 to 2014 in the EU Member States and Norway and reported as classical or atypical respectively
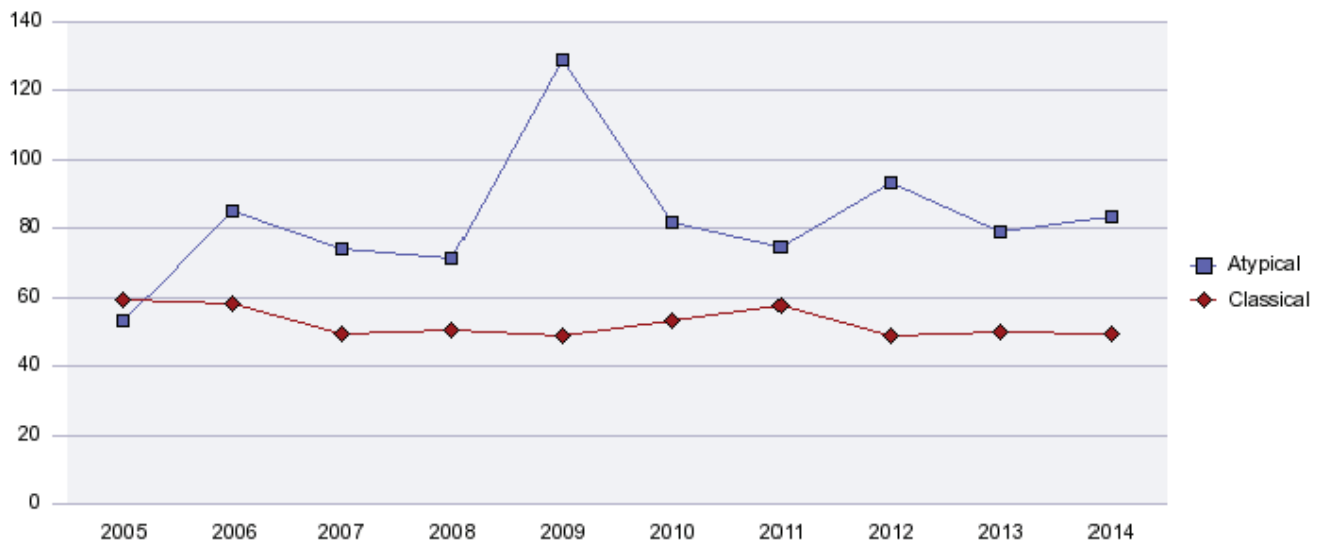
Chart SR12: Age (months) distribution of TSE cases in sheep detected since 2002 in the EU 28 and Norway, in cases reported as atypical and classical respectively

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:

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

Table SR12: Distribution of known genotypes in confirmed TSE cases in sheep in 2014, 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	1	100 %		100.0%				
Danmark								
Deutschland	8	80 %		20.0%	40.0%	10.0%		
Eesti								
Ellas	501	89 %		2.0%	68.9%	11.6%	0.2%	1.1%
España	39	93 %	2.4%		81.0%	9.5%		
France	32	94 %	5.9%	2.9%	79.4%			5.9%
Hrvatska								
Ireland	6	23 %			11.5%			11.5%
Italia	243	100 %		0.4%	85.2%	13.2%		0.8%
Kypros	17	68 %		44.0%	24.0%			
Latvija								
Lietuva								
Luxembourg								
Magyarország	23	100 %	4.3%	43.5%	34.8%	17.4%		
Malta								
Nederland								
Norway	9	100 %	11.1%	44.4%	11.1%	33.3%		
Österreich	2	100 %		50.0%	50.0%			
Polska	11	100 %	45.5%	27.3%		27.3%		
Portugal	9	45 %	5.0%	10.0%	20.0%	10.0%		
Romania	89	96 %		5.4%	75.3%	7.5%	1.1%	5.4%
Slovenija	1	100 %				100.0%		
Slovensko	9	100 %			88.9%	11.1%		
Suomi/Finland	1	100 %			100.0%			
Sverige	2	29 %			14.3%	14.3%		
United Kingdom	7	64 %	18.2%	27.3%		18.2%		

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

Cases Detected in 2014

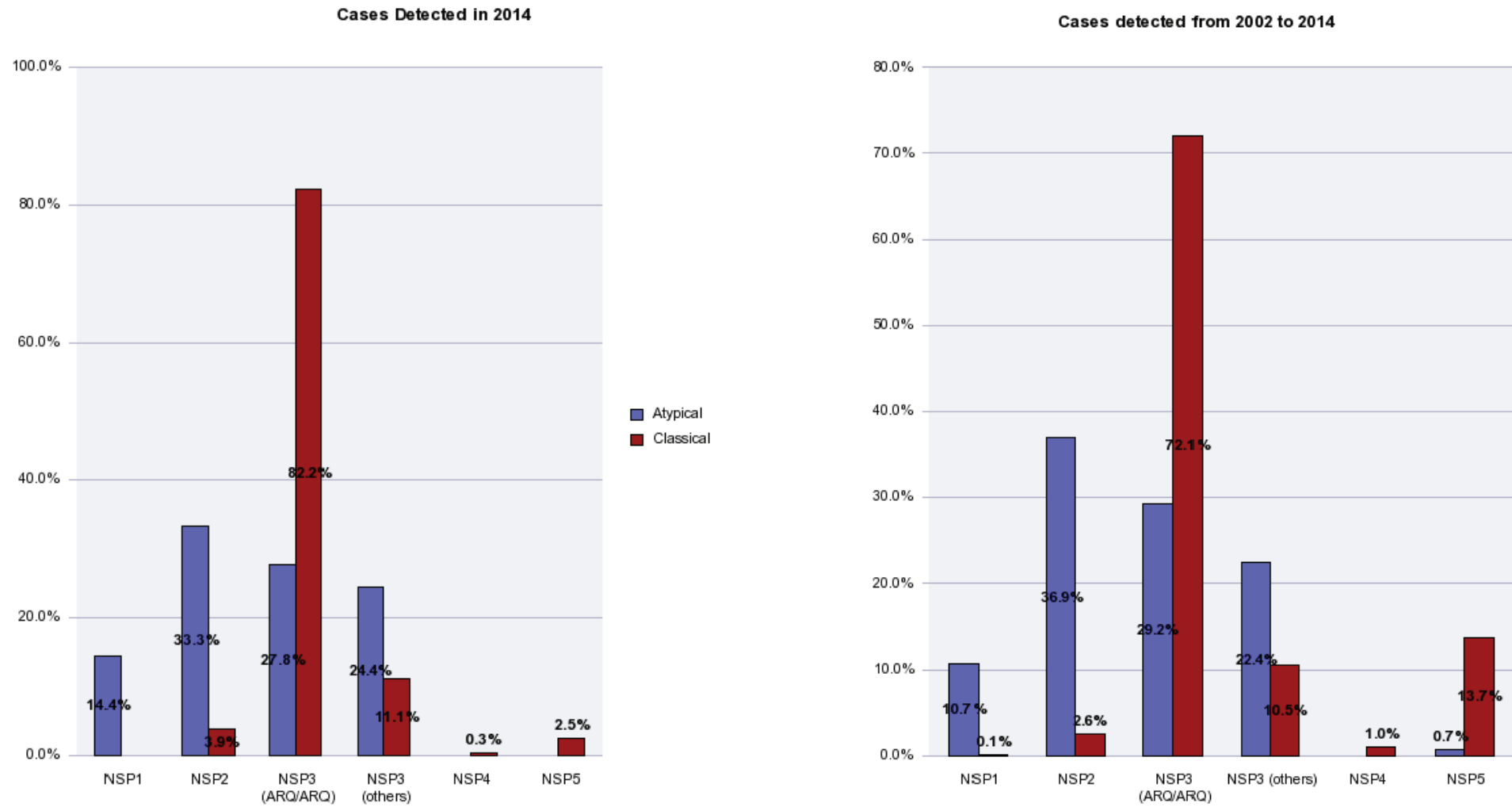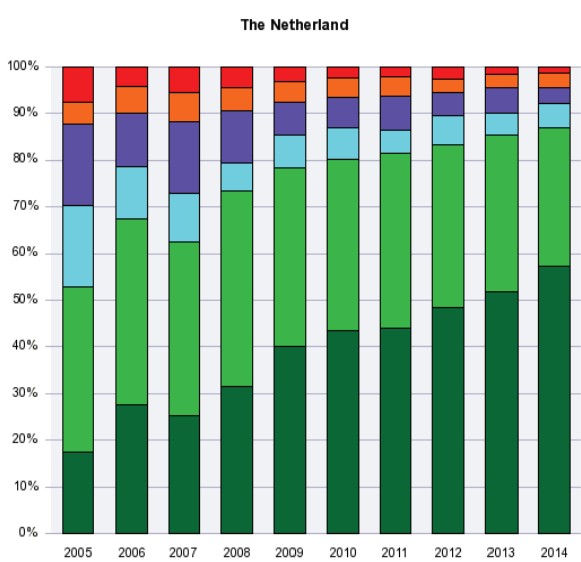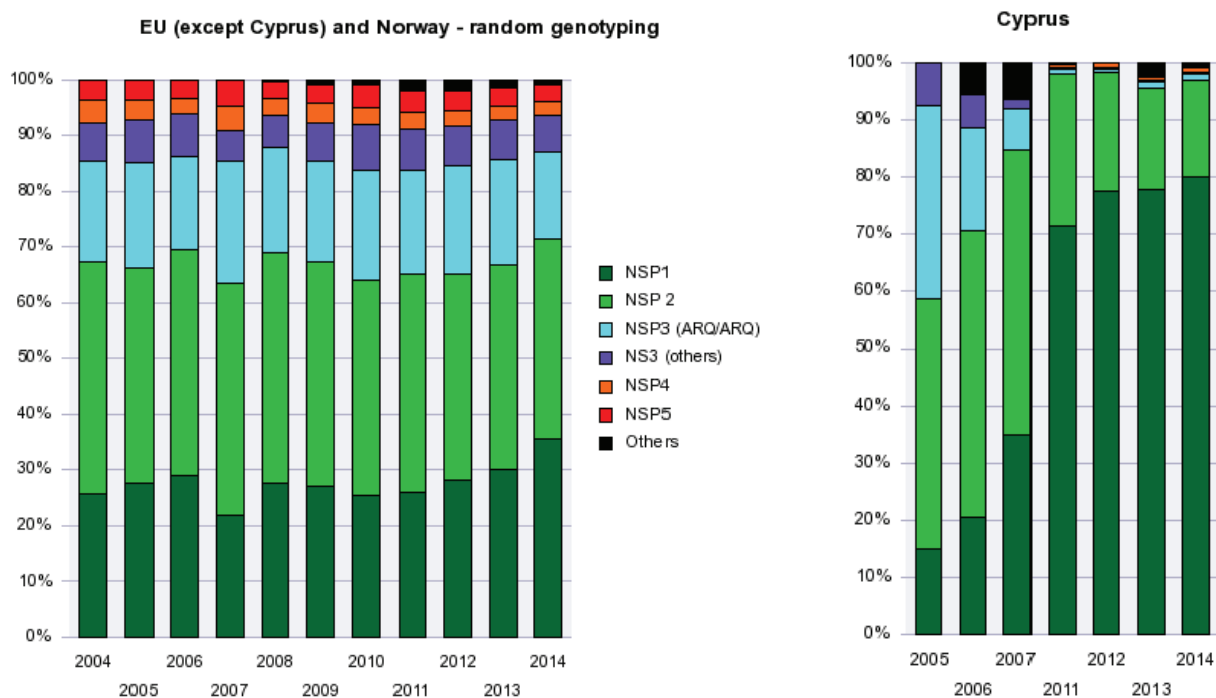Cases detected from 2002 to 2014

Atypical
Classical

Table SR13: Distribution of genotypes in randomly genotyped ovine animals in EU Member States and Norway in 2014

	NSP1	NSP2	NSP3		NSP4	NSP5	Others	Number of Samples
			ARQ/ARQ	Others				
Belgique/België	56.4%	27.7%	7.7%	5.5%	1.8%	0.9%		220
Bulgaria								0
Ceská Republika	29.8%	38.3%	23.4%	6.4%	2.1%			47
Danmark	27.0%	26.0%	31.0%	10.0%	1.0%	5.0%		100
Deutschland	70.4%	23.0%	4.5%	1.8%	0.1%	0.1%	0.1%	1 366
Eesti	29.6%	43.7%	15.5%	7.0%	4.2%			71
Ellas	12.9%	30.9%	29.0%	14.8%	1.6%	3.2%	6.6%	379
España	12.5%	38.1%	30.7%	8.8%	2.1%	3.0%	4.8%	662
France	45.3%	31.6%	8.9%	1.3%	4.2%	1.9%		889
Hrvatska	8.7%	35.3%	42.7%	9.3%	0.7%	3.3%		150
Ireland	28.5%	44.5%	11.0%	8.1%	4.3%	3.4%		645
Italia	19.0%	44.0%	27.4%	6.3%	0.5%	2.6%	0.2%	616
Latvija	17.3%	49.1%	25.5%	4.5%	1.8%	0.9%		110
Lietuva	0.0%							0
Luxembourg	73.3%	26.7%						15
Magyarország	52.0%	34.7%	6.2%	4.3%	1.7%	1.2%		600
Malta								0
Nederland	57.3%	29.6%	5.2%	3.6%	3.1%	1.3%		751
Norway	13.0%	41.4%	11.3%	15.0%	5.9%	13.0%		575
Österreich	12.6%	45.0%	27.0%	9.0%	0.9%	1.8%	1.8%	111
Polska	42.3%	44.1%	7.2%	0.9%	2.7%	2.7%		111
Portugal	14.7%	40.3%	30.2%	6.8%	3.7%	4.0%		620
Romania	11.6%	40.7%		5.4%	6.5%	2.5%	0.0%	354
Slovenija	7.4%	34.7%	38.8%	9.1%	1.7%	1.7%	6.6%	121
Slovensko	18.0%	48.0%	16.0%	6.0%	6.0%	6.0%		100
Suomi/Finland	4.0%	18.0%	53.0%	20.0%		5.0%		100
Sverige	7.0%	20.9%	61.7%	1.7%		7.8%		115
United Kingdom	32.8%	42.4%	9.5%	7.4%	3.4%	2.3%	2.1%	609
EU 28 - CY + NO	34.7%	35.2%	15.5%	6.2%	2.6%	2.9%	0.9%	9 437

Table SR14: Distribution of genotypes reported in 2014 by Cyprus, where the entire sheep population is being genotyped

	NSP1	NSP2	NSP3		NSP4	NSP5	Others	Number of Samples
			ARQ/ARQ	Others				
Kypros	78.6%	16.6%	0.8%	0.4%	0.7%	0.1%	0.8%	63 349

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

EU (except Cyprus) and Norway - random genotyping

Legend:
- NSP1
- NSP 2
- NSP3 (ARQ/ARQ)
- NS3 (others)
- NSP4
- NSP5
- Others

Cyprus

The Netherland

Comments on genotyping

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 Netherland, the consistent decrease in the number of Classical scrapie cases since 2005, until no Classical scrapie case in 2014, can be linked to effectiveness of the breeding programme put in place, with a marked progression of the NSP1 group since 2005.

In the rest of the EU as a whole, no trend in the genetic profile can be identified from 2004 to 2014 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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