



EUROPEAN COMMISSION
HEALTH AND CONSUMERS DIRECTORATE-GENERAL

Director General

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*Programmes for the eradication, control and monitoring of certain
animal diseases and zoonoses*

**The programme for the monitoring of
transmissible spongiform encephalopathies (TSE) and for
the eradication of bovine spongiform encephalopathy
(BSE) and of scrapie**

Hungary

Approved* for 2013 by Commission Decision 2012/761/EU

* in accordance with Council Decision 2009/470/EC

1. **Identification of the programme**

Member State: HUNGARY

Diseases: Bovine spongiform encephalopathy (BSE) and scrapie

Year of implementation: 2013

Reference of this document: Article 27 of Council Decision 2009/470/EC,
Commission Decision 2008/425/EC

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2. **Description of the programme**

Annual programme for monitoring BSE and scrapie using rapid tests in accordance with Article 6 and Annex III, Chapter A of Regulation (EC) No 999/2001.

3. **Description of the epidemiological situation of the disease**

The Act on Food Chain and on the Supervision of the Food Chain (Act on No XLVI of 2008, in the previous years the Act on the Veterinary Rules /Act No CLXXVI of 2005 and Act No XCI of 1995/) prescribes that the animal keeper shall report the illness or the suspicion of a disease of the animal to the veterinarian. Before 1995 the former legislation rules on animal health also prescribed it. It has to be stressed that the veterinary legislation have prescribed for decades that the animal keeper has to report the illness or the suspicion of a disease of his/her animal to the veterinarian in every case not only in case of notifiable disease or suspicion of notifiable disease. It is the task of the veterinarian to state the suspicion of a notifiable disease and in case of the suspicion act on the basis of the detailed rules of the Zoosanitary Code (Decree No 41/1997(V.28.) FM of the Minister of Agriculture) or other ministerial decrees.

Since 1995 the BSE has been a compulsorily notifiable disease in Hungary (from 1995 to 2005 by the Act No. XCI of 1995 on the Veterinary Rules, from

2005 to September 2008 by the Act No CLXXVI of 2005 on the Veterinary Rules and since September 2008 by the Decree No 113/2008 (30.VIII.) of the Ministry of Agriculture and Rural Development (MARD) on notification of animal diseases). Furthermore, BSE is a compulsorily notifiable disease in Hungary by the by the Decree No 179/2009 (29. XII.) of the Ministry of Agriculture and Rural Development (MARD) on the prevention, control and eradication of transmissible spongiform encephalopathies.

It has to be noted that many years before the BSE became compulsory notifiable disease it was already compulsory to report each ruminant showing any neurological signs as a suspicious case of rabies and since 1989 these animals have been investigated for BSE (or scrapie) besides the laboratory tests for rabies. BSE has never occurred in indigenous herd. There was only one **imported** BSE case in 2007.

Since 2001 the scrapie has also been a compulsorily notifiable disease in Hungary by the Decree No 113/2008 (30.VIII.) of the Ministry of Agriculture and Rural Development (MARD) on notification of animal diseases and by the Decree No 179/2009 (29. XII.) of the Ministry of Agriculture and Rural Development (MARD) on the prevention, control and eradication of transmissible spongiform encephalopathies. (In the previous years by the Act on the Veterinary Rules /Act No CLXXVI. of 2005 and Act No XCI of 1995/). Many years before the scrapie became compulsory notifiable disease it was already compulsory to report each ruminant showing any neurological signs as it was mentioned before. The first scrapie case occurred in 1964 at an import quarantine station among imported sheep. The second case was confirmed in January 2005 in a sheep imported from Romania for immediate slaughter. There were six confirmed scrapie cases in 2006 and there were eight of them in 2007 in domestic sheep population. In 2008 nine scrapie cases occurred in domestic sheep population. In 2009 fifteen scrapie cases occurred in domestic sheep population. In 2010 fifteen 8 scrapie cases occurred in domestic sheep population. In 2011 eleven atypical scrapie cases occurred in domestic sheep population, one of them was investigated in Poland.

Between 1989 and March 2001 our surveillance system was the following:

The investigations of the brains of all ruminants showing any neurological signs were carried out for BSE or scrapie with histopathological method, irrespective of any other existing diagnosis. Furthermore on the basis of Zoosanitary Code (Decree No 41/1997(V.28.) FM) the compulsory, nationwide monitoring system has contained the investigation of the brains of the slaughtered, culled ruminants, as well as of the bovine animals older than three years and the sheep older than two years which died even without showing any neurological signs. This procedure corresponded to the Appendix

3.8.4. of the OIE International Animal Health Code (Surveillance and monitoring systems for BSE) and its Chapter 2.3.13.

Besides the ruminants the histopathological investigation were carried out in case of the felidae species, too. In Hungary the Central Veterinary Institute and the five regional veterinary institutes had carried out tests for TSEs with histopathological method. In these laboratories our experts performed these investigations according to the recommendations of the OIE Manual of Standards for Diagnostic Tests and Vaccines. The sampling place, as well as, the investigation procedure corresponded to the recommendations of the Manual. From 1989 to 2000, 1806 bovine brains and 1983 ovine brains were tested, with negative results in each case. In case of felidae species our experts carried out over 3800 tests, with negative results, too. The population of goats is very small in Hungary, therefore only a few goats are investigated per year (e.g. in 1998 11 and in 1999 5 goats). There was not any positive result in case of this species, either. Please see the attached table (**Table 1**).

From March 2001 our surveillance system regarding TSE have been extended as follows:

1. Passive surveillance

It has been compulsory to investigate all ruminants showing any neurological signs in an official laboratory (as it was in the past, too). But there are some differences in the examination of the different species. In case of bovine animals only the Central Veterinary Institute (Budapest) was allowed to carry out investigation for BSE until March 2003 (After March 2003 the two regional veterinary institutes are also allowed to carry out this investigation). In the first step a histopathological examination is carried out as laid down in the latest edition of the OIE Manual. Where the result of the histopathological examination is inconclusive or negative or where the material is autolysed, the tissues shall be subjected to an examination by one of the other diagnostic methods laid down in the Manual (immuno-blotting, immunocytochemistry, or demonstration of characteristic fibrils by electron microscopy). In case of other ruminants the Central Veterinary Institute and the two* regional veterinary institutes are allowed to carry out histopathological investigation for TSE. Where the result of the histopathological investigation is inconclusive or negative without alternative diagnosis, the tissues shall be subject to an examination by immunocytochemistry in the Central Veterinary Institute. From 19 March 2009 cattle, sheep and goats showing any neurological signs can be investigated not only with histopathology examination, but with other confirmatory examinations laying down in Annex X to the Regulation (EC) No 999/2001,

(immunohistochemical method, SAF-immunoblot, demonstration of characteristic fibrils by electron microscopy or combination of rapid tests), too.

*From 1 January 2001 there were only two regional veterinary institutes in Hungary, not five. At the end of 2004 these two institutes were attached to the Central Veterinary Institute and became the regional institutes of the CVI. Between 1 January 2007 and 15 March 2012 the National Reference Laboratory was the Veterinary Diagnostic Directorate of the Central Agricultural Office (the former Central Veterinary Institute). As of 15 March 2012 the National Reference Laboratory is the Veterinary Diagnostic Directorate of the National Food Chain Safety Office (the former Veterinary Diagnostic Directorate of the Central Agricultural Office). The rapid test and the histopathology in case of TSE suspicion is also carried out by the Veterinary Diagnostic Directorate's two regional labs in Debrecen and Kaposvár. The confirmatory test is carried out by the National Reference Laboratory in Budapest.

2.Active surveillance, National Monitoring Programme

A new National Monitoring Programme for BSE based on the rapid tests was introduced in March 2001 by the internal instruction of the CVO No 32505/2001. This programme has been changed several times since March 2001 following the modifications of the relevant EU rules, but since the start of the programme until 2004 the Bio-Rad Platelia test had been used. Since 2004 the Bio-Rad TeSeE™ Detection Kit has been used. The internal instruction of the CVO No 32505/2001 was modified by internal instructions No 32505/1/2001. and 8349/2002. Until July 2001 the main target subpopulation were the dead bovine animals over 30 months of age without any neurological signs. After the first modification of our surveillance program (in July 2001) the monitoring investigations covered the following groups:

- bovine animals over 24 months which died without any neurological signs, or killed ones (excluding bovines killed due to an epidemic);
- all emergency slaughtered bovine animals over 24 months;
- animals over 30 months of age subject to normal slaughter.

In February 2002 the compulsory investigation of all bovine animals over 30 months of age subject to normal slaughter was introduced. These monitoring investigations were carried out by the Central Veterinary Institute (CVI) only. Please see the attached tables on the BSE monitoring investigations 2001 and 2002. (**Table 2 and 3**)

The above mentioned internal instructions contained the following rules for the confirmatory tests.

Where the result of the monitoring test is inconclusive or positive, the tissues immediately shall be subjected to confirmatory examinations. The confirmatory

examination shall start by a histopathological examination of the brainstem as laid down in the OIE Manual. Where the results of the histopathological examination is inconclusive or negative or where the material is autolysed, the tissues shall be subjected to an examination by one of the other diagnostic methods laid down in the Manual (immuno-blotting, immunocytochemistry, or demonstration of characteristic fibrils by electron microscopy), but the method must not be the same as the one used in the monitoring test.

In March 2003 a new internal instruction of the CVO were issued (No 11496/2/2003.) and the compulsory investigation of all dead bovine animals over 24 months has been introduced since 1 May 2003. These internal instruction contained the approval for the two regional veterinary institute (at Debrecen and Kaposvár) to carry out rapid tests for BSE and scrapie as well as to carry out histopathology in case of bovine animals. (Before this date it was allowed only in case of other ruminants as it was mentioned earlier.)

As a part of the harmonisation process of the Hungarian veterinary legislation to the EU rules in June 2003 the Decree No 69/2003. (VI.25.) FVM of the Minister of Agriculture and Rural Development on the prevention, control and eradication of transmissible spongiform encephalopathies were published. On the basis of the Decree the TSE Contingency Plan issued at the end of November 2003. This Contingency Plan contains a special chapter for the official control carried out by the State Veterinary Service and a very detailed Instruction Manual for the practical implementation of the legislative rules. Furthermore in February 2004 Decree No. 22/2004. (II.27.) FVM amending Decree No. 69/2003. (VI.25) FVM were published and from the date of accession Hungary has been directly under the effect of Regulation (EC) No 999/2001. In December of 2009 a new Ministerial decree for executing of Regulation (EC) No 999/2001 was published (Decree No 179/2009 (29. XII.) of the Ministry of Agriculture and Rural Development (MARD) on the prevention, control and eradication of transmissible spongiform encephalopathies) and the Decree No 69/2003. (VI.25.) FVM of the Minister of Agriculture and Rural Development on the prevention, control and eradication of transmissible spongiform encephalopathies was repealed.

After the last modification of our BSE surveillance program (in July 2011) the monitoring investigations will be covered the following groups:

- **All dead bovine animals over 24 months**
- **All emergency slaughtered bovine animals over 24 months;**
- **All bovine animals over 24 months showing clinical sign at ante mortem inspection**
- **All bovine animals over 72 months of age subject to normal slaughter. All bovine animals originated from Bulgaria, Romania or third countries over 30 months of age**

4. Measures included in the programme

4.1. Designation of the central authority in charge of supervising and coordinating the departments responsible for implementing the programme:

In national level this monitoring program is supervised and coordinated by the Animal Health and Animal Welfare Directorate of the National Food Safety Office.

In county level the Food Chain Safety and Animal Health Directorate of the County Government Office is responsible for the implementation of the programme.

4.2. Description and delimitation of the geographical and administrative areas in which the programme is to be applied:

The TSE monitoring programme covers the whole territory of Hungary, the derogation laid down in Annex III, Chapter A, I.3.2. of Regulation (EC) No 999/2001 is not applied in our country. (Please see the map of Hungary.)

4.3. System in place for the registration of holdings:

In case of cattle a computerized, centralized identification and registration system (ENAR) has been operated since 1997 and each bovine herd has been registered in the frame of this system.

In case of sheep a computerized, centralized identification and registration system (ENAR) has been operated since 2000. The ovine herds have been registered on the basis of the Decree No. 29/2000. (VI. 9.) FVM of the Minister of Agriculture and Regional Development. Please see also the following point.

In case of goats the Zoosanitary Code (Decree No 41/1997. (V.28.) FM of Minister of Agriculture) prescribes that during identification of these animals pre-printed ear-tags must be used, but until May of 2005 there was no special ministerial decree for the identification and registration of goats. However the voluntary registration of goats have been started by the breeding organizations of goats without the special legislation. In May of 2005 a new decree of the Minister of Agriculture and Rural Development, Decree No 47/2005. (V.23.) FVM, was published about the identification and registration of goats and sheep and for the implementation of Council Regulation (EC) No 21/2004. (In case of sheep this new decree replaced the Decree No. 29/2000. (VI. 9.)

FVM.) In October of 2007 a new decree of the Minister of Agriculture and Rural Development, Decree No 119/2007. (X.18.) FVM was published about centralized registration of holdings and herds. In December of 2009 a new decree of the Minister of Agriculture and Rural Development, Decree No 182/2009. (30. XII.) FVM was published about the identification and registration of sheep and goats and for the implementation of Council Regulation (EC) No 21/2004.

Please see also the following point.

4.4. System in place for the identification of animals:

Bovine animals

Bovine animals are subject to individual identification and registration. This obligation has been laid down in several legal texts. The most common provisions related to individual identification of animals belonging to *inter alia* bovine animals are laid down in the Zoosanitary Code and in the legal texts dealing with the animal passport which has got to accompany the animals during domestic transport.

Special rules for bovine animals have been implemented as follows:

Individual identification of bovine animals:

Until 31 December 1972:

horn branding

tattooing

ear-tagging (by pre-printed or handwritten individual number)

data recorded and handled in the herd-book.

From 1 January 1973: (Decree No. 10/1972. (VIII.9.) MÉM of the Minister of Agriculture and Alimentation)

ear-tagging (for most animals by pre-printed individual number)

data recording and handling on both herd and county level.

Registration and identification using central, computerised database

From 18 September 1997 (Decree No. 62/1997. (IX. 10.) FM of Minister of agriculture

ear-tagging by pre-printed, bar-coded individual number

data recording and handling in computerised, central database.

The rules of the Decree No. 62/1997. (IX. 10.) FM were equivalent to the relevant rules of the European Union. Since 1997 due to *inter alia* the changes of the EU rules we have modified our rules several times. The current legislative text, namely the Decree No 99/2002. (XI.5.) FVM of Minister of

Agriculture and Rural Development are fully compatible with the following legislative Rules of the European Union: (The Decree No 99/2002. (XI.5.) FVM was modified before Accession by Decree No 12/2004. (I.31) FVM of the Minister of Agriculture and Rural Development.)

- Regulation (EC) No 1760/2000 of the European Parliament and of the Council establishing a system for the identification and registration of bovine animals and regarding the labelling of beef and beef products and repealing Council Regulation (EC) No 820/97;
- Commission Regulation (EC) No 494/98 laying down detailed rules for the implementation of Council Regulation (EC) No 820/97 as regards the application of minimum administrative sanctions in the framework of the system for the identification and registration of bovine animals;
- Commission Regulation (EC) No 2629/97 laying down detailed rules for the implementation of Council Regulation (EC) No 820/97 as regards ear tags, herd registers and passports in the framework of the system for the identification and registration of bovine animals;
- Commission Regulation (EC) No 1082/2003 of laying down detailed rules for the implementation of Regulation (EC) No 1760/2000 of the European Parliament and of the Council as regards the minimum level of controls to be carried out in the framework of the system for the identification and registration of bovine animals;
- Council Directive (EC) No 97/12 amending and updating Directive 64/432/EEC on health problems affecting intra-Community trade in bovine animals and swine;
- Council Directive (EEC) No 92/102 on the identification and registration of animals.

Ovine and caprine animals

Ovine and caprine animals are subject to individual identification and registration. This obligation has been laid down in several legal texts.

The most common provisions related to individual identification of animals belonging to the two species are laid down in the Zoosanitary Code and in the legal texts dealing with the animal passport which has got to accompany the animals during domestic transport.

Special rules for these two species have been implemented as follows:

Individual identification of ovine and caprine animals:

By 30 June 1997:

tattooing

ear-tagging

From 1 July 1997: (Zoo-Sanitary Code, Decree No. 41/1997. (V.28.) of the Minister of Agriculture)

ear-tagging by pre-printed individual number

From 1 January 2010: (Decree No 182/2009. (30. XII.) FVM)

Electronic ear-tagging or ruminal bolus

Registration and identification of ovine animals using central, computerised database:

From 17 June 2000: (Decree No. 29/2000. (VI. 9.) of the Minister of Agriculture and Regional Development regarding ovine animals

ear tagging by pre-printed number,

(supported by a tattooed ear number prefix)

data recording and handling in computerised, central database for breeders.

From July of 2005 until 1 January of 2010 the Decree No. 47/2005. (V.23.)* FVM about the identification and registration of sheep and goats and for the implementation of Council Regulation (EC) No 21/2004 had been effective. Parallel making this decree in the frame of a PHARE project a new central, computerised database for sheep and goats were developed. After 1 January of 2006 this new central database is fully operable. In December of 2009 a new decree of the Minister of Agriculture and Rural Development, Decree No 182/2009. (30. XII.) FVM was published about the identification and registration of sheep and goats and for the implementation of Council Regulation (EC) No 21/2004.

* It was published on 23 May of 2005.

Registration and identification of caprine animals

As it was mentioned earlier the voluntary registration of goats have been started by the breeding organizations without special decree as result of this work the most of the breeding farms were registered by these organizations before May of 2005. As it was mentioned earlier in May of 2005 the Decree No 47/2005. (V.23.) FVM, were published about the identification and registration of sheep and goats and for the implementation of Council Regulation (EC) No 21/2004. This was the first special Hungarian decree regarding the identification and registration of goats. On the basis of this decree the new central, computerised database is fully operable for goats as well. From 1 January of 2010 Decree No 182/2009. (30. XII.) FVM entered into force about

the identification and registration of sheep and goats and for the implementation of Council Regulation (EC) No 21/2004.

The detailed rules for registration and identification of ovine and caprine animals

Until 1 January of 2010 on the basis of Decree No 47/2005. (V.23.) FVM of the Minister of Agriculture the identification and registration of sheep and goats was the following.

The identification system was the same in the breeding and the commercial flocks.

All sheep and goats were identified until 6 months of age or before leaving the birth holding. In case of animals not intended for keeping in the birth holding the first and second mean of identification was also eartags.

The identification of animals intended for keeping in the birth holding was the following:

a tattoo of registration number in two ears and one tag with the same number and bar code. (In case of transport to other member states the second eartag was also compulsory)

The eartag consisted of a 9-11 digits individual code in case of sheep and a 10 digits individual code in case of goats.

In case of sheep the registration number consisted of a 5 digits holding code after that a 2-5 digit individual number (the first digit of this number is the last number of the birth year). Before this number might be a one digit serial number. This system was used in breeding sheep flocks from the early seventies and in the commercial sheep flocks from 1997.

The Decree 182/2009 (XII. 30.) FVM of the Minister of Agriculture the identification and registration of sheep and goats is effective as of 1 January 2010 and it has been introduced the usage of the electronic eartag or ruminal bolus in Accordance with Council Regulation (EC) No 21/2004.

The individual numbers are given by a central computer database that operating according to Article 7 and 8 of the Regulation (EC) No 21/2004. It is compulsory to register the data listed in Part D of Annex to Regulation (EC) No 21/2004 in the Central Database.

The holding register is in the same computer database, it consists all data of holdings and animal keepers.

During the transport an official document accompanies the animals. This document contains the data listed Part C1 of Annex to Regulation (EC) No

21/2004 as well as the ID number of animals. This transport document has five copies, two from it remain at the original keeper, two ones accompanying the shipment, and the last has to be given to the veterinarian who signed the animal health declaration in the transporting document.

4.5. Measures in place as regards the notification of the disease:

As it was mentioned in point 1 the BSE and the scrapie are compulsorily notifiable diseases in Hungary by the Act No. XCI of 1995 on the Veterinary Rules. Furthermore, according to the Section 19 of Decree No. 179/2009 (XII.29) FVM during the implementation of the provisions of the Act on Food Chain and on the Supervision of the Food Chain (Act on No XLVI of 2008) persons engaging in the keeping and buying of animals shall

- notify the suspicion of a TSE to the veterinary surgeon, if any animal owned or taken care of or transported by the person shows neurological symptoms, behavioural disorder or a progressively deteriorating condition, which may be attributed to a disease of the nervous system;
- notify any death of bovine, ovine or caprine animals to the veterinary surgeon irrespective of the symptoms shown prior to the death of the animal;
- follow the veterinary surgeon's instructions, promote his/her work in all possible ways and tolerate the measures and interventions ordered.
- notify normal slaughter of cattle over 72 months and ovine or caprine animals over 18 months for own consumption, furthermore emergency slaughter of cattle, ovine or caprine animals without veterinary supervision to the veterinary surgeon.

4.6. Testing

As it was mentioned earlier the National TSE Monitoring Program is supervised and coordinated by the Animal Health and Animal Welfare Directorate of the National Food Chain Safety Office and this program covers the whole territory of Hungary.

In Hungary it is compulsory to investigate by rapid test:

- all bovine animals over 24 months which died, or killed ones (excluding bovines killed due to an epidemic)
- all emergency slaughtered bovine animals over 24 months
- all bovine animals over 24 months with clinical signs at ante mortem.
- all bovine animals over 72 months of age subject to normal slaughter (As of 1 July of 2011), furthermore all bovine animals originated from Bulgaria,

Romania and third countries over 30 months of age subject to normal slaughter

- 10 000 slaughtered sheep over 18 months
- 10 000 dead sheep over 18 months
- all emergency slaughtered goats over 18 months and all caprine animals over 18 months with clinical sign at ante mortem inspection (from 2009)*
- 100 dead goats over 18 months (from 2009)*

* The number of goat's investigations has been reduced due to the decline of Hungarian goat population.

In 2003, 86595 healthy slaughtered cattle over 30 months as well as 4263 emergency slaughtered and 6532 dead ones over 24 months were tested with negative results. (Please see **table 4.**) In 2004, 81284 healthy slaughtered cattle over 30 months, 2436 emergency slaughtered and 12264 dead cattle over 24 months as well as the 35 cattle over 24 months with clinical signs at ante mortem were tested with negative results. (Please see **table 5.**) During 2005, 67770 healthy slaughtered cattle over 30 months, 2464 emergency slaughtered and 13269 dead cattle over 24 months as well as the 12 cattle over 24 months with clinical signs at ante mortem were tested with negative results. (Please see **table 6.**) In 2006, 67362 healthy slaughtered cattle over 30 months, 2579 emergency slaughtered and 13725 dead cattle over 24 months as well as the 37 cattle over 24 months with clinical signs at ante mortem were tested with negative results (Please see **table 7.**). In 2007 69440 healthy slaughtered cattle over 30 months, 1971 emergency slaughtered and 13522 dead cattle over 24 months as well as the 15 cattle over 24 months with clinical signs at ante mortem were tested. In case of a cattle imported from Slovakia for immediate normal slaughter the rapid test and the confirmatory tests were positive, too. (Please see **table 8**) In 2008 70831 healthy slaughtered cattle over 30 months, 1435 emergency slaughtered and 13625 dead cattle over 24 months as well as the 8 cattle over 24 months with clinical signs at ante mortem were tested with negative results (Please see **table 9**). In 2009 75317 healthy slaughtered cattle over 30 months, 872 emergency slaughtered and 12155 dead cattle over 24 months as well as the 21 cattle over 24 months with clinical signs at ante mortem were tested with negative results (Please see **table 10**). In 2010 71808 healthy slaughtered cattle over 30 months, 746 emergency slaughtered over 24 months and 13097 dead cattle over 24 months as well as the 25 cattle over 24 months with clinical signs at ante mortem were tested with negative results (Please see **table 11**). In the year 2011: Between 1 January and 30 June 2011, 33287 as of 1 July 1798 (originated from Romania, Bulgaria or 3rd country) healthy slaughtered bovine animals over 30 months of age were tested by rapid test. As of 1 July 11915 healthy slaughtered bovine animals over 72 months of age were tested by rapid test. All results were negative. Furthermore, 657 emergency slaughtered over 24 months and 11976 dead cattle over 24 months as well as

the 92 cattle over 24 months with clinical signs at ante mortem were tested with negative results (Please see **table 12**).

In 2003, totally 2545 sheep over 18 months were tested by Bio-Rad Platelia tests and all results were negative. These 2545 sheep covered 1717 dead and 828 (714 healthy and 114 emergency) slaughtered ones. During 2004, 4196 dead, 218 emergency slaughtered and 1306 healthy slaughtered ovine animals over 18 months were tested, all results were negative excluding one healthy slaughtered sheep imported from Romania for immediately slaughter. During 2005, 5483 dead, 354 emergency slaughtered and 3113 healthy slaughtered ovine animals over 18 months were tested, all results were negative. During 2006, 5615 dead, 477 emergency slaughtered and 5905 healthy slaughtered ovine animals over 18 months were tested, and excluding the seven positive animals the results were negative. During 2007, 6682 dead, 764 emergency slaughtered and 4473 healthy slaughtered ovine animals over 18 months were tested, and excluding the seven positive animals the results were negative. During 2008, 7134 dead, 872 emergency slaughtered and 5031 healthy slaughtered, 1318 killed ovine animals over 18 months were tested, and excluding the nine positive animals the results were negative. During 2009, 6720 dead, 905 emergency slaughtered, 4071 healthy slaughtered and 2020 killed ovine animals over 18 months were tested, and excluding the 15 positive animals the results were negative. During 2010, 7239 dead, 1183 emergency slaughtered, 3885 healthy slaughtered and 1136 killed ovine animals, over 18 months were tested, and excluding the 8 positive animals the results were negative. During 2011, 8115 dead, 1044 emergency slaughtered, 4545 healthy slaughtered and 635 killed ovine animals over 18 months were tested, and excluding the 11 positive animals the results were negative. (Please see **tables 13-33**)

In 2003, 77 dead, 10 emergency slaughtered and 66 healthy slaughtered caprine animals over 18 months were tested with negative results. In 2004, 136 dead, 4 emergency slaughtered and 132 healthy slaughtered caprine animals were tested with negative results. During 2005, 173 dead, 21 emergency slaughtered and 53 healthy slaughtered caprine animals were tested with negative results. During 2006, 120 dead, 26 emergency slaughtered and 45 healthy slaughtered caprine animals were tested with negative results. During 2007, 258 dead, 25 emergency slaughtered and 119 healthy slaughtered caprine animals were tested with negative results. During 2008, 216 dead, 20 emergency slaughtered, 42 healthy slaughtered and 6 killed caprine animals were tested with negative results. During 2009, 195 dead, 19 emergency slaughtered, 76 healthy slaughtered and 18 killed caprine animals were tested with negative results. During 2010, 186 dead, 16

emergency slaughtered and 51 healthy slaughtered caprine animals over 18 months were tested with negative results. During 2011, 142 dead, 25 emergency slaughtered, 77 healthy slaughtered and 17 killed caprine animals over 18 months were tested with negative results. (Please see **tables 34-54.**)

Genotyping

During 2004 the genotypes of 601 sheep were determined in accordance with Annex III Chapter A, Part II, points 8.2. In 2005, 2006, 2007, 2008, 2009, 2010, 2011 this number was 600 per year.

Under the framework of a breeding programme as established in Commission Decision 2003/100/EC in 2005, 3322, in 2006, 4450, and in 2007 3791 sheep were genotyped. Under the framework of a breeding programme referred to in Article 6a of Regulation (EC) No 999/2001 in 2008 4230 sheep, in 2009 4380, in 2010 3847, in 2011 3374 sheep were genotyped. Besides these investigations in 2007 3020 sheep, in 2008 6546, in 2009 8559, in 2010 4055, in 2011 1843 sheep were genotyped in the infected flocks.

(Please see **table 55-66** regarding the investigation in 2006, 2007, 2008, 2009, 2010 and 2011.)

4.6.1. Rapid tests in Bovine Animals

	Age (in months) above which animals are tested	Estimated number of animals to be tested	Estimated number of rapid tests, including rapid tests used for confirmation
Animals referred to in Annex III, Chapter A, Part I, point 2.1, 3 and 4 of Regulation (EC) No 999/2001 of the European Parliament and of the Council	24	17 000	17 000
Animals referred to in Annex III, Chapter A, Part I, point 2.2 of Regulation (EC) No 999/2001	72	31 000	31 000
Animals referred to in Annex III, Chapter A, Part I, point 2.2 of Regulation (EC) No 999/2001 originated from Bulgaria, Romania and their countries	30	4000	4000

4.6.2. Rapid tests in Ovine animals

Estimated population of adult ewes and ewe lambs put to the ram (at the end of 2011): 866474

	Estimated number of animals to be tested
Ovine animals referred to in Annex III, Chapter A, Part II, point 2 of Regulation (EC) 999/2001	10 000*
Ovine animals referred to in Annex III, Chapter A, Part II, point 3 of Regulation (EC) 999/2001	10 000
Ovine animals referred to in Annex III, Chapter A, Part II, point 5 of Regulation (EC) 999/2001	1000**
Ovine animals referred to in Annex VII, Chapter A, point 2.3(d) of Regulation (EC) No 999/2001	1250**
Ovine animals referred to in Annex VII, Chapter A, point 3.4(d) of Regulation (EC) No 999/2001	800**
Ovine animals referred to in Annex VII, Chapter A, point 4(b) and (e) of Regulation (EC) No 999/2001	200**
Ovine animals referred to in Annex VII, Chapter A, point 5(b)(ii) of Regulation (EC) No 999/2001	100**
Others (specify)	0

* Taking into consideration not only the investigation of sheep slaughtered in the Hungarian slaughterhouses, but ovine animals slaughtered (by the farmer) for own consumption.

** Estimated on the basis of the scrapie cases found during 2006, 2007, 2008, 2009, 2010, 2011.

4.6.3. Monitoring in Caprine animals

Estimated population of female goats and female kids mated (at the end of 2011): 15589

	Estimated number of animals to be tested
Caprine animals referred to in Annex III, Chapter A, Part II, point 2 of Regulation (EC) 999/2001	150
Caprine animals referred to in Annex III, Chapter A, Part II, point 3 of Regulation (EC) 999/2001	150
Caprine animals referred to in Annex III, Chapter A, Part II, point 5 of Regulation (EC) 999/2001	150*
Caprine animals referred to in Annex VII, Chapter A, point 2.3(d) of Regulation (EC) No 999/2001	30*
Caprine animals referred to in Annex VII, Chapter A, point 3.3(c) of Regulation (EC) No 999/2001	30*
Caprine animals referred to in Annex VII, Chapter A, point 4(b) and (e) of Regulation (EC) No 999/2001	10*
Caprine animals referred to in Annex VII, Chapter A, point 5(b)(ii) of	50*

Regulation (EC) No 999/2001

Others (specify)

0

* There were no cases in our domestic goat population, therefore it is very difficult to estimate it.

4.6.4. *Confirmatory tests other than rapid tests as referred to in Annex X Chapter C of Regulation (EC) No 999/2001*

	Estimated number of tests
Confirmatory tests in Bovine animals	0
Confirmatory tests in Ovine and Caprine animals	96*

*Estimated on the basis of the scrapie cases found during 2006, 2007, 2008, 2009, 2010, 2011.

4.6.5. *Discriminatory tests*

	Estimated number of tests
Primary molecular testing referred to in Annex X, Chapter C, point 3.2 (c) (i) of Regulation (EC) 999/2001	32*

*Estimated on the basis of the scrapie cases found during 2006, 2007, 2008, 2009, 2010, 2011.

4.6.6. *Genotyping of positive and randomly selected animals*

	Estimated number of tests
Animals referred to in Annex III, Chapter A, Part II, point 8.1 of Regulation (EC) 999/2001	15*
Animals referred to in Annex III, Chapter A, Part II, point 8.2 of Regulation (EC) 999/2001	600

* Estimated on the basis of the scrapie cases found during 2006, 2007, 2008, 2009, 2010, 2011.

4.7. Eradication

4.7.1. *Measures following confirmation of a BSE case*

4.7.1.1. Description

Following confirmation of a BSE case measures laid down in Annex VII, Chapter A of Regulation (EC) 999/2001 shall be carried out.

The BSE has never occurred in indigenous herd in Hungary, therefore the necessary information are not available to estimate the number of the animals which will be killed under the requirements of Annex VII, Chapter A, Point 2.1 of Regulation (EC) 999/2001 during 2010.

4.7.1.2. Summary table

	Estimated number
Animals to be killed under the requirements of Annex VII, Point 2.1 of Regulation (EC) 999/2001:	0*

* There was no BSE case in domestic population in Hungary therefore we are not able to estimate it.

4.7.2. Measures following confirmation of a scrapie case

4.7.2.1 Description

The first scrapie outbreak (with two cases) in our domestic herds was found in Fejér county in June 2006. During the second half of 2006 other four outbreaks occurred, one in Jász-Nagykun-Szolnok county and three in Hajdú-Bihar county. Furthermore we found an other sheep in December in Bács-Kiskun county where the rapid test was positive in December 2006, but the scrapie confirmed in January 2007. There were eight confirmed scrapie cases including the above mentioned case, too. There were nine confirmed scrapie cases in 2008. There were fifteen confirmed scrapie cases in 2009. There were eight confirmed scrapie cases in 2010. There were eleven confirmed scrapie cases in 2011, one (healthy slaughtered) of them was investigated in Poland. The attached table contains the most important data regarding the scrapie cases (**table 67- 72**).

Following confirmation of a scrapie case measures laid down in Annex VII, Chapter A of Regulation (EC) 999/2001 shall be carried out.

4.7.2.2. Summary table

	Estimated number
Animals to be culled and destroyed under the requirements of Annex VII, Chapter A, point 2.3 of Regulation (EC) No 999/2001	5000*
Animals to be sent for compulsory slaughter in application of the provisions of Annex VII, Chapter A, point 2.3(d) of Regulation (EC) No 999/2001	2000*
Animals to be genotyped under the requirements of Annex VII, Chapter A, point 2.3 of Regulation (EC) No 999/2001:	8000*

*Estimated on the basis of the scrapie cases found during 2006, 2007, 2008, 2009, 2010, 2011.

4.7.3. Breeding programme for resistance to TSEs in sheep

4.7.3.1. General description¹:

The breeding programme for resistance to scrapie has been developed and organised by the Hungarian Sheep and Goat Breeders Association. The program based on the risk groups listed in table A and the results of the preliminary investigations carried out in 2003 (see table B). Hungarian Breeding Programme was modified in December of 2007.

Table A: Prion protein genotype and likelihood of manifestation of scrapie according to the risk groups

Risk group	Genotype	The likelihood of manifestation of scrapie
<u>R1</u>	ARR/ARR	Very low risk in case of tested animal and its offspring as well.
R2	ARR/AHQ ARR/ARH ARR/ARQ	Low risk in case of tested animal and its offspring as well.
R3	AHQ/AHQ AHQ/ARH AHQ/ARQ ARH/ARH ARH/ARQ ARQ/ARQ	Low risk in case of tested animal, but there is a real risk in case of its offspring depending on the genotype of the other parents
R4	ARR/VRQ	There is a high risk in case of tested animal and offspring as well.
R5	AHQ/VRQ ARH/VRQ ARQ/VRQ VRQ/VRQ	The highest risk

It is very important to prevent and control of scrapie. Its elements are the following:

The results of this preliminary investigations are the basis of the current Hungarian breeding programme (Table B).

Breeds	n	ARR	ARQ	VRQ	R1	R5
Cigája	84	33,33	61,90	0,60	4,76	1,19
Gyimesi racka	57	27,19	70,18	1,75	5,26	1,75
Hortobágyi racka	140	23,93	42,50	3,57	5,00	3,57
Cikta	64	20,29	70,29	-	1,45	-
Landschaf merinóo	57	21,05	73,68	0,88	5,26	1,75

¹ Description of the programme according to the minimum requirements set out in Annex VII, Chapter B of Regulation (EC) No 999/2001.

Charollais	75	38,67	47,33	12,67	13,33	10,67
Texel	102	38,24	31,37	8,82	10,78	7,87
Ile de France	53	69,81	22,64	6,60	52,83	5,66
Prolific merino	59	58,47	37,29	-	32,20	-
German blackheaded	65	51,54	46,15	0,77	21,54	-
Suffolk	69	50,72	43,48	0,72	26,09	-
Hungarian merino	404	46,29	49,75	0,99	22,52	0,74
German meatmerino	137	41,97	44,53	0,36	13,14	-
Lacaune	38	39,47	51,32	-	10,53	-
Awassi	62	38,71	46,77	5,65	17,74	4,84
Booroola merino	46	35,87	55,43	-	8,70	-
British milking	53	35,85	27,36	-	11,32	-

The results of investigations between 2005-2007 (Table C)

Fajta	n	ARR	VRQ	R1	R2	R3	R4	R5
Hungarian merino	1598	49,1	1,2	22,5	52,1	23,0	1,3	1,2
German meatmerino	1546	52,4	1,0	26,4	51,1	20,5	1,0	1,0
Landschaf merino	550	38,5	0	12,0	53,1	34,9	0	0
Charollais	144	39,6	14,6	14,6	36,1	20,8	13,9	14,6
Ile de france	654	76,1	6,0	57,8	26,9	3,5	9,8	2,0
German blackheaded	545	65,6	0,6	41,8	46,6	10,5	0,9	0,2
Suffolk	1027	55,8	0,4	29,6	52,0	17,5	0,4	0,4
Texel	200	51,0	5,5	24,0	46,0	18,5	8,0	3,5
Awassi	19	7,9	0	0	15,8	84,2	0	0
British milking	151	28,8	0	8,6	40,4	51,0	0	0
Lacaune	528	65,5	0,4	39,6	51,3	8,3	0,6	0,2
Dairy Tsigai	96	27,6	6,8	1,0	44,8	40,6	8,3	5,2
Tsigai	158	40,8	3,5	19,0	39,9	34,2	3,8	3,2
Cikta	41	14,6	0	4,9	19,5	75,6	0	0
white racka	954	34,1	3,0	11,3	43,3	39,3	2,2	3,9
black racka	89	39,9	10,7	3,4	29,2	47,2	5,6	14,6
Gyimesi racka	168	36,0	3,6	13,7	43,5	36,3	1,2	5,4
Bábolnai tetra	85	34,7	3,5	15,3	32,9	32,9	5,9	12,9
Romney	9	44,4	5,6	11,1	66,7	11,1	0	11,1
Bergschaf	1	50,0	0	0	100,0	0	0	0

2. The breeding programme is based on previous investigations and extends to all breeds breeding in Hungary:

- It is compulsory to genotype all breeding rams.
- Only rams of R1, R2 or R3 risk groups may be breeding rams, in case of R3 risk group the using of animals ARR/ARQ alleles is not recommended.
- Animals with VRQ allele may leave the flock only for slaughter.

Genotyping and data recording

The Hungarian Sheep and Goat Breeders Association approves the results of accredited laboratories only.

The document approved by the Hungarian Sheep and Goat Breeder Association has to be accompanied the samples for genotyping. The Hungarian Sheepbreeder Association records the results with the individual ID number of the tested sheep in the database.

Qualifying of flocks

I. scrapie free level:

All lambs originated from ARR/ARR rams for one year at least.

II. scrapie free level:

All lambs originated from ARR/ARR, ARR/ARH or ARR/AHQ rams for one year at least

4.7.3.2. Summary table

	Estimated number
Ewes to be genotyped under the framework of a breeding programme referred to in Article 6a of Regulation (EC) No 999/2001	800*
Rams to be genotyped under the framework of a breeding programme referred to in Article 6a of Regulation (EC) No 999/2001	3500*

* Number of the investigations under the framework of a breeding programme depends on the number of investigations in the infected flocks.

5. Costs

5.1. Detailed analysis of the costs:

The costs of our BSE monitoring programme cover the costs of the rapid tests used, the personal cost and overheads for the laboratory investigations of the

- animals referred to in Annex III, Chapter A, Part I, points 2.1, 3 and 4 of Regulation (EC) 999/2001: 17000 cattle
- animals referred to in Annex III, Chapter A, Part I, points 2.2 of Regulation (EC) 999/2001: 35000 cattle

It means the investigations of 52000 cattle totally.

The costs of our scrapie monitoring programme cover the costs of the rapid tests used, the personal cost and overheads for the laboratory investigations of the

- animals referred to in Annex III, Chapter A, Part II, point 2 of Regulation (EC) 999/2001: 10000 sheep and 150 goats
- animals referred to in Annex III, Chapter A, Part II, point 3 of Regulation (EC) 999/2001: 10000 sheep and 150 goats.
- animals referred to in Annex III, Chapter A, Part II, point 5 of Regulation (EC) 999/2001: 1000 sheep and 150 goats
- Ovine animals referred to in Annex VII, Chapter A, point 2.3(d) of Regulation (EC) No 999/2001: 1250 sheep and 30 goats
- Ovine animals referred to in Annex VII, Chapter A, point 3.4(d) of Regulation (EC) No 999/2001: 800 sheep
- Ovine animals referred to in Annex VII, Chapter A, point 4 (b) and (e) of Regulation (EC) No 999/2001: 200 sheep and 10 goats
- Ovine animals referred to in Annex VII, Chapter A, point 5(b)(ii) of Regulation (EC) No 999/2001: 100 sheep and 50 goats
- Caprine animals referred to in Annex VII, Chapter A, point 3.3(c) of Regulation (EC) No 999/2001: 30 goats

- Confirmatory testing: minimum 12 and maximum 96 animals with positive in rapid tests. (In case of TeSe Sheep/Goat Western Blot (Bio-Rad) one unit is eligible for the testing of 32 animals as a maximum, but in case rare positive rapid tests results (as in Hungary) it is eligible only investigation of 4 animals.
- Primary molecular testing referred to in Annex X, Chapter C, point 3.2 (c) (i) of Regulation (EC) 999/2001: minimum 8 and maximum 32 animals with positive in rapid tests In case of 51.177 Discriminatory test (Bio-Rad) one unit is eligible for the testing of 8 animals as a maximum, but in case rare positive rapid tests results (as in Hungary) it is eligible only investigation of 2 animals.)

It means the monitoring investigations of 23350 ovine and 570 caprine animals (23920 small ruminants) and the confirmatory testing of maximum 96 the primary molecular testing of maximum 32 (minimum 8) animals totally.

In 2011 during monitoring investigations for TSE the Bio-Rad TeSeE, Roboscreen Betapriion BSE EIA and IDEXX Herdcheck BSE-Scrapie test has been used. According to our national financial rules it is compulsory to make a call for a tender of the rapid test for 2013. Therefore depending on the result of this tender another rapid tests might be used in 2013.

The costs of the genotyping of 8615 sheep referred to in Annex III, Chapter A, Part II, point 8.1 and 8.2 of Regulation (EC) No 999/2001 and referred to in Annex VII, Chapter A, point 2.3 of Regulation (EC) No 999/2001 as well as costs of the genotyping of 4300 sheep under the framework of a breeding programme referred to in Article 6a of Regulation (EC) No 999/2001 are added to the costs of the TSE monitoring investigations.

The costs of the state compensation of 7000 sheep or goats killed or slaughtered due to confirmation of scrapie.

5.2. Summary of the costs (excluding VAT)

1. 1. Testing in bovine animals (as referred to in point 4.6.1)

<i>Costs related to</i>	<i>Specification</i>	<i>Number of units</i>	<i>Unitary cost in EUR</i>	<i>Total amount in EUR</i>	<i>Community funding requested (yes/no)</i>
1.1. Rapid tests**	Test: Roboscreen Beta Prion BSE EIA	52000 samples	8,5 €	442000	yes
	Test:				
	Test:				
	Test:				
2. Testing in ovine and caprine animals (as referred to in point 4.6.2 and 4.6.3)					
2.1. Rapid tests**	Test: Bio-Rad TeSeE	23920 samples	8,5 €	203320	yes
	Test:				
	Test:				
3. Confirmatory testing (as referred to in point 4.6.4)					
3.1. Confirmatory tests in Bovines	-	-	-	-	-
3.2. Confirmatory tests in Ovines and Caprines	Test: TeSe Sheep/Goat Western Blot (Bio-Rad)	3 unit (32 tests/unit)	2030 €/unit	6090	yes
4. Discriminatory testing²(as referred to in point 4.6.5)					
3.1. Primary molecular tests	Test: 51.177 Discriminatory test (Bio-Rad)	4 units (8 tests/unit)	838 €/unit	3352	yes

² As referred to in point 4.6.4.

5. **Genotyping**

5.1. Determination of genotype of animals in the framework of the monitoring and eradication measures laid down by Regulation (EC) No 999/2001³(as referred to in point 4.6.6 and 4.7.2.2)

Method: **microsequencing**

8615 samples	14,3 €	123194,5	yes
4300 samples	14,3 €	61490	yes

5.2. Determination of genotype of animals in the framework of a breeding programme⁴(as referred to in point 4.7.3.2)

Method: **microsequencing**

6. **Compulsory Slaughter**

6.1. Compensation for bovine animals to be culled and destroyed under the requirements of Annex VII, Chapter A, point 2.1 of Regulation (EC) No 999/2001 (as referred to in point 4712)

0	0	0	no
5000	140 €	700000	yes
2000	100 €	200000	yes

6.2. Compensation for ovine and caprine animals to be culled and destroyed under the requirements of Annex VII, Chapter A, point 2.3 of Regulation (EC) No 999/2001 (as referred to in point 4722)

6.3 Compensation for ovine and caprine animals to be sent for compulsory slaughter in application of the provisions of Annex VII, Chapter

³ As referred to in points 4.6.5 and 4.7.2.2.

⁴ As referred to in point 4.7.3.2.

A, point 2.3(d) of Regulation (EC)
No 999/2001 (as referred to in
point 4722)

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TOTAL'

1 739 446,50

yes

* No data to estimate, **Including the following expenditure:(a) the purchase of test kits, reagents and all consumables identifiable and especially used for carrying out the laboratory test;(b) personnel, whatever the status, specifically allocated entirely or in part for carrying out the tests in the premises of the laboratory; the costs are limited to actual salaries plus social security charges and other statutory costs included in the remuneration); and (c) overheads equal to 7 % of the sum of the costs referred to in (a) and (b).

Table 1

Histopathological investigations for TSE in Hungary 1989-2000

Year	Cattle			Sheep			Goats	Cats
	monitoring	neurological signs	all	monitoring	neurological signs	all		
1989-1997	19	1341	1360	8	1596	1664	*	2373
1998	95	40	135	73	27	100	11	441
1999	41	82	123	28	72	100	5	521
2000	113	75	188	63	56	119	15	496
Total	268	1538	1806	172	1751	1983	31	3831

All results were negative

* The statistics between 1989 and 1997 did not contain the detailed data regarding goats.

About 1-2 goats were investigated with negative results yearly

Table 2
BSE monitoring investigations in cattle during 2001

County according to the place of origin of the animal	Normal slaughtered animals over 30 months	Emergency slaughtered animals over 24 months	Dead animals over 24 months	Total
Baranya	460	12	11	483
Bács-Kiskun	766	7	48	821
Békés	552	64	59	675
Borsod-Abaúj-Zemplén	513	8	25	546
Csongrád	560	16	27	603
Fejér	440	88	42	570
Győr-Moson-Sopron	629	7	2	638
Hajdú-Bihar	1160	96	151	1407
Heves	401	23	9	433
Jász-Nagykun-Szolnok	679	61	71	811
Komárom-Esztergom	231	15	13	259
Nógrád	133	3	7	143
Pest	541	14	2	557
Somogy	580	55	17	652
Szabolcs-Szatmár-Bereg	581	54	50	685
Tolna	672	188	34	894
Vas	278	7	25	310
Veszprém	254	34	8	296
Zala	391	2	1	394
Althogther	9821	754	602	11177

Notes:

The Bio-Rad Platelia test was used. All results were negative.

Table 3

BSE monitoring investigations in cattle during 2002

County according to the place of origin of the animal	Normal slaughtered animals over 30 months	Emergency slaughtered animals over 24 months	Dead animals over 24 months	Total
Baranya	2932	19	52	3003
Bács-Kiskun	4072	139	82	4293
Békés	4234	193	263	4690
Borsod-Abaúj-Zemplén	3537	34	34	3605
Csongrád	3044	72	106	3222
Fejér	3032	614	42	3688
Győr-Moson-Sopron	5243	444	164	5851
Hajdú-Bihar	5866	427	218	6511
Heves	2605	138	22	2765
Jász-Nagykun-Szolnok	5354	263	178	5795
Komárom-Esztergom	1407	131	88	1626
Nógrád	956	7	16	979
Pest	3032	221	12	3265
Somogy	2366	260	21	2647
Szabolcs-Szatmár-Bereg	4131	98	104	4333
Tolna	2746	264	99	3109
Vas	2910	455	131	3496
Veszprém	3638	612	88	4338
Zala	2188	31	88	2307
Althogther	63293	4422	1808	69523

Notes:

The Bio-Rad Platelia test was used. All results were negative

Table 4
BSE monitoring investigations in cattle during 2003

County according to the place of origin of the animal	Normal slaughtered animals over 30 months	Emergency slaughtered animals over 24 months	Dead animals over 24 months	Total
Baranya	4210	25	398	4633
Bács-Kiskun	6377	188	215	6780
Békés	5860	350	384	6594
Borsod-Abaúj-Zemplén	4883	54	437	5374
Csongrád	3939	23	189	4151
Fejér	3868	757	665	5290
Győr-Moson-Sopron	7173	479	598	8250
Hajdú-Bihar	9961	205	475	10641
Heves	2193	78	88	2359
Jász-Nagykun-Szolnok	6122	121	292	6535
Komárom-Esztergom	1663	147	106	1916
Nógrád	1207	13	93	1313
Pest	4691	219	251	5161
Somogy	4439	278	143	4860
Szabolcs-Szatmár-Bereg	5567	74	336	5977
Tolna	3520	175	356	4051
Vas	3888	569	533	4990
Veszprém	4313	469	691	5473
Zala	2721	39	282	3042
Altogether	86595	4263	6532	97390

Notes:

The Bio-Rad Platelia test was used.

All results were negative

Table 5

BSE monitoring investigation in cattle during 2004 in Hungary by counties of origin

County according to the place of origin of the animal	Normal slaughtered animals over 30 months	Emergency slaughtered animals over 24 months	Animals with clinical signs at AM over 24 months	Dead animals over 24 months	Total
Baranya	3355	7	1	654	4017
Bács-Kiskun	4807	119	0	325	5251
Békés	5181	56	2	866	6105
Borsod-Abaúj-Zemplén	4443	44	2	904	5393
Csongrád	3907	26	0	455	4388
Fejér	4904	1082	4	1396	7386
Győr-Moson-Sopron	6982	75	2	1235	8294
Hajdú-Bihar	7575	78	5	691	8349
Heves	1906	7	0	205	2118
Jász-Nagykun-Szolnok	6005	25	0	634	6664
Komárom-Esztergom	1421	385	0	222	2028
Nógrád	999	3	0	163	1165
Pest	5011	280	5	380	5676
Somogy	2999	4	4	509	3516
Szabolcs-Szatmár-Bereg	4599	32	1	531	5163
Tolna	3844	44	1	619	4508
Vas	3522	13	1	766	4302
Veszprém	4117	137	2	1141	5397
Zala	2315	16	3	560	2894
Budapest	112	3	0	7	122
<i>Foreign countries</i>	3280	0	2	1	3283
Altogether	81284	2436	35	12264	96019

Notes:

Bio-Rad TeSeE test was used

All results were negative.

Table 6

BSE monitoring investigation in cattle during 2005 in Hungary by counties of origin

County according to the place of origin of the animal	Normal slaughtered animals over 30 months	Emergency slaughtered animals over 24 months	Animals with clinical signs at AM over 24 months	Dead animals over 24 months	Total
Baranya	3118	8	2	875	4003
Bács-Kiskun	3425	146	0	394	3965
Békés	5464	6	0	1199	6669
Borsod-Abaúj-Zemplén	3590	47	1	861	4499
Csongrád	3518	22	0	660	4200
Fejér	4254	932	1	1105	6292
Győr-Moson-Sopron	6202	138	0	1152	7492
Hajdú-Bihar	6556	127	4	1196	7883
Heves	1500	1	0	187	1688
Jász-Nagykun-Szolnok	5494	37	0	751	6282
Komárom-Esztergom	1338	305	0	214	1857
Nógrád	945	7	0	177	1129
Pest	4004	457	0	459	4920
Somogy	2791	15	1	829	3636
Szabolcs-Szatmár-Bereg	3629	19	0	697	4345
Tolna	2684	15	1	520	3220
Vas	2475	11	0	577	3063
Veszprém	3573	139	0	940	4652
Zala	1999	4	2	459	2464
Budapest	108	28	0	16	152
<i>Foreign countries</i>	1103	0	0	1	1104
Altogether	67770	2464	12	13269	83515

Notes: Bio-Rad TeSeE test was used.

All results were negative.

Table 7

BSE monitoring investigation in cattle during 2006 in Hungary by counties of origin

County according to the place of origin of the animal	Normal slaughtered animals over 30 months	Emergency slaughtered animals over 24 months	Animals with clinical signs at AM over 24 months	Dead animals over 24 months	Total
Baranya	3283	6	1	980	4270
Bács-Kiskun	3309	153	1	436	3899
Békés	5050	19	1	1185	6255
Borsod-Abaúj-Zemplén	4040	49	3	807	4899
Csongrád	3852	30	0	608	4490
Fejér	4128	990	6	1196	6320
Győr-Moson-Sopron	5567	154	2	1260	6983
Hajdú-Bihar	7256	114	5	1199	8574
Heves	1482	0	2	199	1683
Jász-Nagykun-Szolnok	5832	10	3	722	6567
Komárom-Esztergom	1089	360	0	361	1810
Nógrád	903	5	0	234	1142
Pest	4174	505	6	561	5246
Somogy	2470	20	0	706	3196
Szabolcs-Szatmár-Bereg	3482	23	2	617	4124
Tolna	2499	48	2	587	3136
Vas	2263	11	0	636	2910
Veszprém	3554	57	2	983	4596
Zala	1748	4	1	500	2253
Budapest	110	21	0	13	144
<i>Foreign countries</i>	1367	0	0	1	1368
Althogther	67458	2579	37	13791	83865

Notes: Bio-Rad TeSeE test was used. All results were negative.

Table 8
BSE monitoring investigation in cattle during 2007 in Hungary by counties of origin

County according to the place of origin of the animal	Normal slaughtered animals over 30 months	Emergency slaughtered animals over 24 months	Animals with clinical signs at AM over 24 months	Dead animals over 24 months
Baranya	3097	4	0	783
Bács-Kiskun	4070	45	2	392
Békés	5151	10	1	1167
Borsod-Abaúj-Zemplén	3557	41	0	784
Csongrád	3721	27	0	621
Fejér	3979	655	3	1095
Győr-Moson-Sopron	5145	204	2	1269
Hajdú-Bihar	7446	147	0	1180
Heves	1741	2	3	174
Jász-Nagykun-Szolnok	5017	4	2	855
Komárom-Esztergom	1166	182	0	230
Nógrád	884	8	0	246
Pest	4266	494	2	629
Somogy	2321	23	0	692
Szabolcs-Szatmár-Bereg	3298	39	0	658
Tolna	2248	23	0	551
Vas	2301	6	0	699
Veszprém	3585	6	0	939
Zala	1754	4	0	541
Budapest	196	47	0	17
<i>Foreign countries</i>	4497*	0	0	0
Altogther	69440	1971	15	13522

Notes: Bio-Rad TeSeE test was used. In case of a cattle originated from Slovakia the result was positive in September. All other results were negative.

Table 9

BSE monitoring investigation in cattle during 2008 in Hungary by counties of origin

County according to the place of origin of the animal	Normal slaughtered animals over 30 months	Emergency slaughtered animals over 24 months	Animals with clinical signs at AM over 24 months	Dead animals over 24 months	Total
Baranya	2727	20	0	739	3486
Bács-Kiskun	4712	57	0	717	5486
Békés	5220	22	0	1162	6404
Borsod-Abaúj-Zemplén	3900	55	1	880	4836
Csongrád	3723	24	0	562	4309
Fejér	4240	344	2	971	5557
Győr-Moson-Sopron	5401	46	0	1342	6789
Hajdú-Bihar	7279	170	1	1144	8594
Heves	1544	2	0	173	1719
Jász-Nagykun-Szolnok	5272	3	3	695	5973
Komárom-Esztergom	1213	77	0	212	1502
Nógrád	878	3	0	251	1132
Pest	4782	474	0	707	5963
Somogy	2596	25	0	667	3288
Szabolcs-Szatmár-Bereg	3325	47	0	737	4109
Tolna	2105	14	1	520	2640
Vas	2482	6	0	691	3179
Veszprém	3791	9	0	995	4795
Zala	1924	2	0	432	2358
Budapest	134	32	0	25	191
<i>Foreign countries</i>	3583	3	0	3	3589
Altogether	70831	1435	8	13625	85899

Notes: Bio-Rad TeSeE tests were used. All results were negative.

Table 10
BSE monitoring investigation in cattle during 2009 in Hungary by counties of origin

County according to the place of origin of the animal	Normal slaughtered animals over 30 months	Emergency slaughtered animals over 24 months	Animals with clinical signs at AM over 24 months	Dead animals over 24 months	Total
Baranya	2942	20	0	785	3747
Bács-Kiskun	5950	36	0	573	6559
Békés	5109	8	0	1161	6278
Borsod-Abaúj-Zemplén	3717	72	8	803	4600
Csongrád	3648	35	0	553	4236
Fejér	4671	203	2	828	5704
Győr-Moson-Sopron	5233	35	0	1145	6413
Hajdú-Bihar	8306	61	1	1084	9452
Heves	1348	0	1	145	1494
Jász-Nagykun-Szolnok	5379	4	0	643	6026
Komárom-Esztergom	1427	55	1	206	1689
Nógrád	1059	5	0	211	1275
Pest	5187	236	0	579	6002
Somogy	2785	18	0	484	3287
Szabolcs-Szatmár-Bereg	3582	26	3	662	4273
Tolna	2770	14	3	480	3267
Vas	2427	11	0	553	2991
Veszprém	3497	1	0	896	4394
Zala	1750	3	0	344	2097
Budapest	127	29	0	13	169
<i>Foreign countries</i>	4403	0	2	7	4412
Altogther	75317	872	21	12155	88365

Notes: Bio-Rad TeSeE tests were used. All results were negative.

Table 11
BSE monitoring investigation in cattle during 2010 in Hungary by counties of origin

County according to the place of origin of the animal	Normal slaughtered animals over 30 months	Emergency slaughtered animals over 24 months	Animals with clinical signs at AM over 24 months	Dead animals over 24 months	Total
Baranya	2644	37	0	803	3484
Bács-Kiskun	5394	20	0	556	5970
Békés	5325	18	0	1304	6647
Borsod-Abaúj-Zemplén	4035	72	4	870	4981
Csongrád	3512	54	1	652	4219
Fejér	4365	175	1	920	5461
Győr-Moson-Sopron	4757	19	0	1225	6001
Hajdú-Bihar	8130	2	4	1223	9359
Heves	1492	10	3	186	1691
Jász-Nagykun-Szolnok	4951	0	0	697	5648
Komárom-Esztergom	1648	65	0	209	1922
Nógrád	981	9	0	243	1233
Pest	5295	174	2	705	6176
Somogy	2822	34	8	413	3277
Szabolcs-Szatmár-Bereg	3825	15	0	776	4616
Tolna	2073	24	2	465	2564
Vas	2350	8	0	663	3021
Veszprém	3633	0	0	867	4500
Zala	1687	2	0	297	1986
Budapest	142	8	0	21	171
<i>Foreign countries</i>	2747	0	0	2	2749
Altogther	71808	746	25	13097	85676

Notes: Bio-Rad TeSeE tests were used. All results were negative.

Table 12
BSE monitoring investigation in cattle during 2011 in Hungary by counties of origin

County according to the place of origin of the animal	Normal slaughtered animals over 30 and 72months*		Emergency slaughtered animals over 24 months	Animals with clinical signs at AM over 24 months	Dead animals over 24 months	Total
	Until 30 June	As of 1 July				
Baranya	1409	490	68	0	691	3484
Bács-Kiskun	1747	608	49	4	829	5970
Békés	64	22	4	0	1185	6647
Borsod-Abaúj-Zemplén	2410	940	14	0	606	4981
Csongrád	2581	904	11	4	429	4219
Fejér	1481	550	75	1	838	5461
Győr-Moson-Sopron	2013	644	148	2	1102	6001
Hajdú-Bihar	2175	763	12	5	1082	9359
Heves	3755	1356	4	4	153	1691
Jász-Nagykun-Szolnok	636	238	13	68	640	5648
Komárom-Esztergom	1940	724	7	0	143	1922
Nógrád	637	201	19	0	286	1233
Pest	398	227	8	0	634	6176
Somogy	2186	878	152	2	387	3277
Szabolcs-Szatmár-Bereg	1391	328	19	0	808	4616
Tolna	1621	458	18	2	390	2564
Vas	770	342	25	0	618	3021
Veszprém	1123	456	4	0	825	4500
Zala	1933	574	4	0	312	1986
Budapest	914	264	2	0	11	171
<i>Foreign countries</i>	2103	2746**	1	0	7	2749
Altogether	33287	11915	657	92	11976	85676

Notes: Bio-Rad TeSeE, Roboscreen Betaprin BSE EIA, IDEXX-HerdChek BSE tests were used. All results were negative. *As of 1 July the age limit is 72 months, excluding Romania, Bulgaria and third countries **2746 investigations include 1798 cattle originating from Romania over 30 months

Table 13
Healthy slaughtered ovine animals over 18 months of age tested by rapid test during 2005 in Hungary.

Month	Number of samples	Positive	Negative	Pending
January	95	0	95	0
February	151	0	151	0
March	254	0	254	0
April	139	0	139	0
May	215	0	215	0
June	298	0	298	0
July	243	0	243	0
August	273	0	273	0
September	415	0	415	0
October	351	0	351	0
November	336	0	336	0
December	343	0	343	0
Total	3113	0	3113	0

Over the above mentioned investigations in the frame of the TSE monitoring the following animals were also tested by rapid test with negative results:

- 10 healthy slaughtered sheep under 18 months of age
- 10 healthy slaughtered sheep where the age of the animal could not be found out on the basis of the document accompanying the sample

Table 14

Healthy slaughtered ovine animals over 18 months of age tested by rapid test during 2006 in Hungary.

Month	Number of samples	Positive	Negative	Pending
January	191	0	191	0
February	292	0	292	0
March	382	0	382	0
April	816	0	816	0
May	633	0	633	0
June	637	1	636	0
July	592	1	591	0
August	776	0	776	0
September	603	1	602	0
October	423	0	423	0
November	290	0	290	0
December	270	0	270	0
Total	5905	3	5902	0

One positive result was found in June in one sheep originated from Jász-Nagykun county

One positive result was found in July in one sheep originated from Hajdu-Bihar county

One positive result was found in September in a sheep originated from Hajdu-Bihar county, confirmed in October

Table 15
Healthy slaughtered ovine animals over 18 months of age tested by rapid test during 2007 in Hungary

Month	Number of samples	Positive	Negative	Pending
January	223	0	223	0
February	259	0	259	0
March	441	1	440	0
April	750	0	750	0
May	427	1	426	0
June	378	0	378	0
July	509	0	509	0
August	392	0	392	0
September	394	0	394	0
October	248	1	247	0
November	217	0	217	0
December	235	0	235	0
Total	4473	3	4470	0

Positive cases:

In case of an 84 month-old sheep originated from Bács-Kiskun county the result was positive in March.

In case of a 72 month-old sheep originated from Bács-Kiskun county the result was positive in May.

In case of a 24 month-old sheep originated from Bács-Kiskun county the result was positive in October. All other results were negative.

Over the above mentioned investigations in the frame of the TSE monitoring the following animals were also tested by rapid test with negative results:

- 12 healthy slaughtered sheep under 18 months of age
- 75 healthy slaughtered sheep where the age of the animal could not be found out on the basis of the document accompanying the sample

Table 16
Healthy slaughtered ovine animals over 18 months of age tested by rapid test during 2008 in Hungary

Month	Number of samples	Positive	Negative	Pending
January	193	0	193	0
February	279	0	279	0
March	1163	1	1162	0
April	592	0	592	0
May	330	0	330	0
June	339	0	339	0
July	319	0	319	0
August	337	0	337	0
September	434	1	433	0
October	367	0	367	0
November	355	0	355	0
December	323	0	323	0
Total	5031	2	5029	0

Positive cases:

- In case of a 156 month-old sheep originated from Hajdú-Bihar county the result was positive in March.
- In case of a 72 month-old sheep originated from Hajdú-Bihar county the result was positive in September.

Over the above mentioned investigations in the frame of the TSE monitoring the following animals were also tested by rapid test with negative results:

- 5 healthy slaughtered sheep under 18 months of age
- 24 healthy slaughtered sheep where the age of the animal could not be found out on the basis of the document accompanying the sample

Table 17
Healthy slaughtered ovine animals over 18 months of age tested by rapid test during 2009 in Hungary

Month	Number of samples	Positive	Negative	Pending
January	204	0	204	0
February	178	1	177	0
March	307	0	307	0
April	543	1	542	0
May	298	3	295	0
June	393	0	393	0
July	279	0	279	0
August	338	1	337	0
September	534	1	533	0
October	343	0	343	0
November	302	1	301	0
December	352	0	352	0
Total	4071	8	4063	0

Positive cases:

- In case of a 49 month-old sheep originated from Hajdú-Bihar county the result was positive in February.
- In case of a 98 month-old sheep originated from Borsod-Abaúj-Zemplén county the result was positive in April.
- In case of a 52 month-old sheep originated from Szabolcs-Szatmár-Bereg county the result was positive in May.
- In case of a 52 month-old sheep originated from Nógrád county the result was positive in May.
- In case of a 59 month-old sheep originated from Borsod-Abaúj-Zemplén county the result was positive in May.
- In case of a 115 month-old sheep originated from Hajdú-Bihar county the result was positive in August.
- In case of a 41 month-old sheep originated from Hajdú-Bihar county the result was positive in September.
- In case of a 70 month-old sheep originated from Hajdú-Bihar county the result was positive in November.

Over the above mentioned investigations in the frame of the TSE monitoring the following animals were also tested by rapid test with negative results:

- **1** healthy slaughtered sheep under 18 months of age
- **29** healthy slaughtered sheep where the age of the animal could not be found out on the basis of the document accompanying the sample

Table 18
Healthy slaughtered ovine animals over 18 months of age tested by rapid test during 2010 in Hungary

Month	Number of samples	Positive	Negative	Pending
January	226	0	226	0
February	245	0	245	0
March	331	0	331	0
April	434	0	434	0
May	283	0	283	0
June	306	0	306	0
July	228	0	228	0
August	308	2	306	0
September	407	0	407	0
October	343	1	342	0
November	386	0	386	0
December	388	0	388	0
Total	3885	3	3882	0

Over the above mentioned investigations in the frame of the TSE monitoring the following animals were also tested by rapid test with negative results:

- 2 healthy slaughtered sheep under 18 months of age
- 33 healthy slaughtered sheep where the age of the animal could not be found out on the basis of the document accompanying the sample

Table 19
Healthy slaughtered ovine animals over 18 months of age tested by rapid test during 2011 in Hungary

Month	Number of samples	Positive	Negative	Pending
January	261	0	261	0
February	397	1	396	0
March	442	0	442	0
April	807	0	807	0
May	303	0	303	0
June	246	0	246	0
July	244	2	242	0
August	397	1	396	0
September	440	0	440	0
October	369	0	369	0
November	289	1*	289	0
December	350	1	349	0
Total	4545	6	4540	0

* Sample was tested in Poland.

Table 20**Emergency slaughtered ovine animals over 18 months of age tested by rapid test during 2005 in Hungary**

Month	Number of samples	Positive	Negative	Pending
January	37	0	37	0
February	22	0	22	0
March	36	0	36	0
April	22	0	22	0
May	21	0	21	0
June	26	0	26	0
July	29	0	29	0
August	33	0	33	0
September	24	0	24	0
October	36	0	36	0
November	38	0	38	0
December	30	0	30	0
Total	354	0	354	0

Over the above mentioned investigations in the frame of the TSE monitoring the following animals were also tested by rapid test with negative results:

- 5 emergency slaughtered sheep under 18 months of age
- 7 emergency slaughtered where the age of the animal could not be found out on the basis of the document accompanying the sample

Table 21**Emergency slaughtered ovine animals over 18 months of age tested by rapid test during 2006 in Hungary**

Month	Number of samples	Positive	Negative	Pending
January	29	0	29	0
February	45	0	45	0
March	66	0	66	0
April	36	0	36	0
May	24	0	24	0
June	20	0	20	0
July	37	0	37	0
August	47	0	47	0
September	29	0	29	0
October	24	0	24	0
November	51	0	51	0
December	69	0	69	0
Total	477	0	477	0

Table 22
Emergency slaughtered ovine animals over 18 months of age tested by rapid test during 2007 in Hungary

Month	Number of samples	Positive	Negative	Pending
January	44	0	44	0
February	72	0	72	0
March	68	0	68	0
April	73	0	73	0
May	53	0	53	0
June	36	0	36	0
July	25	0	25	0
August	51	0	51	0
September	84	0	84	0
October	78	0	78	0
November	108	0	108	0
December	72	0	72	0
Total	764	0	764	0

Over the above mentioned investigations in the frame of the TSE monitoring the following animals were also tested by rapid test with negative results:

- 2 emergency slaughtered sheep under 18 months of age
- 4 emergency slaughtered where the age of the animal could not be found out on the basis of the document accompanying the sample

Table 23
Emergency slaughtered ovine animals over 18 months of age tested by rapid test during 2008 in Hungary

Month	Number of samples	Positive	Negative	Pending
January	69	0	69	0
February	72	0	72	0
March	66	0	66	0
April	77	0	77	0
May	46	0	46	0
June	64	0	64	0
July	80	0	80	0
August	51	0	51	0
September	83	0	83	0
October	102	0	102	0
November	75	0	75	0
December	87	0	87	0
Total	872	0	872	0

Over the above mentioned investigations in the frame of the TSE monitoring the following animals were also tested by rapid test with negative results:

- 1 emergency slaughtered sheep under 18 months of age
- 1 emergency slaughtered sheep where the age of the animal could not be found out on the basis of the document accompanying the sample

Table 24
Emergency slaughtered ovine animals over 18 months of age tested by rapid test during 2009 in Hungary

Month	Number of samples	Positive	Negative	Pending
January	43	0	43	0
February	54	0	54	0
March	106	0	106	0
April	103	0	103	0
May	85	0	85	0
June	87	0	87	0
July	71	0	71	0
August	59	0	59	0
September	94	0	94	0
October	83	0	83	0
November	64	0	64	0
December	56	0	56	0
Total	905	0	905	0

Over the above mentioned investigations in the frame of the TSE monitoring the following animals were also tested by rapid test with negative results:

- 2 emergency slaughtered sheep under 18 months of age
- 1 emergency slaughtered sheep where the age of the animal could not be found out on the basis of the document accompanying the sample

Table 25
Emergency slaughtered ovine animals over 18 months of age tested by rapid test during 2010 in Hungary

Month	Number of samples	Positive	Negative	Pending
January	61	0	61	0
February	75	0	75	0
March	83	0	83	0
April	78	0	78	0
May	96	0	96	0
June	72	0	72	0
July	79	0	79	0
August	85	0	85	0
September	163	0	163	0
October	152	0	152	0
November	160	0	160	0
December	79	0	79	0
Total	1183	0	1183	0

Over the above mentioned investigations in the frame of the TSE monitoring the following animals were also tested by rapid test with negative results:

- **0** emergency slaughtered sheep under 18 months of age
- **1** emergency slaughtered sheep where the age of the animal could not be found out on the basis of the document accompanying the sample

Table 26
Emergency slaughtered ovine animals over 18 months of age tested by rapid test during 2011 in Hungary

Month	Number of samples	Positive	Negative	Pending
January	98	0	98	0
February	102	0	102	0
March	72	0	72	0
April	173	0	173	0
May	97	0	97	0
June	94	0	94	0
July	68	0	68	0
August	80	0	80	0
September	64	0	64	0
October	51	0	51	0
November	56	0	56	0
December	89	1	88	0
Total	1044	1	1043	0

Table 27
Dead ovine animals over 18 months of age tested by rapid test during 2005 in Hungary

Month	Number of samples	Positive	Negative	Pending
January	361	0	361	0
February	427	0	427	0
March	465	0	465	0
April	362	0	362	0
May	433	0	433	0
June	337	0	337	0
July	217	0	217	0
August	459	0	459	0
September	528	0	528	0
October	597	0	597	0
November	619	0	619	0
December	678	0	678	0
Total	5483	0	5483	0

Over the above mentioned investigations in the frame of the TSE monitoring the following animals were also tested by rapid test with negative results:

- 6 dead sheep under 18 months of age
- 52 dead sheep where the age of the animal could not be found out on the basis of the document accompanying the sample

Table 28
Dead ovine animals over 18 months of age tested by rapid test during 2006 in Hungary.

Month	Number of samples	Positive	Negative	Pending
January	562	0	562	0
February	686	0	686	0
March	636	0	636	0
April	538	0	538	0
May	487	0	487	0
June	275	2	273	0
July	276	0	276	0
August	369	0	369	0
September	481	0	481	0
October	319	1	318	0
November	436	0	436	0
December	550	1	549	0
Total	5615	4	5611	0

Two positive results were found in June in two sheep originated from Fejér county.

One positive results was found in October in one sheep from Hajdu-Bihar county, confirmed in November

One positive results was found in December in one sheep from Bács-Kiskun county, confirmed in January 2007

Table 29
Dead ovine animals over 18 months of age tested by rapid test during 2007 in Hungary

Month	Number of samples	Positive	Negative	Pending
January	514	0	514	0
February	594	0	594	0
March	804	0	804	0
April	749	1	748	0
May	594	0	594	0
June	500	0	500	0
July	337	0	337	0
August	387	0	387	0
September	502	1	501	0
October	473	0	473	0
November	573	1	572	0
December	655	0	655	0
Total	6682	3	6679	0

Positive cases:

A 96 month-old dead ovine animal originated from Bács-Kiskun county in December 2006. (The confirmation test was carried out in January 2007.)

A 39 month-old dead ovine animal originated from Veszprém county in April.

A 53 month-old dead ovine animal originated from Pest county in September.

A 44 month-old dead ovine animal originated from the TSE infected flock in Veszprém county in November.

Over the above mentioned investigations in the frame of the TSE monitoring the following animals were also tested by rapid test with negative results:

- 13 dead sheep under 18 months of age
- 139 dead sheep where the age of the animal could not be found out on the basis of the document accompanying the sample

Table 30
Dead ovine animals over 18 months of age tested by rapid test during 2008 in Hungary

Month	Number of samples	Positive	Negative	Pending
January	803	1	802	0
February	832	1	831	0
March	865	0	865	0
April	728	0	728	0
May	404	1	403	0
June	376	0	376	0
July	469	0	469	0
August	332	0	332	0
September	450	1	449	0
October	564	1	563	0
November	644	1	643	0
December	667	0	667	0
Total	7134	6	7128	0

Positive cases:

- A 62 month-old dead ovine animal originated from Jász-Nagykun-Szolnok county in January.
- A 156 month-old dead ovine animal originated from Pest county in February.
- A 114 month-old dead ovine animal originated from Pest county in May.
- A 67 month-old dead ovine animal originated from Komárom-Esztergom county in September.
- A 50 month-old dead ovine animal originated from Békés county in October.
- A 132 month-old dead ovine animal originated from Bács-Kiskun county in November.

Over the above mentioned investigations in the frame of the TSE monitoring the following animals were also tested by rapid test with negative results:

- **9** dead sheep under 18 months of age
- **15** dead sheep where the age of the animal could not be found out on the basis of the document accompanying the sample

Table 31
Dead ovine animals over 18 months of age tested by rapid test during 2009 in Hungary

Month	Number of samples	Positive	Negative	Pending
January	766	1	765	0
February	787	1	786	0
March	827	1	826	0
April	831	1	830	0
May	393	0	393	0
June	469	0	469	0
July	442	0	442	0
August	300	0	300	0
September	358	0	358	0
October	389	1	388	0
November	487	1	486	0
December	671	0	671	0
Total	6720	6	6714	0

Positive cases:

- A 39 month-old dead ovine animal originated from Fejér county in January.
- A 65 month-old dead ovine animal originated from Fejér county in February.
- A 117 month-old dead ovine animal originated from Heves county in March.
- A 69 month-old dead ovine animal originated from Fejér county in April.
- A 160 month-old dead ovine animal originated from Heves county in October.
- A 49 month-old dead ovine animal originated from Bács-Kiskun county in November.

Over the above mentioned investigations in the frame of the TSE monitoring the following animals were also tested by rapid test with negative results:

- 4 dead sheep under 18 months of age
- 8 dead sheep where the age of the animal could not be found out on the basis of the document accompanying the sample

Table 32
Dead ovine animals over 18 months of age tested by rapid test during 2010 in Hungary

Month	Number of samples	Positive	Negative	Pending
January	554	1	553	0
February	717	0	717	0
March	770	0	770	0
April	702	1	701	0
May	564	0	564	0
June	554	0	554	0
July	317	1	316	0
August	463	1	462	0
September	595	0	595	0
October	524	0	524	0
November	629	0	629	0
December	850	0	850	0
Total	7239	4	7235	0

Over the above mentioned investigations in the frame of the TSE monitoring the following animals were also tested by rapid test with negative results:

- 10 dead sheep under 18 months of age
- 42 dead sheep where the age of the animal could not be found out on the basis of the document accompanying the sample

Table 33
Dead ovine animals over 18 months of age tested by rapid test during 2011 in Hungary

Month	Number of samples	Positive	Negative	Pending
January	1008	0	1008	0
February	1073	0	1073	0
March	1400	1	1399	0
April	801	0	801	0
May	554	0	554	0
June	440	0	440	0
July	374	0	374	0
August	329	0	329	0
September	484	0	484	0
October	395	0	395	0
November	569	0	569	0
December	688	2	686	0
Total	8115	3	8112	0

Table 34
Healthy slaughtered caprine animals over 18 months of age tested by rapid test during 2005 in Hungary.

Month	Number of samples	Positive	Negative	Pending
January	13	0	13	0
February	4	0	4	0
March	1	0	1	0
April	1	0	1	0
May	0	0	0	0
June	29	0	29	0
July	1	0	1	0
August	0	0	0	0
September	0	0	0	0
October	0	0	0	0
November	1	0	1	0
December	3	0	3	0
Total	53	0	53	0

Over the above mentioned investigations in the frame of the TSE monitoring the following animals were also tested by rapid test with negative results:
- 1 healthy slaughtered goat under 18 months of age

Table 35

Healthy slaughtered caprine animals over 18 months of age tested by rapid test during 2006 in Hungary

Month	Number of samples	Positive	Negative	Pending
January	1	0	1	0
February	1	0	1	0
March	0	0	0	0
April	2	0	2	0
May	17	0	17	0
June	11	0	11	0
July	3	0	3	0
August	0	0	0	0
September	0	0	0	0
October	7	0	7	0
November	2	0	2	0
December	1	0	1	0
Total	45	0	45	0

Table 36
Healthy slaughtered caprine animals over 18 months of age tested by rapid test during 2007 in Hungary

Month	Number of samples	Positive	Negative	Pending
January	1	0	1	0
February	11	0	11	0
March	11	0	11	0
April	4	0	4	0
May	5	0	5	0
June	6	0	6	0
July	64	0	64	0
August	12	0	12	0
September	0	0	0	0
October	0	0	0	0
November	1	0	1	0
December	4	0	4	0
Total	119	0	119	0

Over the above mentioned investigations in the frame of the TSE monitoring the following animals were also tested by rapid test with negative results:
- 2 healthy slaughtered goats under 18 months of age

Table 37

Healthy slaughtered caprine animals over 18 months of age tested by rapid test during 2008 in Hungary

Month	Number of samples	Positive	Negative	Pending
January	4	0	4	0
February	2	0	2	0
March	12	0	12	0
April	1	0	1	0
May	3	0	3	0
June	2	0	2	0
July	0	0	0	0
August	2	0	2	0
September	0	0	0	0
October	9	0	9	0
November	2	0	2	0
December	5	0	5	0
Total	42	0	42	0

Table 38**Healthy slaughtered caprine animals over 18 months of age tested by rapid test during 2009 in Hungary**

Month	Number of samples	Positive	Negative	Pending
January	18	0	18	0
February	3	0	3	0
March	6	0	6	0
April	5	0	5	0
May	7	0	7	0
June	3	0	3	0
July	2	0	2	0
August	1	0	1	0
September	7	0	7	0
October	1	0	1	0
November	1	0	1	0
December	22	0	22	0
Total	76	0	76	0

Table 39

Healthy slaughtered caprine animals over 18 months of age tested by rapid test during 2010 in Hungary

Month	Number of samples	Positive	Negative	Pending
January	0	0	0	0
February	2	0	2	0
March	2	0	2	0
April	2	0	2	0
May	5	0	5	0
June	2	0	2	0
July	2	0	2	0
August	10	0	10	0
September	5	0	5	0
October	9	0	9	0
November	9	0	9	0
December	3	0	3	0
Total	51	0	51	0

Table 40
Healthy slaughtered caprine animals over 18 months of age tested by rapid test during 2011 in Hungary

Month	Number of samples	Positive	Negative	Pending
January	2	0	2	0
February	6	0	6	0
March	5	0	5	0
April	7	0	7	0
May	4	0	4	0
June	18	0	18	0
July	2	0	2	0
August	0	0	0	0
September	2	0	2	0
October	13	0	13	0
November	8	0	8	0
December	10	0	10	0
Total	77	0	77	0

Table 41

Emergency slaughtered caprine animals over 18 months of age tested by rapid test during 2005 in Hungary

Month	Number of samples	Positive	Negative	Pending
January	0	0	0	0
February	2	0	2	0
March	1	0	1	0
April	1	0	1	0
May	0	0	0	0
June	0	0	0	0
July	2	0	2	0
August	1	0	1	0
September	4	0	4	0
October	2	0	2	0
November	3	0	3	0
December	5	0	5	0
Total	21	0	21	0

Table 42

Emergency slaughtered caprine animals over 18 months of age tested by rapid test during 2006 in Hungary.

Month	Number of samples	Positive	Negative	Pending
January	1	0	1	0
February	7	0	7	0
March	8	0	8	0
April	0	0	0	0
May	1	0	1	0
June	0	0	0	0
July	0	0	0	0
August	0	0	0	0
September	1	0	1	0
October	5	0	5	0
November	0	0	0	0
December	3	0	3	0
Total	26	0	26	0

Table 43

Emergency slaughtered caprine animals over 18 months of age tested by rapid test during 2007 in Hungary

Month	Number of samples	Positive	Negative	Pending
January	3	0	3	0
February	1	0	1	0
March	5	0	5	0
April	0	0	0	0
May	0	0	0	0
June	3	0	3	0
July	0	0	0	0
August	3	0	3	0
September	6	0	6	0
October	0	0	0	0
November	1	0	1	0
December	3	0	3	0
Total	25	0	25	0

Table 44
Emergency slaughtered caprine animals over 18 months of age tested by rapid test during 2008 in Hungary

Month	Number of samples	Positive	Negative	Pending
January	3	0	3	0
February	3	0	3	0
March	1	0	1	0
April	2	0	2	0
May	0	0	0	0
June	2	0	2	0
July	2	0	2	0
August	1	0	1	0
September	2	0	2	0
October	2	0	2	0
November	1	0	1	0
December	1	0	1	0
Total	20	0	20	0

Over the above mentioned investigations in the frame of the TSE monitoring the following animals were also tested by rapid test with negative results:

- 1 emergency slaughtered caprine animal where the age of the animal could not be found out on the basis of the document accompanying the sample

Table 45

Emergency slaughtered caprine animals over 18 months of age tested by rapid test during 2009 in Hungary

Month	Number of samples	Positive	Negative	Pending
January	2	0	2	0
February	2	0	2	0
March	2	0	2	0
April	2	0	2	0
May	4	0	4	0
June	1	0	1	0
July	1	0	1	0
August	0	0	0	0
September	0	0	0	0
October	1	0	1	0
November	3	0	3	0
December	1	0	1	0
Total	19	0	19	0

Table 46

Emergency slaughtered caprine animals over 18 months of age tested by rapid test during 2010 in Hungary

Month	Number of samples	Positive	Negative	Pending
January	2	0	2	0
February	1	0	1	0
March	1	0	1	0
April	0	0	0	0
May	2	0	2	0
June	2	0	2	0
July	0	0	0	0
August	0	0	0	0
September	1	0	1	0
October	1	0	1	0
November	5	0	5	0
December	1	0	1	0
Total	16	0	16	0

Table 47

Emergency slaughtered caprine animals over 18 months of age tested by rapid test during 2011 in Hungary

Month	Number of samples	Positive	Negative	Pending
January	0	0	0	0
February	2	0	2	0
March	4	0	4	0
April	2	0	2	0
May	0	0	0	0
June	5	0	5	0
July	6	0	6	0
August	1	0	1	0
September	1	0	1	0
October	0	0	0	0
November	1	0	1	0
December	3	0	3	0
Total	25	0	25	0

Table 48
Dead caprine animals over 18 months of age tested by rapid test during 2005 in Hungary

Month	Number of samples	Positive	Negative	Pending
January	21	0	21	0
February	13	0	13	0
March	28	0	28	0
April	18	0	18	0
May	19	0	19	0
June	9	0	9	0
July	4	0	4	0
August	14	0	14	0
September	16	0	16	0
October	7	0	7	0
November	13	0	13	0
December	11	0	11	0
Total	173	0	173	0

Over the above mentioned investigations in the frame of the TSE monitoring the following animals were also tested by rapid test with negative results:

- 1 dead goat under 18 months of age
- 3 dead goats where the age of the animal could not be found out on the basis of the document accompanying the sample

Table 49
Dead caprine animals over 18 months of age tested by rapid test during 2006 in Hungary

Month	Number of samples	Positive	Negative	Pending
January	12	0	12	0
February	13	0	13	0
March	21	0	21	0
April	10	0	10	0
May	16	0	16	0
June	7	0	7	0
July	2	0	2	0
August	2	0	2	0
September	5	0	5	0
October	4	0	4	0
November	5	0	5	0
December	23	0	23	0
Total	120	0	120	0

Table 50
Dead caprine animals over 18 months of age tested by rapid test during 2007 in Hungary

Month	Number of samples	Positive	Negative	Pending
January	14	0	14	0
February	26	0	26	0
March	47	0	47	0
April	27	0	27	0
May	10	0	10	0
June	44	0	44	0
July	7	0	7	0
August	9	0	9	0
September	15	0	15	0
October	14	0	14	0
November	27	0	27	0
December	18	0	18	0
Total	258	0	258	0

Over the above mentioned investigations in the frame of the TSE monitoring the following animals were also tested by rapid test with negative results:

- 1 dead goat where the age of the animal could not be found out on the basis of the document accompanying the sample

Table 51
Dead caprine animals over 18 months of age tested by rapid test during 2008 in Hungary

Month	Number of samples	Positive	Negative	Pending
January	20	0	20	0
February	27	0	27	0
March	27	0	27	0
April	20	0	20	0
May	17	0	17	0
June	7	0	7	0
July	6	0	6	0
August	9	0	9	0
September	10	0	10	0
October	25	0	25	0
November	17	0	17	0
December	31	0	31	0
Total	216	0	216	0

Table 52
Dead caprine animals over 18 months of age tested by rapid test during 2009 in Hungary

Month	Number of samples	Positive	Negative	Pending
January	29	0	29	0
February	21	0	21	0
March	32	0	32	0
April	17	0	17	0
May	6	0	6	0
June	11	0	11	0
July	10	0	10	0
August	15	0	15	0
September	18	0	18	0
October	11	0	11	0
November	14	0	14	0
December	11	0	11	0
Total	195	0	195	0

Table 53
Dead caprine animals over 18 months of age tested by rapid test during 2010 in Hungary

Month	Number of samples	Positive	Negative	Pending
January	15	0	15	0
February	28	0	28	0
March	32	0	32	0
April	10	0	10	0
May	8	0	8	0
June	13	0	13	0
July	6	0	6	0
August	5	0	5	0
September	29	0	29	0
October	15	0	15	0
November	11	0	11	0
December	14	0	14	0
Total	186	0	186	0

Over the above mentioned investigations in the frame of the TSE monitoring the following animals were also tested by rapid test with negative results:

- 1 dead goat under 18 months of age
- 9 dead goat where the age of the animal could not be found out on the basis of the document accompanying the sample

Table 54
Dead caprine animals over 18 months of age tested by rapid test during 2011 in Hungary

Month	Number of samples	Positive	Negative	Pending
January	6	0	6	0
February	27	0	27	0
March	38	0	38	0
April	5	0	5	0
May	5	0	5	0
June	11	0	11	0
July	7	0	7	0
August	15	0	15	0
September	13	0	13	0
October	5	0	5	0
November	8	0	8	0
December	2	0	2	0
Total	142	0	142	0

Table 55
The genotypes of sheep sampled in accordance with chapter A, Part II, points 8.2 during 2006 in Hungary

NSP classification	Breed	HM	GMM	ML	GBH	SUF	TEX	ILE	CHA	AWA	DCI	LAC	BMS	BTE	CIG	CIK	RAC	TR	Altogether	
	Genotypes																		genotypes	NSP
NSP1	ARR/ARR	77	30	2	5	6	4	31	0	0	0	16	0	0	0	0	7	4	182	182
NSP2	ARR/ARQ	57	30	23	12	19	5	14	5	0	3	15	0	3	6	0	12	5	209	272
	ARR/ARH	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0	8	0	13	
	ARR/AHQ	7	20	5	2	4	0	0	0	0	0	0	0	1	0	0	11	0	50	
	VRR/ARQ	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
NSP3	ARQ/ARQ	11	10	6	3	7	2	3	2	2	0	0	0	2	0	0	8	4	60	60
NSP3 (others)	AHQ/AHQ	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	10	0	12	72
	ARH/ARH	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	3	
	ARH/ARQ	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	0	5	
	AHQ/ARH	0	0	3	0	0	3	0	0	0	0	0	0	0	0	0	8	0	14	
	AHQ/ARQ	4	22	0	0	0	2	0	0	0	0	3	0	0	0	0	7	0	38	
NSP4	ARR/VRQ	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0	5	5
NSP5	ARQ/VRQ	0	0	0	0	0	0	0	4	0	1	0	0	0	0	0	2	0	7	9
	ARH/VRQ	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	
	AHQ/VRQ	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	
	VRQ/VRQ	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Total		156	114	39	22	41	16	53	11	2	4	34	0	6	6	0	83	13	600	600

Table 56

The genotypes of sheep sampled in accordance with chapter A, Part II, points 8.2 during 2007 in Hungary

		Number of samples															Althogether	
NSP classi- fication	Breed	Hun- garian	German Mutton	Merino Land- schaf	German Black Headed	Suffolk	Texel	Ile de France	Charollais	Dairy Tsigai	Lacaune	British Milk- sheep	Bábolna Tetra	Tsigai	Hungarian Racka	Trans- sylvanian Racka	Genotypes	NSP
	Genotypes	Merino	Merino															
NSP1	ARR/ARR	24	33	2	28	16	6	32	0	0	18	1	4	5	5	3	177	177
NSP2	ARR/ARQ	64	38	8	15	24	6	13	3	1	19	2	1	14	6	7	221	257
	ARR/ARH	3	0	0	0	0	0	0	0	1	0	0	0	1	2	0	7	
	ARR/AHQ	5	9	0	0	2	0	0	0	0	2	2	0	0	8	1	29	
	VRR/ARQ	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
NSP3	ARQ/ARQ	20	9	5	5	8	2	2	3	5	1	2	0	7	4	6	79	79
NSP3 (others)	AHQ/AHQ	0	0	1	0	0	0	0	0	0	0	5	1	0	5	0	12	61
	ARH/ARH	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	ARH/ARQ	0	1	0	0	0	2	0	0	3	0	0	0	0	4	2	12	
	AHQ/ARH	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2	
	AHQ/ARQ	3	9	4	0	0	1	0	0	0	0	8	1	1	7	1	35	
NSP4	ARR/VRQ	0	0	0	2	0	2	3	4	0	0	0	1	1	0	0	13	13
NSP5	ARQ/VRQ	1	1	0	0	0	1	0	0	0	0	0	0	1	4	0	8	13
	ARH/VRQ	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	
	AHQ/VRQ	0	0	0	0	0	0	0	0	0	0	0	1	0	2	0	3	
	VRQ/VRQ	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	
Total		120	100	20	50	50	20	50	10	10	40	20	10	30	50	20	600	600

Table 57

The genotypes of sheep sampled in accordance with chapter A, Part II, points 8.2 during 2008 in Hungary

		Number of samples															Altogether	
NSP classification	Breed	Hun-garian	German Mutton	Merino Land-schaf	German Black Headed	Suffolk	Texel	Ile de France	Charollais	Dairy Tsigai	Lacaune	British Milk-sheep	Bábolna Tetra	Tsigai	Hungarian Racka	Trans-sylvanian Racka	Genotypes	NSP
	Genotypes	Merino	Merino															
NSP1	ARR/ARR	35	36	2	36	14	6	18	1	1	9	2	5	8	9	0	182	182
NSP2	ARR/ARQ	49	32	14	11	25	9	23	3	7	23	2	2	14	14	6	234	289
	ARR/ARH	1	0	0	0	1	1	2	0	1	0	0	1	0	2	0	9	
	ARR/AHQ	8	11	1	0	4	0	2	0	0	4	12	0	0	4	0	46	
NSP3	ARQ/ARQ	23	8	2	3	4	2	3	4	1	4	0	0	6	5	8	73	73
NSP3 (others)	AHQ/AHQ	0	1	0	0	0	0	0	0	0	0	1	0	0	3	0	5	38
	ARH/ARH	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	ARH/ARQ	0	0	0	0	0	2	0	0	0	0	0	0	0	3	1	6	
	AHQ/ARH	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	AHQ/ARQ	2	10	1	0	2	0	0	0	0	0	3	1	1	5	2	27	
NSP4	ARR/VRQ	2	1	0	0	0	0	2	0	0	0	0	0	1	0	0	6	6
NSP5	ARQ/VRQ	0	1	0	0	0	0	0	2	0	0	0	1	0	2	3	9	12
	ARH/VRQ	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2	
	AHQ/VRQ	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	
	VRQ/VRQ	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Total		120	100	20	50	50	20	50	10	10	40	20	10	30	50	20	600	600

Table 58

The genotypes of sheep sampled in accordance with chapter A, Part II, points 8.2 during 2009 in Hungary

b	Breed Genotypes	<i>HM</i>	<i>GMM</i>	<i>ML</i>	<i>GBH</i>	<i>SUF</i>	<i>TEX</i>	<i>ILE</i>	<i>CHA</i>	<i>DCI</i>	<i>LAC</i>	<i>BMS</i>	<i>BTE</i>	<i>CIG</i>	<i>RAC</i>	<i>TR</i>	Altogether
NSP1	ARR/ARR	36	47	3	19	28	9	34	3	0	20	3	2	3	7		214
NSP2	ARR/ARQ	54	29	10	28	13	8	9	4	2	16	5	1	15	7	9	210
	ARR/ARH	0	1	0	0	1	1	0	0	0	0	0	0	0	3	0	6
	ARR/AHQ	5	10	1	0	2	0	1	1	0	1	5	0	1	5	1	33
NSP3	ARQ/ARQ	18	5	6	2	5	0	1	2	5	3	1	3	7	8	9	75
	AHQ/AHQ	0	3	0	0	0	0	0	0	0	0	3	0	0	2	0	8
	ARH/ARH	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
	ARH/ARQ	1	1	0	0	0	0	0	0	3	0	0	0	0	1	0	6
	AHQ/ARH	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	3
	AHQ/ARQ	4	4	0	1	1	0	0	0	0	0	3	3	2	8	0	26
NSP4	ARR/VRQ	0	0	0	0	0	2	5	0	0	0	0	0	0	1	0	8
NSP5	ARQ/VRQ	2	0	0	0	0	0	0	0	0	0	0	0	2	4	1	9
	ARH/VRQ	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	AHQ/VRQ	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	VRQ/VRQ	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1
Total		120	100	20	50	50	20	50	10	10	40	20	10	30	50	20	600

HM Hungarian Merino
 GMM German Mutton Merino
 ML Merino Landschaf
 GBH German Blackhead Mutton Sheep
 SUF Suffolk
 TEX Texel
 ILE Ile de france
 CHA Charollais
 LAC Lacaune
 AWA Awassi

BMS British Milksheep
 DCI Dairy Tsigai
 BTE Bábolna Tetra
 CIG Tsigai
 CIK Cikta
 RAC Hungarian Racka
 TR Transsylvanian Racka

Table 59

The genotypes of sheep sampled in accordance with chapter A, Part II, points 8.2 during 2010 in Hungary

NSP classification	Breed Genotypes	<i>HM</i>	<i>GMM</i>	<i>ML</i>	<i>GBH</i>	<i>SUF</i>	<i>TEX</i>	<i>ILE</i>	<i>CHA</i>	<i>DCI</i>	<i>LAC</i>	<i>BMS</i>	<i>CIG</i>	<i>RAC</i>	<i>TR</i>	Altogether
NSP1	ARR/ARR	34	40	10	33	30	11	32	3	2	22	5	5	18	3	248
NSP2	ARR/ARQ	52	32	9	15	16	5	14	6	4	16	3	8	15	9	204
	ARR/ARH	2	0	0	0	0	1	0	0	0	0	0	0	2	0	5
	ARR/AHQ	5	14	0	0	2	0	0	0	0	2	8	0	11	0	42
NSP3	ARQ/ARQ	18	6	1	1	2	2	0	1	3	0	0	6	8	5	53
	AHQ/AHQ	0	1	0	0	0	0	0	0	0	0	2	0	3	0	6
	ARH/ARH	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	ARH/ARQ	1	0	0	0	0	0	0	0	0	0	0	0	1	1	3
	AHQ/ARH	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2
	AHQ/ARQ	6	3	0	0	0	0	0	0	0	0	0	2	1	6	0
NSP4	ARR/VRQ	2	1	0	1	0	1	4	0	1	0	0	0	1	2	13
NSP5	ARQ/VRQ	0	3	0	0	0	0	0	0	0	0	0	0	3	0	6
	ARH/VRQ	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	AHQ/VRQ	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	VRQ/VRQ	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total		120	100	20	50	50	20	50	10	10	40	20	20	70	20	600

HM	Hungarian Merino	BMS	British Milkshoop
GMM	German Mutton Merino	DCI	Dairy Tsigai
ML	Merino Landschaf	BTE	Bábolna Tetra
GBH	German Blackhead Mutton Sheep	CIG	Tsigai
SUF	Suffolk	CIK	Cikta
TEX	Texel	RAC	Hungarian Racka
ILE	Ile de france	TR	Transsylvanian Racka
CHA	Charollais		
LAC	Lacaune		
AWA	Awassi		

Table 60

The genotypes of sheep sampled in accordance with chapter A, Part II, points 8.2 during 2011 in Hungary

NSP classification	Breed Genotypes	HM	GMM	ML	GBH	SUF	TEX	ILE	CHA	DCI	LAC	BMS	CIG	RAC	TR	Altogether
NSP1	ARR/ARR	38	49	7	32	34	5	42	9	2	33	0	3	13	5	272
NSP2	ARR/ARQ	58	30	9	11	20	4	13	9	1	13	2	9	15	4	198
	ARR/ARH	1	0	0	0	0	1	0	0	0	0	0	0	2	1	5
	ARR/AHQ	5	12	3	0	3	0	0	0	0	1	2	1	12	0	39
NSP3	ARQ/ARQ	14	4	1	1	0	0	1	0	1	2	0	7	13	0	44
	AHQ/AHQ	0	0	0	0	0	0	0	0	0	0	2	0	0	0	2
	ARH/ARH	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	ARH/ARQ	0	0	0	0	0	0	0	0	0	0	0	0	7	0	7
	AHQ/ARH	0	0	0	0	0	0	0	0	0	0	0	0	3	0	3
	AHQ/ARQ	3	4	0	0	3	0	0	0	0	0	1	3	0	5	0
NSP4	ARR/VRQ	1	0	0	0	0	0	4	1	0	0	0	0	0	0	6
NSP5	ARQ/VRQ	0	1	0	1	0	0	0	1	1	0	0	0	0	0	4
	ARH/VRQ	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	AHQ/VRQ	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1
	VRQ/VRQ	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total		120	100	20	45	60	10	60	20	5	50	10	20	70	10	600

HM	Hungarian Merino	BMS	British Milksheep
GMM	German Mutton Merino	DCI	Dairy Tsigai
ML	Merino Landschaf	BTE	Bábolna Tetra
GBH	German Blackhead Mutton Sheep	CIG	Tsigai
SUF	Suffolk	CIK	Cikta
TEX	Texel	RAC	Hungarian Racka
ILE	Ile de france	TR	Transsylvanian Racka
CHA	Charollais		
LAC	Lacaune		
AWA	Awassi		

Table 61
Sheep genotyped under the framework of a breeding programme as established in Commission Decision 2003/100/EC during 2006 in Hungary

NSP classification	Breed	HM	GMM	ML	GBH	SUF	TEX	ILE	CHA	AWA	DCI	LAC	BMS	BTE	CIG	CIK	RAC	TR	Altogether	
	Genotypes																		genotypes	NSP
NSP1	ARR/ARR	177	216	35	86	124	23	146	9	0	1	89	1	8	22	0	80	13	1030	1030
NSP2	ARR/ARQ	332	302	111	122	200	41	79	18	1	19	119	0	13	27	0	145	6	1535	2125
	ARR/ARH	8	3	4	2	18	14	5	0	2	2	3	2	4	15	0	54	4	140	
	ARR/AHQ	48	149	32	3	22	6	4	1	0	0	39	0	7	134	0	0	5	450	
	VRQ/ARQ	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
NSP3	ARQ/ARQ	116	87	64	24	46	18	6	14	5	7	19	0	4	25	0	59	28	522	522
NSP3 (others)	AHQ/AHQ	3	7	3	0	1	0	0	0	0	0	11	0	0	0	0	49	0	74	574
	ARH/ARH	0	2	0	0	3	1	0	0	2	0	0	0	3	3	0	8	11	33	
	ARH/ARQ	16	0	4	3	12	8	9	0	8	6	0	0	3	8	0	29	0	106	
	AHQ/ARH	3	0	3	0	0	2	0	0	0	0	0	0	1	4	0	47	0	60	
	AHQ/ARQ	31	74	9	1	17	2	5	2	0	2	20	0	9	6	0	120	3	301	
NSP4	ARR/VRQ	11	10	0	2	3	8	42	8	1	2	1	1	3	4	0	24	1	121	121
NSP5	ARQ/VRQ	10	11	2	0	3	8	6	10	0	0	0	0	0	4	0	1	0	55	78
	ARH/VRQ	1	1	1	0	0	0	0	0	0	1	0	1	0	0	0	0	0	5	
	AHQ/VRQ	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	15	0	17	
	VRQ/VRQ	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1	
Total		756	862	268	243	450	131	304	62	19	40	301	5	55	252	0	631	71	4450	4450

Table 62
Sheep genotyped under the framework of a breeding programme as established in Commission Decision 2003/100/EC during 2007 in Hungary

NSP classification	Breed	HM	GMM	ML	GBH	SUF	TEX	ILE	CHA	DCI	LAC	BMS	BTE	CIG	CIK	RAC	TR	Altogether	
	Genotypes																	genotypes	NSP
NSP1	ARR/ARR	189	199	57	114	159	18	194	14	0	115	3	5	4	0	23	5	1099	1099
NSP2	ARR/ARQ	403	234	133	110	218	31	75	30	16	132	5	3	13	5	33	27	1468	1744
	ARR/ARH	8	1	2	1	8	3	0	0	2	0	0	0	0	0	10	0	35	
	ARR/AHQ	31	91	28	1	32	0	5	3	0	10	8	0	2	0	28	2	241	
NSP3	ARQ/ARQ	177	65	94	24	65	9	9	10	10	17	12	7	12	22	27	17	577	577
NSP3 (others)	AHQ/AHQ	1	10	2	0	0	0	0	0	0	1	2	1	0	0	7	0	24	259
	ARH/ARH	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	ARH/ARQ	6	1	1	1	4	4	0	0	6	0	0	2	0	0	10	0	35	
	AHQ/ARH	1	0	0	0	0	4	0	0	0	0	0	0	0	0	3	0	8	
	AHQ/ARQ	39	54	22	0	26	1	1	2	0	10	13	2	1	6	13	2	192	
NSP4	ARR/VRQ	11	5	0	1	2	6	18	10	2	0	0	2	1	0	2	0	60	60
NSP5	ARQ/VRQ	6	4	0	1	0	1	5	9	1	1	0	5	0	0	3	0	36	52
	ARH/VRQ	0	0	0	0	0	1	0	0	0	0	0	2	0	0	3	0	6	
	AHQ/VRQ	2	0	0	0	0	0	0	0	0	0	0	1	0	0	4	0	7	
	VRQ/VRQ	0	0	0	0	0	0	0	1	0	0	0	2	0	0	0	0	3	
Total		874	664	339	253	514	78	307	79	37	286	43	32	33	33	166	53	3791	3791

Table 63
Sheep genotyped under the framework of a breeding programme referred to in Article 6a of Regulation (EC) No 999/2001
during 2008 in Hungary*

NSP classification	Genotypes/Breeds	<i>HM</i>	<i>GMM</i>	<i>ML</i>	<i>GBH</i>	<i>SUF</i>	<i>TEX</i>	<i>ILE</i>	<i>CHA</i>	<i>DCI</i>	<i>LAC</i>	<i>BMS</i>	<i>BTE</i>	<i>CIG</i>	<i>CIK</i>	<i>RAC</i>	<i>TR</i>	<i>BS</i>	<i>infected flocks</i>	Altogether	
NSP1	ARR/ARR	306	242	51	112	162	21	167	19	2	115	9	34	3	0	26	3	0	1407	2679	2679
NSP2	ARR/ARQ	593	212	148	58	222	19	109	48	18	116	9	20	12	2	28	13	1	2680	4308	5035
	ARR/ARH	32	0	2	0	18	2	0	0	2	0	0	1	0	0	6	1	0	70	134	
	ARR/AHQ	52	66	19	0	30	1	7	0	1	16	24	1	1	1	41	0	0	333	593	
NSP3	ARQ/ARQ	316	75	57	4	46	4	16	20	9	23	2	9	0	9	17	13	0	1394	2014	2679
	AHQ/AHQ	1	2	2	0	0	0	0	0	0	1	19	0	0	0	8	0	0	21	54	
	ARH/ARH	2	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	5	
	ARH/ARQ	28	0	1	0	7	2	0	0	2	0	0	4	0	0	7	0	0	63	114	
	AHQ/ARH	2	0	0	0	0	0	0	0	0	0	0	1	0	0	5	0	0	8	16	
AHQ/ARQ	45	34	7	0	11	0	0	0	0	0	6	17	1	0	3	20	3	0	329	476	
NSP4	ARR/VRQ	17	4	4	2	2	1	21	8	2	1	1	1	1	0	0	8	0	77	150	150
NSP5	ARQ/VRQ	19	2	2	0	0	0	8	11	1	0	0	3	0	0	5	5	0	99	155	187
	ARH/VRQ	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	5	
	AHQ/VRQ	2	0	0	0	0	0	2	0	0	0	1	0	0	0	1	0	0	11	17	
	VRQ/VRQ	2	0	0	0	0	0	2	1	0	0	0	0	0	0	0	0	0	5	10	
Other	ARR/ARK	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	19	20	46
	AHQ/ARK	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	5	
	ARH/ARK	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	
	ARQ/ARK	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	16	16	
	ARK/VRQ	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	
	ARQ/TRQ	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	
Total		1419	637	293	176	498	50	332	107	37	278	83	74	17	15	167	46	1	6546	10776	10776

* Table includes genotyping data of the infected flocks, too.

Explanation of abbreviations used in the tables for genotyping

HM	Hungarian Merino
GMM	German Mutton Merino Merino
ML	Landschaf
GBH	German Blackhead Mutton Sheep
SUF	Suffolk
TEX	Texel
ILE	Ile de france
CHA	Charollais
LAC	Lacaune
AWA	Awaassi
BMS	British Milksheep
DCI	Dairy Tsigai
BTE	Bábolna Tetra
CIG	Tsigai
CIK	Cikta
RAC	Hungarian Racka Transsylvanian
TR	Racka
BS	Bergschaf

Table 64
Sheep genotyped under the framework of a breeding programme referred to in Article 6a of Regulation (EC) No 999/2001
during 2009 in Hungary

NSP classification	Genotypes/Breeds	<i>HM</i>	<i>GMM</i>	<i>ML</i>	<i>BER</i>	<i>GBH</i>	<i>SUF</i>	<i>TEX</i>	<i>ILE</i>	<i>CHA</i>	<i>DOP</i>	<i>DCI</i>	<i>LAC</i>	<i>BMS</i>	<i>BTE</i>	<i>CIG</i>	<i>CIK</i>	<i>RAC</i>	<i>TR</i>	<i>infected flocks</i>	Altogether		
NSP1	ARR/ARR	284	293	39	36	109	190	10	362	50	1	1	288	4	2	10	0	90	8	1731	3508	3508	
NSP2	ARR/ARQ	374	253	112	11	49	201	2	110	82	4	2	159	8	6	19	1	52	34	3456	4935	5860	
	ARR/ARH	13	5	2	0	0	13	3	1	1	0	0	1	0	2	1	0	12	0	217	271		
	ARR/AHQ	41	91	12	0	4	37	0	9	3	0	0	29	5	1	1	0	63	2	356	654		
NSP3	ARQ/ARQ	135	47	78	3	3	32	0	3	22	23	1	12	1	5	15	3	32	39	1834	2288	3093	
	AHQ/AHQ	1	5	1	0	0	0	0	0	2	0	0	0	4	0	0	0	17	0	20	50		
	ARH/ARH	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	0	12	17		
	ARH/ARQ	6	20	2	0	0	0	0	0	0	0	0	2	0	3	0	0	7	0	203	243		
	AHQ/ARH	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	7	0	17	25		
AHQ/ARQ	30	1	14	0	2	15	0	1	2	0	0	0	6	2	3	3	1	29	4	357	470		
NSP4	ARR/VRQ	8	6	0	0	4	3	0	37	7	3	0	0	0	1	1	0	5	5	149	229	229	
NSP5	ARQ/VRQ	6	7	0	0	1	0	0	0	3	5	1	0	0	3	2	0	3	2	152	185	223	
	ARH/VRQ	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	7	8		
	AHQ/VRQ	0	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	4	1	19	27		
	VRQ/VRQ	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	3		
Other	ARR/ARK	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10	10	26	
	AHQ/ARK	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	5		
	ARH/ARK	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1		
	ARQ/ARK	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10	10		
	ARK/VRQ	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0
	ARQ/TRQ	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0
Total		898	730	261	50	172	491	15	523	172	36	5	497	24	27	52	5	327	95	8559	12939	12939	

HM	Hungarian Merino	CHA	Charollais	RAC	Hungarian Racka
GMM	German Mutton Merino	DOP	Dorper	TR	Transsylvanian Racka
ML	Merino Landschaf	LAC	Lacaune		
BER	Berrichon du cher	BMS	British Milksheep		

GBH German Blackhead Mutton Sheep
SUF Suffolk
TEX Texel
ILE Ile de france

DCI Dairy Tsigai
BTE Bábolna Tetra
CIG Tsigai
CIK Cikta

Table 65
Sheep genotyped under the framework of a breeding programme referred to in Article 6a of Regulation (EC) No 999/2001
during 2010 in Hungary

NSP classification	Genotypes /Breeds	<i>HM</i>	<i>GMM</i>	<i>ML</i>	<i>BER</i>	<i>GBH</i>	<i>SUF</i>	<i>TEX</i>	<i>ILE</i>	<i>CHA</i>	<i>DOP</i>	<i>DCI</i>	<i>LAC</i>	<i>BMS</i>	<i>BTE</i>	<i>ROM</i>	<i>CIG</i>	<i>CIK</i>	<i>RAC</i>	<i>TR</i>	<i>breeding .progr.</i>	<i>infected flocks</i>	Altogether
NSP1	ARR/ARR	196	273	54	21	96	254	23	404	35	1	7	213	18	9	0	5	0	71	6	1 686	779	2 465
NSP2	ARR/ARQ	283	269	62	8	37	207	16	106	55	5	9	127	11	9	3	8	8	48	34	1 305	1662	2 967
	ARR/ARH	6	4	1	0	2	16	4	4	0	0	2	3	0	1	0	0	0	12	0	55	42	97
	ARR/AHQ	30	64	10	1	1	28	1	5	4	0	0	10	13	0	0	2	0	35	6	210	209	419
NSP3	ARQ/ARQ	87	63	23	0	5	26	2	3	8	20	4	5	0	0	2	8	8	29	27	320	857	1 177
	AHQ/AHQ	2	8	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	6	0	20	18	38
	ARH/ARH	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	1
	ARH/ARQ	5	1	0	0	1	1	0	0	0	0	2	0	0	0	0	0	0	6	4	20	49	69
	AHQ/ARH	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	1	3	3	6
	AHQ/ARQ	17	37	6	0	1	11	0	0	1	2	2	0	7	0	0	1	4	17	1	107	244	351
NSP4	ARR/VRQ	5	10	1	0	3	0	1	40	11	0	3	2	0	0	0	0	0	3	0	79	85	164
NSP5	ARQ/VRQ	5	3	0	0	2	1	1	5	1	2	1	0	0	0	0	1	0	8	4	34	80	114
	ARH/VRQ	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	1	3	6	9
	AHQ/VRQ	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0	4	10	14
	VRQ/VRQ	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2
Other	ARR/ARK	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	4
	AHQ/ARK	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	ARH/ARK	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	ARQ/ARK	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	5
	ARK/VRQ	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	ARQ/TRQ	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total		636	732	157	30	148	544	48	567	115	30	30	360	53	19	5	25	20	244	84	3 847	4055	7902

Table 66
Sheep genotyped under the framework of a breeding programme referred to in Article 6a of Regulation (EC) No 999/2001
during 2011 in Hungary

NSP classification	Genotypes/ Breeds	<i>HM</i>	<i>GMM</i>	<i>ML</i>	<i>BER</i>	<i>GBH</i>	<i>SUF</i>	<i>TEX</i>	<i>ILE</i>	<i>CHA</i>	<i>SHR</i>	<i>DOP</i>	<i>DCI</i>	<i>LAC</i>	<i>BMS</i>	<i>BTE</i>	<i>CIG</i>	<i>CIK</i>	<i>RAC</i>	<i>TR</i>	<i>infected flocks</i>	Altogether	
NSP1	ARR/ARR	166	218	55	29	148	227	64	311	22	1	0	1	164	3	4	24	1	105	6	475	2 024	2024
NSP2	ARR/ARQ	265	140	83	5	52	141	16	68	27	5	3	10	98	2	10	53	3	111	5	744	1 841	2117
	ARR/ARH	4	0	1	0	1	7	3	3	0	0	0	0	0	0	0	1	0	21	0	16	57	
	ARR/AHQ	34	57	9	1	0	20	1	9	2	0	0	0	0	10	5	1	4	1	42	0	23	
NSP3	ARQ/ARQ	79	27	17	1	3	15	0	0	2	0	13	4	3	3	8	30	10	44	6	416	681	940
	AHQ/AHQ	2	4	0	0	0	0	0	0	0	0	0	0	0	4	0	0	1	8	0	3	22	
	ARH/ARH	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	0	2	7	
	ARH/ARQ	2	0	0	0	0	1	0	0	0	0	0	0	0	0	5	0	0	22	1	42	73	
	AHQ/ARH	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11	0	4	15	
	AHQ/ARQ	21	16	6	0	0	11	0	0	0	0	0	0	0	1	4	0	3	3	30	0	47	
NSP4	ARR/VRQ	5	0	0	0	3	1	2	16	8	0	0	1	1	0	0	1	0	6	1	27	72	72
NSP5	ARQ/VRQ	4	0	0	0	0	1	1	0	1	0	0	0	0	0	0	0	0	6	0	36	49	59
	ARH/VRQ	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	2	0	3	6	
	AHQ/VRQ	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	4	
	VRQ/VRQ	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Other	ARR/ARK	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	5
	AHQ/ARK	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	ARH/ARK	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	ARQ/ARK	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	
	ARK/VRQ	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	ARQ/TRQ	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	
Total		582	462	171	36	207	424	87	408	62	6	16	16	277	21	28	116	19	417	19	1843	5212	5212

HM	Hungarian Merino	CHA	Charollais	RAC	Hungarian Racka
GMM	German Mutton Merino	DOP	Dorper	TR	Transsylvanian Racka
ML	Merino Landschaf	LAC	Lacaune	SHR	sShropshire
BER	Berrichon du cher	BMS	British Milksheep		

GBH	German Blackhead Mutton Sheep	DCI	Dairy Tsigai
SUF	Suffolk	BTE	Bábolna Tetra
TEX	Texel	CIG	Tsigai
ILE	Ile de france	CIK	Cikta

Table 67
Confirmed scrapie cases in Hungary (domestic sheep population) in 2006

Case No	County	Name of the farm/owner	Subgroup of animal	Positive rapid test	Positive confirmatory test	Discriminatory test (CEA WB)	Genotype	Killing
2006/1	Fejér	Kovács Zoltán	Dead, 85 months	Bio-Rad TeSeE, 2 June 2006	(histopathology and immunocytochemistry) 23 June 2006	classical form of scrapie	ARR/ARQ	The whole flock was killed
2006/2	Fejér	Kovács Zoltán	Dead, 125 months	Bio-Rad TeSeE 2 June 2006	(histopathology and immunocytochemistry) 23 June 2006	classical form of scrapie	ARQ/VRQ	The whole flock was killed
2006/3	Jász-Nagykun-Szolnok	Jász-Ovin Kft.	Healthy slaughter, 60 months	Bio-Rad TeSeE, 16 June 2006	histopathology and immunocytochemistry, 29 June 2006	atypical	ARR/AHQ	The whole flock was killed
2006/4	Hajdu-Bihar	Lamb & Land Kft.	Healthy slaughter, 37 months	Bio-Rad TeSeE, 7 July 2006	Immunoblotting 20 July 2006	atypical	Not known*	The whole flock was killed
2006/5	Hajdu-Bihar	Kati László	Healthy slaughter, 72 months	Bio-Rad TeSeE, 29 September 2006	Immunoblotting 10 October 2006	atypical	Not known*	The whole flock was killed
2006/6	Hajdu-Bihar	Hortobágyi Természetvédelmi és Génmegőrző KHT.	Dead, 96 months	Bio-Rad TeSeE, 31 October 2006	Immunoblotting 9 November 2006	atypical	ARR/AHQ	Killing after genotyping

* The results of the genotyping was not appreciable.

Table 68
Confirmed scrapie cases in Hungary (domestic sheep population) in 2007

Case No	County	Name of the farm/owner	Subgroup of animal	Positive rapid test	Positive confirmatory test	Discriminatory test (CEA WB)	Genotype	Killing
2007/1	Bács-Kiskun (Kunszentmiklós)	Gajár János	Dead, 96 months	Bio-Rad TeSeE, 20 December 2006	Immunoblotting 8 January 2007	atypical	ARQ/ARQ	Killing after genotyping
2007/2	Bács-Kiskun (Dunavecse)	Gulyás György	Healthy slaughtered, 84 months	Bio-Rad TeSEe 2 March 2007	Immunoblotting 14 March 2007	Classical form of scrapie	ARR/ARQ	Killing after genotyping
2007/3	Veszprém (Hajmáskér)	Palota-Mező Kft	Dead, 39 months	Bio-Rad TeSeE, 20 April 2007	Immunoblotting 9 May 2007	atypical	ARQ/ARQ	Killing after genotyping
2007/4	Bács-Kiskun (Tiszaug)	Szőke Tisza Fogy. Otthona	Healthy slaughtered, 72 months	Bio-Rad TeSeE, 18 May 2007	Immunoblotting 1 June 2007	Classical form of scrapie	ARR/ARQ	Killing after genotyping
2007/5	Pest (Dömsöd)	Bak Gábor	Dead, 53 months	Bio-Rad TeSeE, 13 September 2007	<i>Immunocytochemistry</i> 21 September 2007 Immunoblotting 26 September 2007	Classical form of scrapie	ARH/ARQ	Killing after genotyping
2007/6	Bács-Kiskun (Jász-szentlászló)	Ritka Mátyás	Healthy slaughtered, 24 months	Bio-Rad TeSeE, 19 October 2007	<i>Immunocytochemistry</i> 24 October 2007 Immunoblotting 7 November 2007	atypical	ARR/AHQ	There was no other animal on the farm.
2007/7	Pest (Dömsöd)	Bak Gábor	Culled for destruction, 62 months	Bio-Rad TeSeE, 24 October 2007	<i>Immunocytochemistry</i> 6 November 2007 Immunoblotting 7 November 2007	atypical	ARQ/ARQ	Killing after genotyping
2007/8	Veszprém (Hajmáskér)	Palota-Mező Kft	Dead, 44 months	Bio-Rad TeSeE, 22 November 2007	<i>Immunocytochemistry</i> 4 December 2007 Immunoblotting 5 December 2007	Classical form of scrapie	ARQ/ARQ	Killing after genotyping

Table 69
Confirmed scrapie cases in Hungary (domestic sheep population) in 2008

Case No	County	Name of the farm/owner	Subgroup of animal	Positive rapid test	Positive confirmatory test	Discriminatory test (CEA WB)	Genotype	Killing
2008/1	Jász-Nagykun-Szolnok (Tiszafüred)	Kapás Kft.	Dead, 62 months	Bio-Rad TeSeE, 16 January 2008	<i>Immunocytochemistry</i> 18 January 2008 <i>Immunoblotting</i> 04 February 2008	Classical form of scrapie	ARQ/ARQ	The whole flock was killed.
2008/2	Veszprém (Hajmáskér)	Palota-Mező Kft	Culled for destruction, 96 months	Bio-Rad TeSeE, 18 February 2008	<i>Immunocytochemistry</i> 28 February 2008 <i>Immunoblotting</i> 07 March 2008	Atypical scrapie	ARQ/ARR	Killing after genotyping.
2008/3	Pest (Kocsér)	Petőfi Mg. Szövetkezet.	Dead, 156 months	Bio-Rad TeSeE, 21 February 2008	<i>Immunocytochemistry</i> 28 February 2008 <i>Immunoblotting</i> 07 March 2008	Atypical scrapie	ARR/ARR	The whole flock was killed.
2008/4	Hajdú-Bihar (Tiszagyula-háza)	Megyesi Elemér	Healthy slaughtered, 156 months	Bio-Rad TeSeE, 21 March 2008	<i>Immunocytochemistry</i> 26 March 2008 <i>Immunoblotting</i> 04 April 2008	Atypical scrapie	ARQ/ARR	Killing after genotyping.
2008/5	Pest (Vecsés)	Ifj. Apró Mihály	Dead, 114 months	Bio-Rad TeSeE, 26 May 2008	<i>Immunocytochemistry</i> 27 May 2008 <i>Immunoblotting</i> 05 June 2008	Atypical scrapie	ARR/ARQ	Killing after genotyping.
2008/6	Komárom-Esztergom (Oroszlány)	Baranya József	Dead, 67 months	Bio-Rad TeSeE, 01 September 2008	<i>Immunocytochemistry</i> 12 September 2008 <i>Immunoblotting</i> 10 September 2008	Atypical scrapie	ARR/ARR	Killing after genotyping.
2008/7	Hajdú-Bihar (Sárrétudvari)	Bodó Gyula	Healthy slaughtered, 72 months	Bio-Rad TeSeE, 29 September 2008	<i>Immunocytochemistry</i> 02 October 2008 <i>Immunoblotting</i> 07 October 2008	Atypical scrapie	ARR/ARR	Killing after genotyping.

2008/8	Békés (Békés)	Török Sándor	Dead, 50 months	Bio-Rad TeSeE, 28 October 2008	<i>Immunocytochemistry</i> 29 October 2008 <i>Immunoblotting</i> 06 November 2008	Atypical scrapie	ARQ/ARQ	Killing after genotyping.
2008/9	Bács-Kiskun (Kunszentmiklós)	Major László	Dead, 132 months	Bio-Rad TeSeE, 20 November 2008	<i>Immunoblotting</i> 04 December 2008	Atypical scrapie	ARR/AHQ	Killing after genotyping.

Table 70
Confirmed scrapie cases in Hungary (domestic sheep population) in 2009

Case No	County	Name of the farm/owner	Subgroup of animal	Positive rapid test	Positive confirmatory test	Discriminatory test (CEA WB)	Genotype	Killing
2009/1	Fejér (Csákberény)	Id. Lákics János	Dead, 39 months	Bio-Rad TeSeE, 22 January 2009	<i>Immunocytochemistry</i> 30 January 2009 <i>Immunoblotting</i> 05 February 2009	Classical form of scrapie	ARR/AHQ	The whole flock was killed.
2009/2	Hajdú-Bihar (Hortobágy)	Hortobágyi Kht.	Healthy slaughtered, 49 months	Bio-Rad TeSeE, 11 February 2009	<i>Immunocytochemistry</i> 13 February 2009 <i>Immunoblotting</i> 02 March 2009	Atypical scrapie	ALRH/ALH Q	The whole flock was killed.
2009/3	Fejér (Csákberény)	Ifj. Lákics János	Dead, 65 months	Bio-Rad TeSeE, 17 February 2009	<i>Immunocytochemistry</i> 04 March 2009 <i>Immunoblotting</i> 26 February 2009	Atypical scrapie	AHQ/AHQ	The whole flock was killed.
2009/4	Heves (Mikófalva)	Kelemen Miklós	Dead, 117 months	Bio-Rad TeSeE, 18 March 2009	<i>Immunocytochemistry</i> 19 March 2009 <i>Immunoblotting</i> 01 April 2009	Atypical scrapie	ARR/ARH	Killing after genotyping
2009/5	Fejér (Sárbogárd)	Mezőfalvai Mg-i Termelő és Szolgáltató Zrt.	Dead, 69 months	Bio-Rad TeSeE, 06 April 2009	<i>Immunocytochemistry</i> 20 April 2009 <i>Immunoblotting</i> 17 April 2009	Atypical scrapie	ARR/AHQ	Killing after genotyping
2009/6	Borsod-Abaúj-Zemplén (Mezőzombor)	Kucskár Lajos	Healthy slaughtered, 98 months	Bio-Rad TeSeE, 28 April 2009	<i>Immunocytochemistry</i> 29 April 2009 <i>Immunoblotting</i> 06 May 2009	Atypical scrapie	ARR/AHQ	Killing after genotyping
2009/7	Szabolcs (Aranyosapáti)	Bíró Zoltán	Healthy slaughtered, 52 months	Bio-Rad TeSeE, 04 May 2009	<i>Immunocytochemistry</i> 13 May 2009 <i>Immunoblotting</i> 22 May 2009	Atypical scrapie	ARQ/ARQ	Killing after genotyping

2009/8	Nógrád (Cered)	Ceredvölgye Mg-I Szövetkezet	Healthy slaughtered, 52 months	Bio-Rad TeSeE, 21 May 2009	<i>Immunocytochemistry</i> 05 June 2009 <i>Immunoblotting</i> 08 June 2009	Atypical scrapie	AHQ/ARQ	Killing after genotyping
2009/9	Borsod-Abaúj-Zemplén (Mezőcsát)	Kuli Sándor	Healthy slaughtered, 59 months	Bio-Rad TeSeE, 19 May 2009	<i>Immunocytochemistry</i> 25 May 2009 <i>Immunoblotting</i> 08 July 2009	Atypical scrapie	ARQ/VRQ	Killing after genotyping
2009/10	Hajdú-Bihar (Hajdúvid)	Zeke László	Healthy slaughtered, 115 months	Bio-Rad TeSeE, 25 August 2009	<i>Immunocytochemistry</i> 04 September 2009 <i>Immunoblotting</i> 09 September 2009	Atypical scrapie	ARQ/ARQ	Killing after genotyping
2009/11	Hajdú-Bihar (Biharnagybajom)	Gálné Dobrán Andrea	Healthy slaughtered, 41 months	Bio-Rad TeSeE, 14 September 2009	<i>Immunocytochemistry</i> 30 September 2009 <i>Immunoblotting</i> 01 October 2009	Atypical scrapie	ARQ/ARQ	Killing after genotyping
2009/12	Heves (Bükkszentmárton)	Magyar Ottó	Dead, 160 months	Bio-Rad TeSeE, 19 October 2009	<i>Immunocytochemistry</i> 29 October 2009 <i>Immunoblotting</i> 30 October 2009	Atypical scrapie	ARR/ARR	Killing after genotyping
2009/13	Bács (Petőfiszállás)	Ifj. Kis József	Dead, 49 months	Bio-Rad TeSeE, 17 November 2009	<i>Immunoblotting</i> 07 December 2009	Atypical scrapie	ARQ/ARQ	Killing after genotyping
2009/14	Heves (Bükkszentmárton)	Magyar Ottó	Culled, 154 months	Bio-Rad TeSeE, 23 November 2009	<i>Immunocytochemistry</i> 10 December 2009 <i>Immunoblotting</i> 07 December 2009	Atypical scrapie	ARR/ARQ	Killing after genotyping
2009/15	Hajdú-Bihar (Hajdúdorog)	Oláh György	Healthy slaughtered, 70 months	Bio-Rad TeSeE, 25 November 2009	<i>Immunocytochemistry</i> 11 December 2009 <i>Immunoblotting</i> 17 December 2009	Atypical scrapie	ARR/ARR	Killing after genotyping

Table 71 Confirmed scrapie cases in Hungary (domestic sheep population) in 2010

Case No	County	Name of the farm/owner	Subgroup of animal	Positive rapid test	Positive confirmatory test	Discriminatory test (CEA WB)	Genotype	Killing
2010/1	Bács-Kiskun	Kiss József	Dead, 57 months	Bio-Rad TeSeE, 11 January 2010	<i>Immunocytochemistry</i> 22 January 2010 <i>Immunoblotting</i> 26 January 2010	Atypical scrapie	ARQ/ARQ	Killing after genotyping
2010/2	Somogy	Juhász Zoltán	Clinical suspect, 72 months	Bio-Rad TeSeE, 02 April 2010	<i>Immunocytochemistry</i> 16 April 2010 <i>Immunoblotting</i> 26 April 2010	Atypical scrapie	AHQ/ARQ	Killing after genotyping
2010/3	Bács-Kiskun	Balla Dömötör	Dead, 67 months	Bio-Rad TeSeE, 12 April 2010	<i>Immunocytochemistry</i> 22 April 2010 <i>Immunoblotting</i> 26 April 2010	Atypical scrapie	ARR/AHQ	Killing after genotyping
2010/4	Pest	Ifj. Apró Mihály	Dead, 112 months	Bio-Rad TeSeE, 16 July 2010	<i>Immunocytochemistry</i> 23 July 2010 <i>Immunoblotting</i> 29 July 2010	Atypical scrapie	ARR/ARQ	Infected herd
2010/5	Bács-Kiskun	Ficsor István	Healthy slaughtered, 156 months	Bio-Rad TeSeE, 04 August 2010	<i>Immunocytochemistry</i> 13 August 2010 <i>Immunoblotting</i> 18 August 2010	Atypical scrapie	ARH/ARQ	Killing after genotyping
2010/6	Veszprém	Deli Csaba	Healthy slaughtered, 95 months	Bio-Rad TeSeE, 25 August 2010	<i>Immunocytochemistry</i> 03 September 2010 <i>Immunoblotting</i> 06 September 2010	Atypical scrapie	AHQ/ARQ	The whole flock was killed.
2010/7	Bács-Kiskun	Nagy Imréné	Dead, 132 months 11 éves	Bio-Rad TeSeE, 25 August 2010	<i>Immunocytochemistry</i> 03 September 2010 <i>Immunoblotting</i> 06 September 2010	Atypical scrapie	AHQ/ARQ	Killing after genotyping
2010/8	Hajdú-Bihar	Korpás Barnabás	Healthy slaughtered, 96 months	Bio-Rad TeSeE, 21 October 2010	<i>Immunocytochemistry</i> 26 October 2010 <i>Immunoblotting</i> 02 November 2010	Atypical scrapie	ARQ/AHQ	Killing after genotyping

Table 72 Confirmed scrapie cases in Hungary (domestic sheep population) in 2011

Case No	County	Name of the farm/owner	Subgroup of animal	Positive rapid test	Positive confirmatory test	Classical or atypical	Genotype	Killing
2011/1	Szabolcs-Szatmár-Bereg (Kálmánháza)	Petics Zsolt	Healthy slaughtered, 61 months	Bio-Rad TeSeE, 17 February 2011	<i>Immunocytochemistry</i> 1 March 2011 <i>Immunoblotting</i> 22 February 2011	Atypical scrapie	ARR/ARQ	Killing after genotyping
2011/2	Bács-Kiskun (Madaras)	Mátrai Józsefné	Dead, 50 months	Bio-Rad TeSeE, 18 March 2011	<i>Immunocytochemistry</i> 28 March 2011 <i>Immunoblotting</i> 28 March 2011	Atypical scrapie	ARR/ARH	Killing after genotyping
2011/3	Tolna (Paks)	Milkmen Kft.	Healthy slaughtered, 112 months	Idexx Herd Check TSE, 08 July 2011	<i>Immunocytochemistry</i> 21 July 2011 <i>Immunoblotting</i> 04 August 2011	Atypical scrapie	ARQ/ARR	Genotyping without killing
2011/4	Pest (Vecsés)	Ifj. Apró Mihály	Healthy slaughtered, 144 months	Idexx Herd Check TSE, 12 July 2011	<i>Immunocytochemistry</i> 21 July 2011 <i>Immunoblotting</i> 25 July 2011	Atypical scrapie	ARR/ARR	Infected herd
2011/5	Somogy (Rinyaújnép)	Szűsz József	Healthy slaughtered, 48 months	Bio-Rad TeSeE, 03 August 2011	<i>Immunocytochemistry</i> 02 September 2011 <i>Immunoblotting</i> 12 August 2011	Atypical scrapie	ARQ/ARQ	Killing after genotyping
2011/6	Szabolcs-Szatmár-Bereg (Kálmánháza)	Petics Zsolt	Exterminated, 51 months	Bio-Rad TeSeE, 09 November 2011	<i>Immunocytochemistry</i> 24 November 2011 <i>Immunoblotting</i> 17 November 2011	Atypical scrapie	ARQ/AHQ	Infected herd
2011/7	Nógrád (Borsosberény)	Dr. Hetényi Tamásné	Healthy slaughtered in Poland, 50 months	Sample was tested in Poland	Sample was tested in Poland	Atypical scrapie	Sample was tested in Poland Not known.	Killing after genotyping
2011/8	Veszprém (Hegyesd)	Dörögdi Mező Kft.	Dead, 84 months	Bio-Rad TeSeE, 05 December 2011	<i>Immunocytochemistry</i> 13 December 2011 <i>Immunoblotting</i> 14 December 2011	Atypical scrapie	ARR/ARQ	Killing after genotyping

2011/9	Fejér (Szabadhidvég)	Kiss Gyula	Emergency slaughtered, 117 months	Bio-Rad TeSeE, 16 December 2011	<i>Immunocytochemistry</i> 30 December 2011 Immunoblotting 29 December 2011	Atypical scrapie	ARR/ARQ	Killing after genotyping
2011/10	Heves (Sarud)	Ifj. Karkus Jánosné	Dead, 40 months	Bio-Rad TeSeE, 21 December 2011	<i>Immunocytochemistry</i> 30 December 2011 Immunoblotting 29 December 2011	Atypical scrapie	ARR/ARQ	Killing after genotyping
2011/11	Bács-Kiskun (Harkakötöny)	Berta Mihály	Healthy slaughtered, 118 months	Bio-Rad TeSeE, 30 December 2011	<i>Immunocytochemistry</i> 16 January 2012 Immunoblotting 11 January 2012	Atypical scrapie	ARR/ARR	Killing after genotyping

The Map of Hungary

