



EUROPEAN COMMISSION  
HEALTH & CONSUMERS DIRECTORATE-GENERAL  
Unit 04 - Veterinary Control Programmes

SANCO/12992/2010

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

## **Monitoring and eradication programme of TSE, BSE and scrapie**

**Approved\* for 2011 by Commission Decision 2010/712/EU**

**Sweden**

\* in accordance with Council Decision 2009/470/EC

<b>Program for Eradication : ANNEX 3</b>
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<b>Submission number</b>	1272364144753-232
<b>Submission date</b>	27/04/2010 12:29:05
<b>1. Identification of the programme</b>	
Country Geographical English Name	Sweden
Disease	Transmissible Spongiform Encephalopathies
Requestperiod From	2011
Requestperiod To	2011
<b>1.1 Contact</b>	
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## 2. Description of the programme

### Description of the programme

Animals from all counties in Sweden are sampled. The programme is applied in accordance with Regulation (EC) 999/2001 of the European Parliament and of the Council of 22 May 2001.

#### Cattle

The estimated number of cattle foreseen to be sampled divided into categories is:

- All cattle over 48 months of age in normal slaughter
- All emergency slaughter and sick animals rejected from healthy slaughter (over 48 months of age)
- All fallen stock over 48 months of age

#### Goat

The goat population in Sweden is very small, and mainly not used for human consumption. The estimated number of goats foreseen to be sampled is:

- All fallen stock above 18 months

#### Sheep

The Swedish National Scrapie control programme (1874/2003/EC), was approved by the Commission the 24 October 2003.

- Due to this programme all fallen stock above 18 months shall be tested
- Sweden is applying the derogation provided for in Annex VII, Chapter A, point 2.3 c regarding atypical scrapie. Those herds are put under restrictions for 2 breeding years following the detection of the case. This includes movement restrictions: no animals are allowed to leave the herd for other purpose than direct slaughter. All animals shall be identified. All animals more than 18 months slaughtered for human consumption or dead at farm, approximately 20, shall be tested.
- Genotyping is performed in 100 randomly selected animals every year and in animals that are TSE-positive.

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

Description of the epidemiological situation of the disease

From 1st of January 1986, the use of any fallen stock and diseased parts of slaughtered animals was officially banned in any feeding stuff including MBM to other animals than fur and zoo animals. Since 1987 more than 95% of the bovine compound feeding stuff for ruminants no longer contained MBM as a result of a voluntary decision by the industry. Feeding MBM to dairy cows was prohibited by the above-mentioned decision in 1986. The use of ruminant material for feeding ruminants was officially banned in Sweden in 1991. In 1995, as a result of the Swedish accession to the EU, the ban was extended to include material of mammalian origin.

One single case of BSE has been recorded in Sweden in 2006. This case was shown to be an atypical case of H-type. One single case of classical scrapie was found in 1986. Cases of atypical scrapie occur and so far all of these has been of the type NOR98. Three cases of was found in 2003, two cases in 2004, one case in 2005, eight cases in 2006, four cases in 2007 and two in 2009.

The import of live animals to Sweden is limited and only applies for breeding animals.

Since 30 may 2008 Sweden is classified by the OIE as a country having a negligible risk for BSE in accordance with the provisions of Article 2.3.13.3 of the OIE Terrestrial Animal Health Code.

**4. Measures included in the programme**

**4.1 Designation of the central authority in charge of supervising and coordinating the departements responsible for implementing the programme**

The Swedish Board of Agriculture

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

The programme applies to the whole country. Regarding samples taken from fallen stock animals from all counties of Sweden are sampled. In remote areas, in the northwestern part of the country, it is allowed to bury carcasses.

The number of cattle in these areas represents only about 2.3 % of the total bovine population in the country.

To increase the number of sheep and goat sent in to rendering plants the Swedish Board of Agriculture (SBA) pays the fee for collecting fallen stock of sheep and goats over 18 month of age. In the northwestern parts of Sweden, where burying of animal waste is allowed, the owner can submit the skull direct to the NVI. The SBA will bear the expenses for sampling and cost related to submitting the samples.

**4.3 System in place for the registration of holdings**

According to national legislation every keeper of cattle, sheep and goat has to register the holding at the Swedish Board of Agriculture. Every holding is given a number consisting of the country code, SE, followed by a six-digit number. Information concerning all holding numbers is stored in a computerized register. The national legislation concerning the system for identification and registration is "Statens jordbruksverks föreskrifter (SJVFS 2007:12) om märkning och registrering av nötkreatur", "Statens jordbruksverks föreskrifter (SJVFS 2007:13) om märkning och registrering av svin" and in Statens jordbruksverks föreskrifter (SJVFS 2007:14 om märkning och registrering av får och getter

**4.4 System in place for the identification of animals**

All bovine animals have to be marked with a unique identification number. Calves must be marked with ear tags with a unique identification number within 20 days after birth. All ear tags are marked with: SE, number of the holding of birth, individual identification number and control digit.

The Swedish identification and registration system of bovine animals consists of a central database which was approved by the commission on the first of November 1999 (Commission Decision 99/693/EC), holders are obliged to report events in the herd within seven days. In addition to the database the registration system consists of unique identification numbers of all animals, this number includes the holding number of the herd of origin, the individual identification number and a control digit. Every animal holder is also obliged to keep an updated farm register, in which they shall register information about birth and deaths, the sex of the animals, information about animals added to the herd including information about the origin of these animals and information about animals leaving the herd and their destination. The information shall be recorded on the same day as the event.

Sheep and goats: An updated system for identification and registration of sheep and goats was implemented in July 2005. All sheep and goats have to be marked with an ear tag with an identification number consisting of the country code (SE), the holding number of the herd of origin and a 5 digit individual number before 6 months of age. For animals intended for slaughter before the age of 12 months, one ear tag is sufficient.

The national legislation concerning the system for identification and registration is "Statens Jordbruksverk föreskrifter (SJVFS 2007:14) om märkning och registrering av får och getter". This legislation is revised in compliance with the EG legislation 21/2004.

**4.5 Measures in place as regards the notification of the disease**

All TSE's are compulsory notifiable on clinical suspicion according to Swedish legislation, the act of epizootic diseases, epizootilagen (1999:657). All holders of animals are obliged to report every suspect case of TSE to a veterinarian, and the veterinarian is obliged to report to the authorities.

<b>4.6 Monitoring</b>	
<b>4.6.1 Monitoring in bovine animals</b>	
<b>Description</b>	<b>Nbr</b>
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	13,000
Animals referred to in Annex III, Chapter A, Part I, point 2.2 of Regulation (EC) No 999/2001	105,000
Other please specify here	
<b>Sum:</b>	<b>118,000</b>

<b>4.6.2 Monitoring in ovine animals</b>	
<b>Description</b>	<b>Nbr</b>
Ovine animals referred to in Annex III, Chapter A, Part II, point 2 of Regulation (EC) No 999/2001	0
Ovine animals referred to in Annex III, Chapter A, Part II, point 3 of Regulation (EC) No 999/2001	4,880
Ovine animals referred to in Annex III, Chapter A, Part II, point 5 of Regulation (EC) No 999/2001	0
Ovine animals referred to in Annex VII, Chapter A, point 3.4(d) of Regulation (EC) No 999/2001	0
Ovine animals referred to in Annex VII, Chapter A, point 5(b)(ii) of Regulation (EC) No 999/2001	20
Other please specify here	0
<b>Sum:</b>	<b>4,900</b>

<b>4.6.3 Monitoring in caprine animals</b>	
<b>Description</b>	<b>Nbr</b>
Caprine animals referred to in Annex III, Chapter A, Part II, point 2 of Regulation (EC) No 999/2001	0
Caprine animals referred to in Annex III, Chapter A, Part II, point 3 of Regulation (EC) No 999/2001	70
Caprine animals referred to in Annex III, Chapter A, Part II, point 5 of Regulation (EC) No 999/2001	0
Caprine animals referred to in Annex III, Chapter A, Part II, point 3.3(c) of Regulation (EC) No 999/2001	0
Caprine animals referred to in Annex III, Chapter A, Part II, point 5(b)(ii) of Regulation (EC) No 999/2001	0
Other please specify here	0
<b>Sum:</b>	<b>70</b>

<b>4.6.4 Discriminatory tests</b>	
<b>Description</b>	<b>Nbr</b>
Primary molecular testing referred to in Annex X, Chapter C, point 3.2(c)(i) of Regulation (EC) No 999/2001	0
<b>Sum:</b>	<b>0</b>

<b>4.6.5 Genotyping of positive and randomly selected animals</b>	
<b>Description</b>	<b>Nbr</b>
Animals referred to in Annex III, Chapter A, Part II, point 8.1 of Regulation (EC) No 999/2001	4
Animals referred to in Annex III, Chapter A, Part II, point 8.2 of Regulation (EC) No 999/2001	100
<b>Sum:</b>	<b>104</b>

<b>4.7 Eradication</b>	
<b>4.7.1 Measures following confirmation of a BSE case</b>	
<b>4.7.1.1 Description</b>	

Description: If a BSE case is confirmed the procedure set out in regulation (EC) 999/2001 is followed. The herd of origin is put under restrictions and investigated for possible sources of contamination; cohort animals are traced and culled. If the case is found at a slaughterhouse all parts of the body will be destroyed as well as the carcass before and two carcasses after the infected animal.

4.7.1.2 Summary table	
Description	Nbr
Animals to be killed under the requirements of Annex VII, Chapter A, point 2.1 of Regulation (EC) No 999/2001	0
<b>Sum:</b>	<b>0</b>

**4.7.2 Measures following confirmation of a scrapie case**

**4.7.2.1 Description**

Description: If scrapie is confirmed the case will be traced back to the farm and restrictions concerning moving animals are immediately put on the herd. An epidemiological investigation is performed. Contact herds will be traced. In such case the whole herd will be stamped out and animals in appropriate age category will be examined for scrapie. Positive animals will be genotyped. Following the revision of the rules for eradication of TSE in small ruminants Sweden will use the possibility not to cull the herds were NOR 98 has been found and instead put them under movement restrictions and extended monitoring. We will also perform genotyping of about 20 of the animals from these herds either from fallen stock or animals sent to slaughter.

4.7.2.2 Summary table	
Description	Nbr
Animals to be genotyped under the requirements of Annex VII, Chapter A, point 2.3 of Regulation (EC) No 999/2001	0
Animals to be killed under the requirements of Annex VII, Chapter A, point 2.3 of Regulation (EC) No 999/2001	0
<b>Sum:</b>	<b>0</b>

**4.7.3 Breeding programme for resistance to TSEs in sheep**

**4.7.3.1 General description**

Sweden has no breeding programme for resistance to TSE in Sheep

4.7.3.2 Summary table	
Description	Nbr
Ewes to be genotyped under the framework of a breeding programme referred to in Article 6a of Regulation (EC)	0
Rams to be genotyped under the framework of a breeding programme referred to in Article 6a of Regulation (EC)	0
<b>Sum:</b>	<b>0</b>

**5. Costs**

**5.1 Detailed analysis of the costs**

There are currently two laboratories performing TSE tests in Sweden, SVA (NRL) getting samples from fallen stock (including all samples from sheep and goat) and emergency slaughter as well as clinical suspects and Alcontrol laboratory getting samples from healthy slaughtered animals.

1. Estimated costs for cattle 2011:

Calculation of cost per unit for cattle

Test	Laboratory	Samples	Å-price	Euro (=9,5 SEK)	Sum
Euro					
Biorad	SVA (NRL)fallen stock,em. slaughter	13 000	490 SEK	51,58 €	6 370 000 SEK
Biorad	Alcontrol, healthy slaughter	105 000	93 SEK	9,79 €	9 765 000 SEK
Total		118 000	137 SEK (mean)	14,39 €	16 135 000
SEK	1 698 421 €				

**5. Costs**

**5.1 Detailed analysis of the costs**

Cost  
 Test-Kits and reagents, Analysis, transport of samples and sampling equipment (136,74 SEK) 16 135 000 SEK  
 Administrative costs at the Swedish Board of Agriculture 915 000 SEK  
**TOTAL 17 050 000 SEK**

**2. Estimated costs for goat 2011**

Kits and reagents Costs for analysis, transport of samples, sampling equipment, collection of samples (490 SEK /sample) 34 300SEK  
 Administrative costs at the Swedish board of agriculture 35 000 SEK  
**TOTAL 69 300 SEK**

**3. Estimated costs for sheep 20 11**

Kits and reagents, Costs for analysis, transport of samples, sampling equipment, collection of samples 490 SEK/sample) 2 450 000 SEK  
 Administrative costs at the Swedish board of agriculture 350 000 SEK  
 Genotyping of 104 animals (120 SEK/sample screening, 1000 SEK single pos cases) 16 000 SEK  
 Sampling costs for genotyping 27 500 SEK  
 Stamping out of infected herds 0 SEK  
 Costs for collectiona and sampling of sheep (>18 months old dead on farm) 4 552 509 SEK  
**3. TOTAL 7 392 249 SEK**

**5.2 Summary of costs**

Costs related to	Specification	Number of units	Unitary cost in EUR	Total amount in EUR	Community funding requested
Rapid tests	NA	118,000	14	1,698,020	yes
Rapid tests	NA	5,070	52	261,511	yes
Primary molecular tests	NA	0	0	0	yes
4.1 Determination of genotype of animals in the framework of the monitoring and eradication measures laid down by Regulation (EC) No 999/2001	NA	104	16	1,685	yes
4.2 Determination of genotype of animals in the framework of a breeding programme	NA	0	0	0	no
5.1 Compensation for bovine animals to be killed /slaughtered under the requirements of Annex VII, Chapter A, point 2.1 of Regulation (EC) No 999/2001	NA	0	0	0	yes
5.2 Compensation for ovine and caprine animals to be killed /slaughtered under the requirements of Annex VII, Chapter A, point 2.3 of Regulation (EC) No 999/2001	NA	0	0	0	yes
<b>Sum:</b>		<b>123,174</b>		<b>1,961,215</b>	
<b>Sum:</b>		<b>123,174</b>	<b>Sum:</b>	<b>1,961,215</b>	