



EUROPEAN COMMISSION  
HEALTH & CONSUMERS DIRECTORATE-GENERAL

Unit 04 - Veterinary Control Programmes

**SANCO/10482/2009**

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

## **Multi-annual programme for the eradication of Rabies**

**Approved\* for 2010 by Commission Decision 2009/883/EC**

**Estonia**

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

**Application from Estonia for Community financing for program for the eradication, monitoring and control of Rabies for years 2010 – 2011**

**1. Identification of the programme**

Member State: ESTONIA

Disease(s)<sup>1</sup>: RABIES

Request of Community co-financing for<sup>2</sup>: 2010 - 2011

Reference of this document: State Program on Monitoring and Surveillance of Animal Infectious Diseases

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<sup>1</sup> One document per disease is used unless all measures of the programme on the target population are used for the monitoring, control and eradication of different diseases.

<sup>2</sup> Indicate the year(s) for which co-financing is requested.

## 7. Targets

### 7.1. Targets related to testing

#### 7.1.1. *Targets on diagnostic tests*

#### Disease<sup>(a)</sup>: rabies 2010

#### Animal species: wild and domestic animals

Region <sup>(b)</sup>	Type of the test <sup>(c)</sup>	Target population <sup>(d)</sup>	Type of sample <sup>(e)</sup>	Objective <sup>(f)</sup>	Number of planned tests
Estonia	FAT	all animals with suspicion	brain tissue	confirmation of suspected cases	350
Estonia	PCR	all animals with suspicion	brain tissue	confirmation of suspected cases	100
Estonia	CC	all animals with suspicion	brain tissue	confirmation of suspected cases	100
Estonia	FAT	red fox, raccoon dog	brain tissue	monitoring of campaigns	1740
Estonia	TC detection	red fox, raccoon dog	mandibula, tooth	monitoring of campaigns	3478
Estonia	ELISA	red fox, raccoon dog	blood sera	monitoring of campaigns	2000
Estonia	PCR (sequencing)	red fox, raccoon dog	brain tissue	virus strain genotyping	10
Total					

#### Disease<sup>(a)</sup>: rabies 2011

#### Animal species: wild and domestic animals

Region <sup>(b)</sup>	Type of the test <sup>(c)</sup>	Target population <sup>(d)</sup>	Type of sample <sup>(e)</sup>	Objective <sup>(f)</sup>	Number of planned tests
Estonia	FAT	all animals with suspicion	brain tissue	confirmation of suspected cases	350
Estonia	PCR	all animals with suspicion	brain tissue	confirmation of suspected cases	100
Estonia	CC	all animals with suspicion	brain tissue	confirmation of suspected cases	100
Estonia	FAT	red fox, raccoon dog	brain tissue	monitoring of campaigns	1740
Estonia	TC detection	red fox, raccoon dog	mandibula, tooth	monitoring of campaigns	3478
Estonia	ELISA	red fox, raccoon dog	blood sera	monitoring of campaigns	2000
Estonia	PCR (sequencing)	red fox, raccoon dog	brain tissue	virus strain genotyping	10
Total					

- (a) Disease and species if necessary
- (b) Region as defined in the approved eradication programme of the Member State
- (c) Description of the test (for instance SN-test, AB-Elisa, RBT, ...)
- (d) Specification of the targeted species and the categories of targeted animals (for instance sex, age, breeding animal, slaughter animal, ...).
- (e) Description of the sample (for instance blood, serum, milk, ...)
- (f) Description of the objective (for instance qualification, surveillance, confirmation of suspected cases, monitoring of campaigns, seroconversion, control on deleted vaccines, testing of vaccine, control of vaccination, ...)

### 7.3. Targets on vaccination or treatment

#### 7.3.1. Targets on vaccination or treatment<sup>3</sup>

Pursuant to the Minister of Agriculture Regulation No. 67 "Rabies Control Rules" of 20.11.2000 (RTL 2000, 120, 1876) an animal owner is required to ensure that the cats and dogs belonging to him or her are vaccinated. The first vaccination of dogs and cats takes place when animal is 3-4 months old, onwards animals should be given booster vaccination once a year, preferably after 12 months of the last vaccination. The vaccination of farm animals that graze on woodland pastures and pastures adjacent to forests is recommended. Animals are vaccinated by veterinary supervisory officials, authorized veterinary surgeons or licensed veterinarians. In case we had obtained rabies free status the vaccination of pet animals remain compulsory, the vaccine and vaccination will not be covered by the state budget anymore but the animal owner will bear all the costs. For vaccination inactivated adjuvanted vaccine (Rabisin) against rabies is used mainly.

Disease <sup>(a)</sup> : rabies	Animal species: domestic animals					Targets on vaccination or treatment programme				
	Total number of herds <sup>(c)</sup> in vaccination or treatment programme	Total number of animals in vaccination or treatment programme	Number of herds <sup>(c)</sup> in vaccination or treatment programme	Number of herds <sup>(c)</sup> expected to be vaccinated or treated	Number of animals expected to be vaccinated or treated	Number of doses of vaccine or treatment expected to be administered	Number of adults <sup>(d)</sup> expected to be vaccinated	Number of young <sup>(d)</sup> animals expected to be vaccinated		
Estonia 2010					120000	120000				
Estonia 2011					120000	120000				
Total										

(a) Disease and species if necessary

(b) Region as defined in the approved eradication programme of the Member State

(c) Herds or flocks or holdings as appropriate

(d) Only for Bovine brucellosis and Ovine, Caprine brucellosis (*B. melitensis*) as defined in the programme

<sup>3</sup> Data to provide only if appropriate.

7.3.2. Targets on vaccination or treatment<sup>4</sup> of wildlife

Vaccine baits for oral vaccination of wild animals (reservoirs animals of rabies infection, red foxes and raccoon dogs) against rabies are distributed in the total territory of Estonia (45 227 sq km) approximately 20 baits per km (area suitable for distribution ~ 43 000 sq km). Vaccine used must be registered in Estonian State Agency of Medicine and/or registered at the European Community Register of veterinary medicinal products. Vaccine baits should be in compliance with European Pharmacopoeia no. 0746 "European monograph for live oral rabies vaccine for foxes". Vaccine should consist of bait casing attractive for the foxes and raccoon dogs and containing a capsule or a sachet consisting of live vaccine against rabies. The bait should contain a biomarker tetracycline (~150 mg/bait). The baits must fulfil WHO recommended criteria of efficacy, pathogenicity and stability. The minimum titer of the baits at the reception to Estonia must be  $10^{8.0}$  TCID<sub>50</sub> per dose or equal. Rabies strain used in vaccine must be non pathogenic for target and non target species and must fulfil all safety criteria of recommendations formulated by the World Health Organization. The rabies strain must have been tested for innocuity on several wild rodent species. The long lasting immunity should be guaranteed.

Region <sup>(b)</sup>	Square km	Targets on the vaccination or treatment programme		
		Animal species: red fox and raccoon dog	Disease <sup>(a)</sup> : rabies	Number of doses of vaccine or treatments expected to be administered in the campaign
ESTONIA 2010	43 000	2	2	1 720 000
ESTONIA 2011	43 000	2	2	1 720 000
Total				

- (a) Disease and species if necessary  
 (b) Region as defined in the approved eradication programme of the Member State

<sup>4</sup> Data to provide only if appropriate.

8. Detailed analysis of the cost of the programme (one table per year of implementation)

Year 2010	Costs related to	Specification	Number of units	Unitary cost in €	Total amount in €	Community funding requested (yes/no)
1. Testing						
1.1. Cost of the analysis						
		Test: FAT(fox, raccoon dog)	1740	29,97	52 148	yes
		Test: ELISA (fox, raccoon dog)	2 000	21,54	43 080	yes
		Test: TC detection (fox, raccoon dog)	3 478	17,00	59 126	yes
		Test: FAT (all suspected animals)	350	29,97	10 490	yes
		Test: PCR (all suspected animals)	100	47,04	4 704	yes
		Test: cell culture (all suspected animals)	100	43,27	4 327	yes
		Test :PCR (sequencing - in the case of positive result)	10	127,82	1 278	yes
1.2. Cost of sampling		Hunting of foxes and raccoon dogs	3 478	8,44	29 354	yes
		Taking of blood sample	2 000	8,44	16 880	yes
		Transportation of samples	3 478	3,20	11 130	yes
1.3. Other costs		Autopsy (fox, raccoon dog)	1740	5,82	10 127	yes
		Autopsy (all suspected animals)	350	23,14	8 099	yes
2. Vaccination or treatment						
2.1. Purchase of vaccine/treatment		Vaccine baits for wild animals	1 720 000	0,831	1 429 320	yes
2.2. Distribution costs		Aerial distribution (per km2)	90 454	4,48	405 234	yes
2.3. Administering costs						
2.4. Control costs						
3. Slaughter and destruction						
3.1. Compensation of animals						
3.2. Transport costs						
3.3. Destruction costs						
3.4. Loss in case of slaughtering						
3.5. Costs from treatment of products (milk, eggs, hatching eggs, etc)						
4. Cleaning and disinfection						
5. Salaries (staff contracted for the programme only)						
6. Consumables and specific equipment						
7. Other costs						
		Awareness campaign concerning OV	2	9 586,00	19 172	Yes
		<b>TOTAL</b>			<b>2 104 468</b>	

<b>Year 2011</b>	<b>Costs related to</b>	<b>Specification</b>	<b>Number of units</b>	<b>Unitary cost in €</b>	<b>Total amount in €</b>	<b>Community funding requested (yes/no)</b>
<b>1. Testing</b>						
<b>1.1. Cost of the analysis</b>						
		Test: FAT(fox, raccoon dog)	1 740	32,97	57 368	yes
		Test: ELISA (fox, raccoon dog)	2 000	23,69	47 380	yes
		Test: TC detection (fox, raccoon dog)	3 478	18,70	65 039	yes
		Test: FAT (all suspected animals)	350	32,97	11 540	yes
		Test: PCR (all suspected animals)	100	51,74	5 174	yes
		Test: cell culture (all suspected animals)	100	47,60	4 760	yes
		Test :PCR (sequencing - in the case of positive result)	10	140,60	1 406	yes
<b>1.2. Cost of sampling</b>		Hunting of foxes and raccoon dogs	3 478	9,28	32 276	yes
		Taking of blood sample	2 000	9,28	18 560	yes
<b>1.3. Other costs</b>		Transportation of samples	3 478	3,52	12 243	yes
		Autopsy (fox, raccoon dog)	1 740	6,40	11 136	yes
		Autopsy (all suspected animals)	350	25,45	8 908	yes
<b>2. Vaccination or treatment</b>						
<b>2.1. Purchase of vaccine/treatment</b>		Vaccine baits for wild animals	1 720 000	0,914	1 572 080	yes
<b>2.2. Distribution costs</b>		Aerial distribution (per km2)	90 454	4,93	445 938	yes
<b>2.3. Administering costs</b>						
<b>2.4. Control costs</b>						
<b>3. Slaughter and destruction</b>						
<b>3.1. Compensation of animals</b>						
<b>3.2. Transport costs</b>						
<b>3.3. Destruction costs</b>						
<b>3.4. Loss in case of slaughtering</b>						
<b>3.5 Costs from treatment of products (milk, eggs, hatching eggs, etc)</b>						
<b>4. Cleaning and disinfection</b>						
<b>5. Salaries (staff contracted for the programme only)</b>						
<b>6. Consumables and specific equipment</b>						
<b>7. Other costs</b>		Awareness campaign concerning OV	2	10 546,00	21 092	yes
		<b>TOTAL</b>			<b>2 314 898</b>	