



EUROPEAN COMMISSION  
HEALTH & CONSUMERS DIRECTORATE-GENERAL

Unit 04 - Veterinary Control Programmes

SANCO/12880/2010

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

## **Surveillance and Eradication programme of Bluetongue**

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

**Denmark**

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

Program for Eradication : ANNEX 1

<b>Submission Date</b>	<b>Submission Number</b>
21/09/2010	1285060990647-424

1. Identification of the programme		Request of Community co-financing from beginning of	To end of
Member State	Disease	Species	
Denmark	Bluetongue in endemic or high risk areas	Bovines	2011

1.1 Contact			
Contact Name	Contact Phone	Contact Fax	Contact Email
Tina Merik	+45 3395 6042	+45 3967 5248	tm@fvst.dk

2. Historical data on the epidemiological evolution of the disease

## Program for Eradication : PDF detail

### 2. Historical data on the epidemiological evolution of the disease

Denmark experienced the first outbreak of bluetongue serotype 8 (BTV8) in October 2007. In 2008 Denmark had 15 outbreaks of bluetongue. In 2009 no outbreaks.

Compulsory vaccinations were introduced in 2008 and continued in 2009. In 2010 the vaccination became voluntary. Denmark has had an active surveillance programme for bluetongue since 2007.

### 3. Description of the submitted programme

#### Surveillance:

The objective with the surveillance in Denmark is to confirm the presence or absence of circulating bluetongue virus. The surveillance consists of an animal part and an entomological part as requested in Regulation 1266/2007.

#### Surveillance in animals

Monthly sampling and examination of blood from bovines at slaughterhouses will perform the surveillance. The sampling will take place in five months from August to December. The samples will be tested by PCR in order to detect possible circulation of bluetongue virus of all serotypes.

The extent of the surveillance will be as follows:

- Number of geographical grids: 22
- Number of tested animals in each grid monthly: 150
- Number of months with surveillance each year: 5

In order to reduce the expenses to laboratory test the samples will be tested in pools of five.

#### Entomological surveillance

According to Regulation 1266/2007 a minimum of at least one aspiration trap with UV light must be placed in each grid (22) and operated one night each week. This shall at least be done during the period of the year necessary to determine the end and the start of the vector-free period. In addition this shall also be done one time monthly in the vector-free period. • Period of trapping: 5 weeks around the end of the vector free period, 5 weeks around the start of the vector free period, 3 months vector free period. Total: 13. An adequate proportion of the midges must be sent to a specialised laboratory capable of identifying and counting Culicoides species on a routine basis.

### 4. Measures of the submitted programme

#### 4.1 Summary of measures under the programme

**Program for Eradication : PDF detail**

**Duration of the programme**

beginning of 2011 to end of 2011

<b>First Year :</b>	
Control	
Testing	<b>X</b>
Slaughter and animals tested positive	
Killing of animals tested positive	<b>X</b>
Vaccination	
Treatment	
Disposal of products	
Eradication, control or monitoring	<b>X</b>

<b>Last Year :</b>	
Eradication	
Testing	<b>X</b>
Slaughter of positive animals	
Killing of animals tested positive	
Extended slaughter of killing	
Disposal of products	
Other	

## Program for Eradication : PDF detail

### 4.2 Organisation, supervision and role of all stakeholders involved in the programme

- Superior coordination and supervision of the animal and entomological surveillance and reporting of PCR results to Bluetongue-Net is performed by The Danish Veterinary and Food Administration
- Blood samples are tested at the Danish national laboratory for bluetongue, The National Veterinary Institute, Technical University of Denmark, Lindholm.
- Maintenance of traps for Culicoides is performed by farmers on a voluntary basis under the supervision of veterinary officers from the Regional Veterinary and Food Administrations.
- Counting and identification of Culicoides species, including reporting of entomological results to Bluetongue-Net is performed by The National Veterinary Institute, Technical University of Denmark, Frederiksberg.

### 4.3 Description and demarcation of the geographical and administrative areas in which the programme is to be implemented

The whole territory of Denmark will be covered by the surveillance programmes.

### 4.4 Description of the measures of the programme

#### 4.4.1 Notification of the disease

In accordance with the Animal Health Act and Order no. 97 of 22 February 2002 on combating bluetongue, a farmer is obliged to immediately call a veterinarian if the farmer suspects bluetongue. The veterinarian shall immediately notify the Regional Veterinary and Food Control Authority (RVFCA) if the veterinarian suspects bluetongue. A veterinary officer from the RVFCA will inspect the farm and inform the Veterinary Department about the suspicion. If the veterinary officer cannot rule out the suspicion of bluetongue the farm is placed under official surveillance and test material is collected and dispatched to the National Veterinary Institute.

#### 4.4.2 Target animals and animal population

Farmed cattle are target animals.

**4.4.3 Identification of animals and registration of holdings**

Will be identified and registered in the Danish Central Husbandry Register by the owners.

**4.4.4 Qualifications of animals and herds**

Not applicable

**4.4.5 Rules of the movement of animals**

Rules for movement of animals are laid down in Commission Regulation no. 1266/2007 on implementing rules for Council Directive 2000/75/EC as regards the control, monitoring, surveillance and restrictions on movements of certain animals of susceptible species in relation to bluetongue.

**4.4.6 Tests used and sampling schemes**

Test used in surveillance:

- PCR for virus identification: Modified method described by Shaw et al.

Sampling scheme:

- Blood samples are taken from 3.300 bovines every month from July to November. The animals come from all of the country.

**4.4.7 Vaccines used and vaccination schemes**

## Program for Eradication : PDF detail

### 4.4.7 Vaccines used and vaccination schemes

Vaccination against bluetongue became voluntary as from 2010. Only vaccine available is an inactivated, monovalent against bluetongue serotype 8. Vaccination scheme will be in accordance with the recommendation from the vaccine producer

### 4.4.8 Information and assessment on bio-security measures management and infrastructure

Not relevant

### 4.4.9 Measures in case of a positive result

Movement restrictions will be placed on the affected holding.

### 4.4.10 Compensation scheme for owners of slaughtered and killed animals

Rules for compensation to owners of slaughtered and killed animals are laid down in Order no. 239 of 12 April 1991 concerning expenses and compensation related to eradication and prevention of animal diseases.

### 4.4.11 Control on the implementation of the programme and reporting

The Danish Veterinary and Food Administration is in charge of the programme and supervise the results of the survey

## Program for Eradication : PDF detail

### 5. Benefits of the programme

The surveillance is used to document presence or absence of bluetongue virus and freedom for disease.

## 6. Data on the epidemiological evolution during the last five years

### 6.1 Evolution of the disease

#### 6.1.1 Data on herds for year:

Year	Region	Total Nber of herds	Total number of herds under the programme	Number of herds checked	Number of positive herds	Number of new positive herds	Number of herds depopulated	% positive herds depopulated	% herds coverage	Indicators		
										% positive herds prevalence	% new positive herds incidence	%
Sum:												
Total :												

#### 6.1.2 Data on animals for year:

Year	Region	Total number of animals	Number of animals to be tested under the programme	Number of animals tested individually	Number of positives animals	Number of animals with positive result slaughtered or culled	Total number of animals slaughtered	% coverage at animal level	% positive animals prevalence		
										%	%
Sum:											
Total:											



Program for Eradication : PDF detail

6.2 Stratified data on surveillance and laboratory tests

6.2.1 Stratified data on surveillance and laboratory tests for year :

Year	Region	Test Type	Test Description	Number of samples tested	Number of positive samples
2009	Whole country	other test	PCR	13,343	0
			<b>Sum:</b>	<b>13,343</b>	<b>0</b>
2008	not relevant	other test	not relevant	0	0
			<b>Sum:</b>	<b>0</b>	<b>0</b>
2007	not relevant	other test	not relevant	0	0
			<b>Sum:</b>	<b>0</b>	<b>0</b>
2006	not relevant	other test	not relevant	0	0
			<b>Sum:</b>	<b>0</b>	<b>0</b>
2005	not relevant	other test	not relevant	0	0
			<b>Sum:</b>	<b>0</b>	<b>0</b>
			<b>Total:</b>	<b>13,343</b>	<b>0</b>

6.3 Data on infection for year :

Year	Region	Number of herds Infected	Number of animal infected
2009	whole country	0	0
	<b>Sum:</b>	<b>0</b>	<b>0</b>
2008	whole country	15	27
	<b>Sum:</b>	<b>15</b>	<b>27</b>
2007	whole country	1	1
	<b>Sum:</b>	<b>1</b>	<b>1</b>
2006	not relevant	0	0
	<b>Sum:</b>	<b>0</b>	<b>0</b>

Program for Eradication : PDF detail

6.3 Data on infection for year :

Year	Region	Number of herds infected	Number of animal infected
2005	not relevant	0	0
	<b>Sum:</b>	<b>0</b>	<b>0</b>
	<b>Total:</b>	<b>16</b>	<b>28</b>

6.4 Data on the status of herds at the end of year

Year	NUTS Region	Total number of herds and animals under the programme		Unknown		Last check positive		Last check negative		Free or officially free from disease status suspended		Free from disease		Officially free from disease	
		Herds	Animals	Herds	Animals	Herds	Animals	Herds	Animals	Herds	Animals	Herds	Animals	Herds	Animals
	<b>Total:</b>														

Not Free or not officially free from disease

6.5 Data on vaccination or treatment programmes for year

Year	Region	Information on vaccination or treatment programme				Information on vaccination or treatment programme				Number of young animals vaccinated
		Total number of herds	Total number of animals	Number of herds vaccinated or treated	Number of animals vaccinated or treated	Number of doses of vaccine or treatment administered	Number of adults vaccinated	Number of young animals vaccinated		

Program for Eradication : PDF detail

6.5 Data on vaccination or treatment programmes for year

Year	Region	Information on vaccination or treatment programme						
		Total number of herds animals	Number of herds in vaccination or treatment programme	Number of herds vaccinated or treated	Number of animals vaccinated or treated	Number of doses of vaccine or treatment administered	Number of adults vaccinated	Number of young animals vaccinated
Total:								

6.6 Data on wildlife

6.6.1 Estimation of wildlife population for year:

Year	Region	Species	Method of estimation	Estimation of the population
Sum:				
Total:				

6.6.2 Monitor of wildlife for year:

Year	Region	Species	Test Type	Test Description	Number of samples tested	Number of positive samples

6.6.3 Data on vaccination or treatment of wildlife for year:

--	--	--	--	--	--	--

Program for Eradication : PDF detail

6.6.3 Data on vaccination or treatment of wildlife for year:

Year	Region	Square km	Number of doses of vaccine or treatment to be administered	Number of campaigns	Total number of doses of vaccine or treatment to be administered

7. Targets

7.1 Targets related to testing (one table for each year of implementation)

7.1.1 Targets on diagnostic tests for year:

Year	Region	Type of the test	Target population	Type of sample	Objective	Number of planned tests
2011	whole country	PCR	Bovines	blood	surveillance	3,300
					<b>Total:</b>	<b>3,300</b>

7.1.2 Targets on testing herds and animals

7.1.2.1 Targets on the testing of herds for year :

Year	Region	Total number of herds	Total number of herds under the programme	Number of herds expected to be checked	Number of expected positive herds	Number of herds expected to be depopulated	Number of herds expected to be depopulated	% positive herds expected to be depopulated	Target indicators			
									Expected herd coverage	% positive herds Expected period herd prevalence	% new positive herds Expected herd incidence	
	<b>Sum:</b>											
	<b>Total:</b>											

Program for Eradication : PDF detail

7.1.2.2 Targets on the testing of animals for year:

Year	Region	Total number of animals	Number of animals under the programme	Number of animals expected to be tested	Number of animals to be tested individually	Number of expected positive animals	Number of animals with positive result expected to be slaughtered or culled	Total number of animals expected to be slaughtered	Target indicators		
									Expected % coverage at animal level	Expected % animals (Expected animal prevalence)	% positive animals
	The whole territory of Denmark - 22 grids	1,600,000	1,600,000	16,500	0	0	0	0	1%		0%
	<b>Sum:</b>	<b>1,600,000</b>	<b>1,600,000</b>	<b>16,500</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>			
	<b>Total:</b>	<b>1,600,000</b>	<b>1,600,000</b>	<b>16,500</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>			

7.2 Targets on qualification of herds and animals for year :

Year	Region	Total number of herds and animals under the programme	Expected unknown			Last check positive			Last check negative			Expected free or officially free from disease status suspended			Expected free from disease			Expected officially free from disease		
			Herds	Animals	Herds	Animals	Herds	Animals	Herds	Animals	Herds	Animals	Herds	Animals	Herds	Animals	Herds	Animals		
	<b>Sum:</b>																			
	<b>Total:</b>																			

7.3 Targets on vaccination or treatment

Year	Region	Total number of herds and animals under the programme	Expected unknown	Last check positive	Last check negative	Expected free or officially free from disease status suspended	Expected free from disease	Expected officially free from disease
	<b>Sum:</b>							
	<b>Total:</b>							

Program for Eradication : PDF detail

7.3 Targets on vaccination or treatment

7.3.1 Targets on vaccination or treatment for year :

Targets on vaccination or treatment programme								
Year	NUTS Region	Total number of herds in vaccination or treatment programme	Total number of animals in vaccination or treatment programme	Number of herds 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 expected to be vaccinated	Number of young animals expected to be vaccinated
		<b>Sum:</b>						
		<b>Total:</b>						

7.3.2 Targets on vaccination or treatment of wildlife for year

Targets on vaccination or treatment programme			
Year	NUTS Region	Square km	Number of doses of vaccine or treatments expected to be administered in the campaign
			Expected number of campaigns
			Total number of doses of vaccine or treatment expected to be administered
		<b>Sum:</b>	
		<b>Total:</b>	

8. Detailed analysis of the cost of the programme for year

Year	Cost Category	Specification	Cost related to	Number of units	Unitary cost in EUR	Total amount in EUR	Community funding request
2011	1. Testing	Entomological catches	sampling and analysis	286	66.67	19,067.62	yes
		Entomological lab.	operation of lab.	1	133333	133,333.00	no

Program for Eradication : PDF detail

8. Detailed analysis of the cost of the programme for year

Year	Cost Category	Specification	Cost related to	Number of units	Unitary cost in EUR	Total amount in EUR	Community funding request
2011	1. Testing	PCR test (blood from bovines)	Cost of analysis	3,300	53.33	175,989.00	yes
		PCR test (blood from bovines)	Cost of development and administration of sampling	1	37005	37,005.00	yes
		PCR test (blood from bovines)	Cost of sampling	16,500	1.75	28,875.00	yes
		<b>Sum:</b>		<b>20,088</b>		<b>394,269.62</b>	
	2. Vaccination or treatment	not relevant	not relevant	0	0		no
	<b>2. Vaccination or treatment</b>			<b>Sum:</b>	<b>0</b>		<b>0.00</b>
	3. Slaughter and destruction	not relevant	not relevant	0	0		no
	<b>3. Slaughter and destruction</b>			<b>Sum:</b>	<b>0</b>		<b>0.00</b>
	4. Cleaning and disinfection	not relevant	not relevant	0	0		no
	<b>4. Cleaning and disinfection</b>			<b>Sum:</b>	<b>0</b>		<b>0.00</b>
5. Salaries (staff contracted for the programme only)	not relevant	not relevant	0	0		no	
<b>5. Salaries (staff contracted for the programme only)</b>			<b>Sum:</b>	<b>0</b>		<b>0.00</b>	
6. Consumables and specific equipment	not relevant	not relevant	0	0		no	
<b>6. Consumables and specific equipment</b>			<b>Sum:</b>	<b>0</b>		<b>0.00</b>	
			<b>Sum:</b>	<b>20,088</b>		<b>394,269.62</b>	
	<b>Total:</b>			<b>20,088</b>		<b>394,269.62</b>	

2011