



EUROPEAN COMMISSION
HEALTH AND CONSUMERS DIRECTORATE-GENERAL

Director General

SANCO/10483/2013

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

Eradication programme for Ovine and Caprine Brucellosis

Cyprus

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

* in accordance with Council Decision 2009/470/EC

Standard requirements for the submission of programme for eradication, control and monitoring

version : 2.2

1. Identification of the programme

Member state : KYPROS

Disease : Sheep and goat brucellosis (B. melitensis)

Species : Sheep and goats

This program is multi annual : no

Request of Community co-financing for
year :

2013

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1.1 Contact

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2. Historical data on the epidemiological evolution of the disease

Provide a concise description on the target population (species, number of herds and animals present and under the programme), the main measures (sampling and testing regimes, eradication measures applied, qualification of herds and animals, vaccination schemes) and the main results (incidents, prevalence, qualification of herds and animals). The information is given for distinct periods if the measures were substantially modified. The information is documented by relevant summary epidemiological tables (point 6), complemented by graphs or maps (to be attached).

(max. 32000 chars) :

The sheep & goat brucellosis (*Brucella melitensis*) eradication and control program is applied on the area of the Republic of Cyprus effectively controlled by the Veterinary Services. From 1999 until October 2004, the United Nations Office for Project Services has funded the bicomunal sheep & goat brucellosis eradication program (UNOPS, Cont. No: WSE-PS03-4463). From 2004 until now the EU has co-financed the programme according to the relevant EU Decisions.

The total sheep & goat population is estimated to 583,790 sheep and goats, reared in 3,362 flocks. The sheep & goat population under the brucellosis eradication and control program is 512,179 sheep and goats, reared in 3,156 flocks.

Vaccination for brucella is prohibited. Testing is based on Rose Bengal Test (RBT) as screening test and Complement Fixation Test (CFT) as confirmatory test. In positive flocks, all animals are tested in parallel with RBT and CFT. A protocol dealing with the false positives exists which uses also culture, together with additional epidemiological information, to rule out false positive serological reactions.

Negative flocks are subject to the testing scheme of Directive 91/68 EEC for the declaration and maintenance of officially free status. Positive flocks are subject to monthly reexaminations and slaughtering of the positive animals until they give four negative examinations with a distance of six months between the first and the last examination. Further measures are applied in positive flocks including movement restrictions, measures for the use of milk and disinfection.

According to the epidemiological data, from 2000 until 2011, the prevalence and incidence of sheep & goat brucellosis in Cyprus have been decreasing (see Graph 1, attached document a_1332835318701).

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The evolution of the officially free flocks and animals is presented in Graph 2, attached document a_1332835327005.

3. Description of the submitted programme

Provide a concise description of the programme with its main objective(s) (monitoring, control, eradication, qualification of herds and/or regions, reducing prevalence and incidence), the main measures (sampling and testing regimes, eradication measures to be applied, qualification of herds and animals, vaccination schemes), the target animal population, the area(s) of implementation and the definition of a positive case.

(max. 32000 chars) :

The main objectives of the programme are the eradication of the disease and the declaration of all flocks under the programme as brucellosis officially free.

The sheep & goat brucellosis eradication program is based on test and extended slaughter or killing of positive animals, implemented in the area effectively controlled by the Veterinary Services of the Republic of Cyprus, concerning all small ruminants over 6 months old in farms for breeding and production. Fattening farms are excluded from the programme, because all animals go directly to slaughterhouses.

According to the L.O.725/2003 treatment of infected animals with brucellosis and the use of vaccines are prohibited. Routine testing is based in serial testing with RBT and CFT. A standardized protocol to deal with no-negative results in RBT and CFT test has been introduced since July 2010. This protocol was designed after evaluation of the available information from the previous years of the implementation of the programme.

Flocks with no negative results in RBT and CFT are initially categorized as follows:

- Category A: Flocks of initial low risk for brucellosis: These are flocks which have only one animal which is RBT positive and CFT negative. In this case the flock is restricted and the animal is confiscated and used for further diagnostic investigation with post mortem examination and culture. At the same time epidemiological investigation for brucellosis is performed. All information is evaluated and the flock is allocated to a final category (final category A - false positive flock with no further actions to return to the initial brucellosis status, final category B – false positive flock that requires a negative examination of all animals over 6 months to return to the initial brucellosis status, final category C – positive flock).
- Category B: Flocks of initial medium risk for brucellosis: These are flocks which have over one animal RBT positive and CFT negative or flocks with one or more animals which are RBT positive and show positive CFT titres near the cut off, taking into account the declared laboratory uncertainty of one dilution (20 – 33.3 ICFTU/ml). In this case the flock is restricted and the animal/animals are confiscated and use for further diagnostic investigation with post mortem examination and culture. At the same time epidemiological investigation for brucellosis is performed. All information is evaluated and the flock is allocated to a final category (final category B – false positive flock that requires a negative examination of all animals over 6 months to return to the initial brucellosis status, final category C – positive flock).
- Category C: Flocks of initial high risk for brucellosis (positive flocks): These are flocks which have one or more animals RBT positive and CFT with a titre over 33,3 ICFTU/ml. In this case the measures for positive flocks which are mentioned in paragraph 4.4.9 are applied.

According to the epidemiological data, from 2000 until 2011, the prevalence and incidence of sheep & goat brucellosis in Cyprus have been decreasing (see Graph 1, attached document a_1332835318701). The evolution of the officially free flocks and animals is presented in Graph 2, attached document

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a_1332835327005.

Reinforcement of samplings across the green line is on place when there is information that poses risk of transmission of the disease. Currently, all flocks, including the ones in the borders, are examined at least annually and also the pre movement test is on place. When the officially free status will be granted to the country and the samplings will be adjusted to the officially free status, additional measures will be applied across the green line.

4. Measures of the submitted programme

4.1 Summary of measures under the programme

Duration of the programme : 2013

First year :

- Control
- Testing
- Slaughter and animals tested positive
- Killing of animals tested positive
- Vaccination
- Treatment
- Disposal of products
- Eradication, control or monitoring

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

Describe the authorities in charge of supervising and coordinating the departments responsible for implementing the programme and the different operators involved. Describe the responsibilities of all involved.

(max. 32000 chars) :

The Veterinary Services, which belongs to the Ministry of Agriculture Environment and Natural Recourses, is responsible for the application of the sheep & goat brucellosis eradication and control programs. The Animal Health and Welfare Division is responsible for the coordination of the programmes.

The five District Veterinary Offices with six District Veterinary Stations are responsible for the collection and the transport of the samples to the Laboratories, the information of the owners for the results, the preparation of epidemiological reports, the confiscations and the compensations of animals.

The Animal Health Laboratory performs the RBT, the CFT and the cultures.

The Laboratory report all the results to the District Veterinary Offices and to the Animal Health and Welfare Division.

The Animal Health and Welfare Division keeps the information about the progress of the programme in a central database.

A committee of three Veterinary Officers examines and evaluates the no negative results according to the above mentioned relative protocol. The committee reports to the Director for any actions not included in the protocol (e.g. whole flock depopulation).

In every no negative case the slaughterhouses and the dairy plants are informed.

In 2010 a standardized system of documents used for the implementation has been developed by the Animal Health and Welfare Division.

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

Describe the name and denomination, the administrative boundaries, and the surface of the administrative and geographical areas in which the programme is to be applied. Illustrate with maps.

(max. 32000 chars) :

The program is implemented in the area effectively controlled by the Veterinary Services of the Republic of Cyprus (see Map 1, attached document a_1332937788904).

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4.4 Description of the measures of the programme

A comprehensive description needs to be provided of all measures unless reference can be made to Union legislation. The national legislation in which the measures are laid down is mentioned.

4.4.1 Notification of the disease

(max. 32000 chars) :

Brucellosis is a notifiable disease in Cyprus according to article 6 of the Law 109(I)2001. Any case of abortion or other symptoms related to brucellosis are compulsory notifiable to Veterinary Services of the Republic of Cyprus.

4.4.2 Target animals and animal population

(max. 32000 chars) :

The total sheep & goat population is estimated to 583,790 sheep and goats, reared in 3,362 flocks. The sheep & goat population under the brucellosis eradication and control program is 512,179 sheep and goats over 6 months old, reared in 3,156 in breeding and production flocks. Fattening farms are not included in the programme, because the animals go directly to the slaughterhouses.

4.4.3 Identification of animals and registration of holdings

(max. 32000 chars) :

All sheep & goats are ear tagged on both ears with an individual identification code in accordance with L.O. 341/2010 and EU Reg. 21/2004.

The central authority has registered all sheep & goats flocks in the Republic of Cyprus and each has been allocated a unique herd number in accordance with L.O. 338/2000 and 399/2002.

4.4.4 Qualifications of animals and herds

(max. 32000 chars) :

The programme for the qualification of the herds is based on the following legislation: 91/68 EEC, L.O. 725/2003 and 56/2005.

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4.4.5 Rules of the movement of animals

(max. 32000 chars) :

All movements of animals should be reported and registered on a central database and are allowed only after a brucellosis negative serological examination.

Movements from infected herds are allowed after a special license and only for slaughter.

The central Database of the Animal Identification and Registration scheme enables tracing of any animal from the date of birth to the date of death or slaughter.

4.4.6 Tests used and sampling schemes

(max. 32000 chars) :

Serological tests:

Flock screening: Rose Bengal Test in all animals over 6 months old.

Confirmation: Complement Fixation Test, in all animals showing positive reaction to Rose Bengal.

Infected farms: Monthly screening of all animals over 6 months with Rose Bengal Test and Complement Fixation Test.

Microbiological tests:

Samples: Milk samples from seropositive animals (centrifugation and sampling from the cream and deposit)

Aborted fetuses (gastric content and lung)

Isolation: On Brucella medium incubating in 37C with and without CO2

Confirmation on the species level: Dye of the colony with Gram and Stamp. Culture on Mc Conkey agar (lactose fermentation) and Blood agar (Haemolysis).

Infected flocks are under monthly reexaminations and slaughter of the positive animals. In officially free herds a percentage of animals are examined serologically once a year. The programme for the qualification of the flocks is based on the Directive 91/68/EEC.

4.4.7 Vaccines used and vaccination schemes

(max. 32000 chars) :

According to the L.O.725/2003 the use of vaccines are prohibited.

4.4.8 Information and assessment on bio-security measures management and infrastructure in place in the holdings involved.

(max. 32000 chars) :

N / A

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4.4.9 Measures in case of a positive result

A short description is provided of the measures as regards positive animals (slaughter, destination of carcasses, use or treatment of animal products, the destruction of all products which could transmit the disease or the treatment of such products to avoid any possible contamination, a procedure for the disinfection of infected holdings, the therapeutic or preventive treatment chosen, a procedure for the restocking with healthy animals of holdings which have been depopulated by slaughter and the creation of a surveillance zone around infected holding)

(max. 32000 chars) :

The measures taken in positive flocks are:

- a. The farm is placed under movement restriction.
- b. The Organizations collecting the milk are notified to collect the milk from the negative animals from the infected farms in separate milk tanks for pasteurization.
- c. Positive animals are isolated from the other animals until slaughter. In case of whole flock depopulation, restocking is permitted after 6 months.
- d. Positive animals are valued before slaughter. Compensations are paid to owners.
- e. Dogs or other species of animals susceptible to Brucellosis are also examined serologically.
- f. One month after the slaughter, all animals are reexamined serologically.
- g. Serological reexamination of the positive flocks is performed every month, and the seropositive animals are culled.
- h. The owners clean and disinfect their farms under the supervision of the Veterinary Services.
- i. The manure is collected and disinfected in a place far from establishments.

All the measures mentioned above are included in the following legislation:

1. The animal health laws (N. 109 (I)/2001, N. 82(I)/2003 and 116(I)/2007)
2. The control of Brucellosis in sheep and goats order of 2003 (L.O. 725/2003)
3. The animal health (requirements governing the trade in ovine and caprine animals), regulations of 2005 (L.O. 56/2005)
4. Directive 91/68/EEC.

A positive Category C flock (as defined in paragraph 3) is candidate for depopulation when culture is positive. In this case, the Brucellosis Committee takes into consideration the laboratory results and the epidemiological data and reports its opinion concerning depopulation to the Director. The key factor for depopulation will be any suspicion of spread of the disease within the flock.

4.4.10 Compensation scheme for owners of slaughtered and killed animals

(max. 32000 chars) :

A designated three member committee sets the maximum value for the compensated animals. Compensated animals include those giving a positive result either to Rose Bengal or to CFT or to both of them or in case of depopulation of all the animals in the flock. The committee has lowered the compensation prices since the recommendation by the Task Force in 2009.

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4.4.11 Control on the implementation of the programme and reporting

(max. 32000 chars) :

The progress of the programme performed by the District Veterinary Offices is controlled by the Animal Health and Welfare Division. At least three times per year a thorough follow up of samplings is made and updated statistical information and sampling programmes are sent to District Veterinary Offices. Also supervision is performed through internal audits to the District Veterinary Offices.

5. Benefits of the programme

A description is provided of the benefits for farmers and society in general

(max. 32000 chars) :

The benefits for the farmers and society are related to the assurance of animal and public health through the implementation of the program .

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

Data already submitted via the online system for the years 2007 - 2010:

yes

6.1 Evolution of the disease

Evolution of the disease:

Not applicable

Applicable...

6.1.1 Data on herds for year: 2011

Region	Animal species	Total number 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 Period herd prevalence	% new positive herds Herd incidence	
CYPRUS	SHEEP & GOATS	3 362	3 156	3 036	0	0	0		96,198			X
Total		3 362	3 156	3 036	0	0	0		96,198			

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Add a new row

6.1.2 Data on animals for year : **2011**

Region	Animal species	Total number of animals	Number of animals to be tested under the programme	Number of animal tested	Number of animals tested individually	Number of positives animals	Slaughtering		Indicators		
							Number of animals with positive result slaughtered or culled	Total number of animals slaughtered	% coverage at animal level	% positive animals Animal prevalence	
CYPRUS	SHEEP & GOATS	583 790	512 179	245 766	245 766	0	0	16	47,984	0	X
Total		583 790	512 179	245 766	245 766	0	0	16	47,98	0	
ADD A NEW ROW											

6.2 Stratified data on surveillance and laboratory tests

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6.2.1 Stratified data on surveillance and laboratory tests for year : **2011**

Region	Animal Species	Test Type	Test Description	Number of samples tested	Number of positive samples
CYPRUS	SHEEP & GOATS	serological test	ROSE BENGAL TEST	245 766	18
CYPRUS	SHEEP & GOATS	serological test	COMPLEMENT FIXATION	1 856	0
CYPRUS	SHEEP & GOATS	microbiological or virological test	CULTURE	91	0
Total				247 713	
ADD A NEW ROW					

6.3 Data on infection

Data on infection Not applicable Applicable...

6.3 Data on infection at the end of year : **2011**

Region	Animal Species	Number of herds infected	Number of animals infected

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CYPRUS	SHEEP & GOATS	0	0	X
Total		0	0	
Add a new row				

6.4 Data on the status of herds

Data on the status of herds : Not applicable Applicable...

6.4 Data on the status of herds at the end of year : 2011

Status of herds and animals under the programme															
Region	Animal Species	Total number of herds and animals under the programme		Not Free or not officially free from disease				Free or officially free from disease status suspended		Free from disease		Officially free from disease			
		Herds	Animals	Unknown		Last check positive		Last check negative		Herds	Animals	Herds	Animals	Herds	Animals
				Herds	Animals	Herds	Animals	Herds	Animals						
CYPRUS	SHEEP & GOATS	3 156	512 179	0	0	0	0	295	32 026	0	0	0	0	2 861	480 153
Total		3 156	512 179	0	0	0	0	295	32 026	0	0	0	0	2 861	480 153

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	Add a new row	
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6.5 *Data on vaccination or treatment programmes*

Data on vaccination or treatment programmes is *Not applicable* *Applicable...*

6.6 *Data on wildlife*

Data on Wildlife is: *Not applicable* *Applicable...*

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7. Targets

The blocks 7.1.1, 7.1.2.1, 7.1.2.2, 7.2, 7.3.1 and 7.3.2 are repeated multiple times in case of first year submission of multiple program.

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

7.1.1 Targets on diagnostic tests for year : **2013**

Region	Type of the test	Target population	Type of sample	Objective	Number of planned tests
CYPRUS	ROSE BENGAL TEST	Sheep and goat	serum	surveillance	250 000 X
CYPRUS	COMPLEMENT FIXATION TEST	Sheep and goat	serum	confirmation of suspected cases	1 500 X
CYPRUS	CULTURE	Sheep and goat	MILK, LYMPHNODES,P	confirmation of suspected cases	100 X
Total					251 600
Add a new row					

7.1.2 Targets on testing herds and animals

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7.1.2.1 Targets on testing herds Not applicable Applicable...

7.1.2.1 Targets on the testing of herds for year: **2013**

Region	Animal species	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 expected new positive herds	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
CYPRUS	SHEEP AND GOATS	3 362	3 156	3 156	1	1	1	100	0,03	0,03	X
Total		3 362	3 156	3 156	1	1	1	100	0,03	0,03	
Add a new row											

7.1.2.2 Targets on testing animals Not applicable Applicable...

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7.1.2.2 Targets on the testing of animals for year : **2013**

Region	Species	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	Slaughtering		Target indicators		
							Number of animals with positive result expected to be slaughtered or culled	Total number of animals expected to be slaughtered	Expected % coverage at animal level	% positive animals (Expected animal prevalence)	
CYPRUS	SHEEP&GOATS	583 790	512 179	200 000	200 000	10	10	230	39,05	0,01	X
Total		583 790	512 179	200 000	200 000	10	10	230	39,05	0,01	
							Add a new row				

7.2 Targets on qualification of herds and animals

Targets on qualification of herds and animals Not applicable Applicable...

7.2 Targets on qualification of herds and animals for year : **2013**

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		Targets on the status of herds and animals under the programme											
		Expected not free or not free from disease				Expected free or officially free from disease status suspended				Expected free from disease			
		Last check positive		Last check negative		Last check positive		Last check negative		Expected free from disease		Expected free from disease	
Region	Animal species	Herds	Animals	Herds	Animals	Herds	Animals	Herds	Animals	Herds	Animals	Herds	Animals
CYPRUS	SHEEP & GOATS	3 156	512 179	1	200	0	0	0	0	0	0	3 155	511 879
Total		3 156	512 179	1	200	0	0	0	0	0	0	3 155	511 879
Add a new row													

7.3 Targets on vaccination or treatment

7.3.1 Targets on vaccination or treatment is Not applicable Applicable...

7.3.2 Targets on vaccination or treatment of wildlife is Not applicable Applicable...

8. Detailed analysis of the cost of the programme for year: 2013

The blocks are repeated multiple times in case of first year submission of multiple program.

1. Testing							
Cost related to	Specification	Unit	Number of units	Unitary cost in EUR	Total amount in EUR	Union funding requested	
Cost of analysis	Rose bengal test	Individual animal sample/test	250 000	0.33	82500	yes	X
Cost of analysis	Complement fixation test	Individual animal sample/test	1 500	3.69	5535	yes	X
Cost of analysis	Bacterial culture	Individual animal sample/test	100	3.92	392	yes	X
Cost of sampling - lump sum	Domestic animals	Individual animal sample/test	250 000	0.5	125 000	yes	X
					Add a new row		
2. Vaccination or treatment							
Cost related to	Specification	Unit	Number of units	Unitary cost in EUR	Total amount in EUR	Union funding requested	
					Add a new row		
3. Slaughter and destruction							
Cost related to	Specification	Unit	Number of units	Unitary cost in EUR	Total amount in EUR	Union funding requested	
Compensation of animals	Killing and disposal of animals	Animal culled	230	110	25300	yes	X

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Transport costs		Killing and disposal of animals	Animal culled	230	5	1150	yes	X
Add a new row								
4. Cleaning and disinfection								
Cost related to	Specification	Unit	Number of units	Unitary cost in EUR	Total amount in EUR	Community funding requested		
					Add a new row			
5. Salaries (staff contracted for the programme only)								
Cost related to	Specification	Unit	Number of units	Unitary cost in EUR	Total amount in EUR	Union funding requested		
					Add a new row			
6. Consumables and specific equipment								
Cost related to	Specification	Unit	Number of units	Unitary cost in EUR	Total amount in EUR	Union funding requested		
					Add a new row			
7. Other costs								
Cost related to	Specification	Unit	Number of units	Unitary cost in EUR	Total amount in EUR	Union funding requested		
					Add a new row			
Total					239 877,00 €			

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Attachments

IMPORTANT :

- 1) The more files you attach, the longer it takes to upload them .
- 2) This attachment files should have one of the format listed here : [.zip](#), [.jpg](#), [.jpeg](#), [.tiff](#), [.tif](#), [.xls](#), [.doc](#), [.bmp](#), [.pna](#).
- 3) The total file size of the attached files should not exceed 2 500Kb (+- 2.5 Mb). You will receive a message while attaching when you try to load too much.
- 4) IT CAN TAKE **SEVERAL MINUTES TO UPLOAD** ALL THE ATTACHED FILES. Don't interrupt the uploading by closing the pdf and wait until you have received a Submission Number!
- 5) Zip files cannot be opened (by clicking on the Open button). All other file formats can be opened.

Attachment
reference

a_1332835318701

Attachment
reference

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Attachment
reference

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