



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

SANCO/3749/2008

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

Eradication programme of Bovine Brucellosis

Approved* for 2009 by Commission Decision 2008/897/EC

Malta

* in accordance with Commission Decision 90/424/EEC

1. Identification of the programme

Member State:	Malta
Disease:	Brucellosis
Year of implementation	2009
Reference of this document	MT-BRUCELLOSIS-09
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2. Historical data on the epidemiological evolution of the disease

In the past *Brucella* has been associated with Malta for several reasons namely through the association of consumption of raw sheep and goat milk by British troops and the contraction of "Malta fever" and through the discovery in Malta of *Brucella Melitensis*. The first National eradication programme was initiated in the 50's, this becoming compulsory in 1961. In 1973: the island of Gozo was submitted to a test and slaughter programme. The main problem then was in the sheep and goat population where 21% of goats and 5.2% of the sheep on the island were infected. Only 0.5% of the cattle on the island were reactors. By 1980 Gozo had only 0.1% of cattle positive while there were no cases in either bovine or ovine animals. As limited funds were available for an eradication programme in Malta in the early 80's the Malta Veterinary Services allowed the use of the 45/20 vaccine for cattle herds either had non active infection or were contiguous to an infected farm, during this period 8% of cattle in Malta were infected. Farmers were also assisted to voluntarily slaughter infected animals. Out of 22 herds vaccinated at the time 15 were accredited within 7 years of vaccination.

In 1983 a survey was carried out which showed that 12% of goats and 5% of sheep were infected.

In 1987 funds were made available for the eradication of both *Brucella* and TB, another survey showed of those farms supplying milk for pasteurization, 2% of bovine animals, 9% of goats and 1% of sheep were infected. In view of this situation a "blitz" approach was taken which included the following measures:-

- Legislation was amended that included the compulsory registration of all dairy animals, more powers to the Veterinary Services and the control of movement of all dairy animals.
- A public awareness campaign on how the disease was transmitted had the beneficial results that over 1000 previously unknown holdings were registered.
- No movement of animals except for slaughter was allowed in the first three months of this scheme.
- All animals were identified by tagging and freeze branding and tested in the first 12 months from the start of the programme.
- All farms with more than 10% animals infected were depopulated within the first 8 months of the scheme. Depopulated farms were cleaned and left empty for six months.
- All animals on problem farms were identified by freeze branding with a letter B.
- Testing on infected farms was carried out at 3 month intervals.
- Reactors were slaughtered not later than 14 days following a positive test result.
- Accredited herds were tested twice yearly.
- Compensation in the form of replacement animals was given in the case of bovine animals while financial compensation was given in the case of sheep and goats.

Animals in the milk-producing herds are tested annually, however those bovine animals on non-milk producing herds over one year are not always tested annually. All animals brought in for slaughter at the civil abattoir, being the only one present on the Island are tested.

The twice yearly testing of bovine, ovine and caprine animals by the Rose Bengal test is still ongoing. Furthermore all RBT positive reactors are then subject to the Complement Fixation test. If these test positive the animal is slaughtered and tissues lifted for culture. All dairy herds are tested through the Milk Ring test three times a year.

All animal movements including farm to farm, slaughter and temporary movements such as movements to shows cannot be carried out without a movement permit that has to be obtained from the competent authorities and is only issued on verification of the health status of the holding.

3. Description of the submitted programme

The main objective of the programme is to achieve a disease-free status for Brucellosis from all bovine herds in Malta and Gozo, in accordance to Council Directive 64/432. In order to achieve this, *brucella melitensis* has to be also eradicated from ovine / caprine herds taking in consideration the confined local surface area.

The testing regime followed is in accordance to Council Directive 63/432. All Bovine animals one year and over will be subjected to two serological tests within 12 months at an interval of at least 3 months. All herds that supply milk for human consumption will undergo bulk milk testing three times a year, at an interval of at least three months.

The testing regime in ovine/caprine herds is in accordance to Council Directive 91/68. All ovine/caprine animals over six months will be subjected to two serological tests within a year at an interval of not less than three months.

The Rose Bengal plate test will be used on both bovine and ovine/caprine herds. Following a positive result to the Rose Bengal tests the sample will be retested using the complement fixation test.

Blood samples containing 20 or more ICFT units /ml will be considered as brucella positive. Those animals resulting positive to CFT will be slaughtered. The holding will be officially declared as brucella -infected and all movement of susceptible animals will be prohibited, except for slaughter. Milk from infected animals will be considered not fit for human consumption and discarded. The whole herd will be retested after one month from the date of slaughter of the last brucella-infected animal.

An epidemiological inquiry will be carried out to investigate on recent movement of animals and if deemed necessary, other herds will be tested. The herd will be considered as brucella-free only until all animals result negative to two serological consecutive tests carried out at an interval of at least three months.

The programme will cover the islands of Malta and Gozo which for the purpose of this programme will be considered as one region.

4. Measures of the submitted programme

4.1. *Summary of measures under the programme*

Duration of the programme: One year

First year: 2009

First year:

Control

Eradication

Testing

Testing

Slaughter of animals tested positive

Slaughter of animals tested positive

Killing of animals tested positive

Extended slaughter or killing

Disposal of products

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

The Veterinary Regulation, Fisheries Conservation and Control is the Central authority based in Malta is responsible for the administration, sampling, laboratory testing, slaughtering, collection and reporting of all data pertaining to this eradication programme. The Ministry of Gozo (Veterinary Division) is only responsible for sampling in Gozo.

The National Veterinary Laboratory:

(i) Senior veterinary officer will be responsible for:

- ensure that samples are analysed in accordance to time frame and methodology as laid down in the programme
- reporting results to the animal health section and CVO
- collecting/ filing all relevant data.

Animal Health Department:

(ii) Veterinary support officer in charge of the bovine/ovine/caprine section will be responsible for:

- co-ordinating sampling team
- making appointments with the farmers and preparing daily sampling schedules
- collaborating with the senior veterinary officer i/c lab
- organizing on farm investigation in cases of suspect/confirmed positive results
- collaborate in census, movement restriction, eradication and cleaning measures
- collaborate and ensure restocking with brucella-free animals.

(iii) Assistant Veterinary Support Officers will be responsible for:

- Ensuring to follow appropriate training
- collecting and transporting samples appropriately
- deliver samples within 24hours from collection to the laboratory
- ensure that accompanying documents are filled appropriately

(iv) Veterinary Officer responsible for by -products:

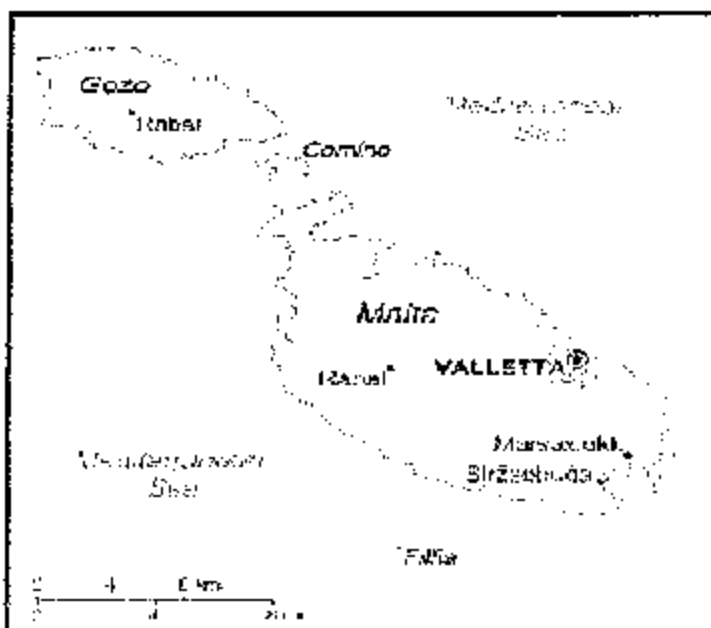
- is responsible of ensuring that biosecurity measures and provisions in Council Regulation 1174/2002 are adhered to during disposal of carcasses and products, were necessary.

(v) Chief Veterinary Officer

Following recommendations from senior veterinary officer i/c lab and veterinary officer i/c of bovine/ovine/caprino section the CVO be responsible for:

- Issuing a brucella -free status document for the farm.
- Responsible of issuing restriction movement documents
- Issuing document for lifting restriction measures on a farm and /or permitting repopulation.

4.3. The Islands of Malta and Gozo are covered by this programme and are considered as one region. The Veterinary regulation Fisheries Conservation and Control Division administers the whole region.



4.4. Description of the measures of the programme:

4.4.1. Notification of the disease:

Veterinary Services Act, Chapter 437 of the laws of Malta, sections 5 and 6

Legal Notice 314/2005 Chapter 437 of the Veterinary Services Act, "Measures for the Eradication of Brucellosis, Tuberculosis and Leucosis in cattle rules"

Prevention of Disease Ordinance, Chapter 36 of the laws of Malta, section 68

4.4.2. Target animals and animal population:

All bovine animals over 12 months for surveillance purposes and all ovine/Caprine animals over 6 months for control purposes.

Bovine population of Malta and Gozo (National herd database 31-12-07)

MDP (Milk dairy producers)

Cows over 2 years	Heifers < / =1 year	Heifers 1 to 2 years	Calves < 3 months	Breeding Bulls	Fattening Bulls
7999	2740	2552	1881	463	3552

NON-Malta Dairy Products

Bovine animals
2040

4.4.3. Identification of animals and registration of holdings:

Veterinary Services Act, section 7

Milking Animals Regulation S.L. 36.32 section 3

All livestock holdings are registered with the Veterinary Regulation, Fisheries Conservation and Control Division. Milk producing herds are allotted a unique herd number (churn number), while non milk producing herds are allotted a unique premises number. All the information pertinent to each farm is also kept on the National Herd database. This system covers bovine, ovine and caprine holdings.

European Union Act, Chapter 460 of the laws of Malta, section 3-4

Regulation (EC) No 1760/2000 of the European Parliament and of the Council of 17 July 2000 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

Council Directive 92/102/EEC of 27 November 1992 on the identification and registration of animals (amended by OJ L 005 09.01.2004 p.8)

Control of marking of animals regulation S.L. 36.17 sections 2-3

Undulant fever (prevention) regulation S.L. 36.04 section 4

All bovine, caprine and ovine animals are tagged and all the information is stored in the National Herd database. The transfer or movement of animals from one holding to another can only be done with the authorisation of the competent authority.

4.4.4. Qualifications of animals and herds

Qualification of animal herds is in accordance with Council Directive 64/432.

Bovine animals

Legal Notice 314/2005 Chapter 437 of the Veterinary Services Act, "Measures for the Eradication of Brucellosis, Tuberculosis and Leucosis in cattle rules"

All those animals resulting positive to CFT will be considered as brucella- infected animals and therefore will be slaughtered. The official veterinarian at the civil abattoir on inspection will deem the carcass as fit or unfit for human consumption. slaughtered.

Animals having an Rose Bengal test negative or a Rose Bengal test positive but the complement fixation test is less than 20ICFT units will be considered as free from brucella.

Bovine herds:

A holding will be officially declared as brucella –infected if an animal tested according to the programme results positive to the complement fixation test.

The whole herd will be retested after one month from the date of slaughter of the last brucella-infected animal.

The herd will be considered as brucella- free only until all animals result negative to two serological consecutive tests carried out at an interval of at least three months.

4.4.5. Rules on the movement of animals:

Prevention of Disease among animals S.L. 36.20 sections 16-17

Legal Notice 314/2005 Chapter 437 of the Veterinary Services Act, "Measures for the Eradication of Brucellosis, Tuberculosis and Leucosis in cattle rules"

Foot and Mouth Disease regulation S.L. 36.05, section 4

Control of Foot and Mouth disease regulation S.L. 36.27 section 2

Undulant fever (prevention) regulation S.L. 36.04 section 7

No bovine animals on the islands can be moved without a permit issued by the Animal Health Department of the Veterinary Regulation, Fisheries Conservation and Control Division. A file is kept for each farm. On request of any sort of movement or purchase transfer the file is brought up. If brucella tests are pending or due, no transfer permit is issued until the screening test is run.

If an animal results positive to both the screening test and the confirmatory test, the holding is declared as brucella-infected and no movement is permitted from the holding without the permission of the CVO. The only permits issued would be to allow movement of brucella-positive animals and other animals from the holding to the civil abattoir for slaughter. The civil abattoir is the only abattoir in the region. All animals arriving for slaughter at the civil abattoir are tested for brucella through the Rose Bengal Plate test.

The herd is retested a month after the last brucella infected animal is slaughtered.

The herd will be considered as brucella-free only until all animals result negative to two serological consecutive tests carried out at an interval of at least three months. Once this is the case, then free movement of animals from the holding for reasons other than slaughter is permitted.

4.4.6. Tests used and sampling schemes:

Testing will be carried out by the National Veterinary Laboratory using the Rose Bengal plate test as a screening test, while the complement fixation test will be carried out as a confirmatory test on all RBT positive samples. Animals will be considered as confirmed positive to brucella infection if the complement fixation tests results in 20 or more ICFU units / ml.

Sampling will be coordinated by the animal health section and will cover all bovine animals over 12 months and all ovine / Caprine animals over 6 months. Testing will be carried out in accordance to the provisions laid down in Council Directive 64/432 and 91/68.

Milk testing

All herds that supply milk for human consumption will undergo bulk milk testing three times a year, at an interval of at least three months. In case of any positive reaction to the milk ring test, the whole herd will be tested through the Rose Bengal plate test. Any positive rose Bengal test has to be confirmed through the positive complement fixation test as stated above.

4.4.7. Vaccines used and vaccination schemes:

Not applicable.

No vaccination has been carried out on local bovine herds since 1980, were 22 infected herds were vaccinated with 45 / 20.

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

Detailed guidelines for good husbandry practices and biosecurity measures on bovine farms have not yet been compiled. However general guidelines are covered in the Code of Good Agriculture Practice (Cogap).

It covers certain practices such as:

- the guidelines for storage of feed
- the quality of building material
- need for a vehicle disinfection pits
- necessity of a manure clamp

All farms producing manure have to store solid manure in an enclosed place known as the manure clamp, for six months a year (from the 15th October to 15th March). All farms are to have a leak proof cesspit, to collect foul water arising from cleaning etc. The manure clamp is to be connected to the cesspit. The water is kept for 15 days then collected by a bowser. These regulations serve to reduce the environmental pollution and the nitrate level in fields fertilised with manure. However, they also provide a tool to permit biosecurity measures to limit spread of disease.

4.4.9. Measures in case of a positive result

Once a positive animal is identified, an order of stop movement is issued by the CVO, with the exception of animals for slaughter. An investigation will be carried out on recent movements of animals from the brucella-infected farm to other farms. In such cases were deemed necessary other farms will be tested.

Animals which test positive to the complement fixation test shall be sent for slaughter and may be passed for human consumption if deemed fit by the official Veterinarian at the slaughter house. Any milk from the infected animals will be deemed as unfit for human consumption and destroyed. All animals on the farm will be retested for brucella a month after the slaughter of the brucella-infected animals. During the re-sampling of the herd, an inspection of the holding is carried out to confirm that all identified animals have been slaughtered and any relevant recommended measures for hygiene and proper management have been observed.

Re-stocking with animals from a Brucellosis-free herd will be allowed only after all susceptible animals result negative to two consecutive Rose Bengal plate tests carried out at an interval of at least three months. In such cases the CVO will lift restrictions on the farm and the farm will be qualified as brucella- free.

4.4.10. Compensation scheme for owners of slaughtered and killed animals:

Legal Notice 314/2005 Chapter 437 of the Veterinary Services Act, "Measures for the Eradication of Brucellosis, Tuberculosis and Leucosis in cattle rules"

Foot and Mouth Disease regulation S.L. 36.05, section 4

Cattle plague regulations S.L. 36.14 section 7

Compensation for slaughtered animals regulation S.L. 36.18 sections 3-6, schedule regulation 4 sections 2, 3, 5.

Beef Herds	Male	Female
0 to 3 months	419.29	232.94
3 to 6 months	559.00	372.70
6 months to 12 months	745.40	559.05
12 months to 18 months	885.16	698.81
Dairy Herds	Male	Female
0 to 3 months	232.94	232.94
6 months to 12 months	465.87	465.87
12 months to 18 months	978.24	931.75
Pregnant cow		2096.44
Milking cow		2329.37

4.4.11. Control on the implementation of the programme and reporting:

Legal Notice 314/2005 Chapter 437 of the Veterinary Services Act, "Measures for the Eradication of Brucellosis, Tuberculosis and Leucosis in cattle rules"

5. Benefits of the programme

Brucellosis is a zoonotic disease. The major benefit would be from a public health aspect. Brucella also reflects on the herd health and agricultural economy. Eradication of this disease from the national herd as not only will there be no trade barrier but due to the improved health status of the animals there will be an increase in production. With the growing concern for safer food by the consumer an improved animal health status will result in a better perception of dairy products by consumers.

6. Data on the epidemiological evolution during the last five years¹

6.1. Evolution of the disease²

6.1.1. Data on herds

Year: 2003

Situation on date: 31-12-03

Disease^(b): BRUCELLOSIS

Animal species: Bovine

Region ^(a)	Total number of herds ^(b)	Total number of herds under the programme	Number of herds checked ^(c)	Number of positive herds ^(d)	Number of new positive herds ^(e)	Number of herds depopulated	% positive herds depopulated	INDICATORS		
								% herd coverage	% positive herds	% new positive herds
1	2	3	4	5	6	7	8 (7/3x100)	9 (4/3x100)	10 (5/4x100)	11 (6/4x100)
Malta and Gozo	398	398	308	2	2	0	0	92.46	0.51%	0.68
Total	398	398	308	2	2	0	0	92.46	0.51%	0.68

(b) Disease and animal species if necessary.

(c) Region as defined in the eradication programme of the Member State.

(d) Total number of herds existing in the region including eligible herds and non-eligible herds for the programme.

(e) Check means to perform a herd level test under the programme for the respective disease with the purpose of maintaining or upgrading the health status of the herd. In this column a herd must not be counted twice even if has been checked more than once.

(f) Herds with at least one positive animal during the period independent of the number of times the herd has been checked.

(g) Herds which status in the previous period was *Unknown*, *Not free-negative*, *Free*, *Officially Free* or *Suspended* and have at least one animal tested positive in this period.

Year: 2004

Situation on date: 31-12-04

Disease^(b): BRUCELLOSIS

Animal species: Bovine

Region ^(a)	Total number of herds ^(c)	Total number of herds under the programme	Number of herds checked	Number of positive herds ^(d)	Number of new positive herds ^(e)	Number of herds depopulated	% positive herds depopulated	% herd coverage	INDEXED ^(f) % positive herds Period herd prevalence	% new positive herds Herd incidence
	3	3	4	5	6	7	8 (75.0%)	9 (42.86%)	10 (33.3%)	11 (33.3%)
Malta and Gozo	421	420	338	0	0	0	0	80.5%	0%	0%
Total	424	423	342	0	0	0	0	80.5%	0%	0%

Year: 2005

Situation on date: 31-12-05

Disease^(a): BRUCELLOSIS

Animal species: Bovine

Region ^(b)	Total number of herds ^(c)	Total number of herds under the programme	Number of herds checked ^(d)	Number of positive herds ^(e)	Number of new positive herds ^(f)	Number of herds depopulated	% positive herds depopulated	INDICATORS		
								% herd coverage	% positive herds prevalence	% new positive herds Herd incidence
I	2	3	4	5	6	7	8 (33.33/100)	9 (14.29/100)	10 (15.43/100)	11 (6.94/100)
Maha and Garo	413	413	381	1	1	0	0	92.23%	0.26%	0.8
Total	413	413	381	1	1	5	0	92.23%	0.26%	0.8

(b) Disease and animal species if necessary.

(c) Region as defined in the eradication programme of the Member State.

(d) Total number of herds existing in the region including eligible herds and non-eligible herds for the programme.

(e) Check means to perform a herd level test under the programme for the respective disease with the purpose of maintaining or upgrading the health status of the herd. In this column a herd must not be counted twice even if has been checked more than once.

(f) Herds with at least one positive animal during the period independent of the number of times the herd has been checked.

(g) Herds which status in the previous period was *Unknown*, *Not free-negative*, *Free*, *Officially free* or *Suspended* and have at least one animal tested positive in this period.

Year: 2006

Situation on date: 31-12-06

Disease^(b): BRUCELLOSIS

Animal species: Bovine

Region ^(a)	Total number of herds ^(c)	Total number of herds under the programme	Number of herds checked ^(d)	Number of positive herds ^(e)	Number of new positive herds ^(g)	Number of herds depopulated	% positive herds depopulated	INDICATORS		
								% herd coverage	% positive herds prevalence	% new positive herds
Malta and Gozo	424	424	418	2	2	0	0	9 (4.7%)	10 (5.1%)	31 (7.4%)
								98.58	0.47%	11.68
Total	424	424	418	2	2	0	0	98.58	0.47%	11.68

(b) Disease and animal species if necessary.

(c) Region as defined in the eradication programme of the Member State.

(d) Total number of herds existing in the region including eligible herds and non-eligible herds for the programme.

(e) Check means to perform a herd level test under the programme for the respective disease with the purpose of maintaining or upgrading the health status of the herd. In this column a herd must not be counted twice even if has been checked more than once.

(f) Herds with at least one positive animal during the period independent of the number of times the herd has been checked.

(g) Herds which status in the previous period was *Unknown*, *Not free-negative*, *Free*, *Officially free* or *Suspended* and have at least one animal tested positive in this period.

Year: 2007

Situation on date: 31-12-07

Disease^(b): BRUCELLOSIS

Animal species: Bovine

Region ^(c)	Total number of herds ^(a)	Total number of herds under this programme	Number of herds checked ^(d)	Number of positive herds ^(e)	Number of new positive herds ^(f)	Number of herds depopulated	% positive herds depopulated	INDICATORS		
								% herd coverage	% positive herds Period herd prevalence	% new positive herds Herd incidence
1	2	3	4	5	6	7	8 = (7/5) x 100	9 = (4/3) x 100	10 = (5/4) x 100	11 = (6/4) x 100
Malta and Gozo	421	421	421	1	1	0	0	100%	11.24%	0.68%
Total	421	421	421	1	1	0	0	100%	0.24%	0.68%

(b) Disease and animal species if necessary.

(c) Region as defined in the eradication programme of the Member State.

(d) Total number of herds existing in the region including eligible herds and non-eligible herds for the programme.

(e) Check means to perform a herd level test under the programme for the respective disease with the purpose of maintaining or upgrading, the health status of the herd. In this column a herd must not be counted twice even if has been checked more than once.

(f) Herds with at least one positive animal during the period independent of the number of times the herd has been checked.

(g) Herds which status in the previous period was *Unknown, Not free-negative, Free, Officially Free or Suspended* and have at least one animal tested positive in this period.

6.1.2. Data on animals (one table per year and per disease/species)

Year: 2003

Situation on date: 31-12-03

Disease^(a): BRUCELLAOSIS

Animal species: Bovine

Region ^(b)	Total number of animals ^(c)	Number of animals ^(d) to be tested under the programme	Number of animals ^(e) tested	Number of animals tested individually ^(f)	Number of positive animals	Slaughtering		INDICATORS	
						Number of animals with positive result slaughtered or culled	Total number of animals slaughtered ^(g)	% coverage at animal level	% positive animals Animal prevalence
1	2	3	4	5	6	7	8	9 (55x100)	10 (54x100)
Main and Cozon	16 907	11 269	11 112	11 112	2	2	0	98.60%	0.017%
Total	16907	11 269	11 112	11 112	2	2	0	98.60%	0.017%

Year: 2005

Situation on date: 31-12-05

Disease¹⁾: BRUCELLOSIS

Animal species: Bovine

Region ²⁾	Total number of animals ³⁾	Number of animals ⁴⁾ to be tested under the programme	Number of animals tested	Number of animals tested individually ⁵⁾	Number of positive animals	Slaughtering		INDICATORS	
						Number of animals with positive result slaughtered or culled	Total number of animals slaughtered ⁶⁾	% coverage at animal level	% positive animals Animal prevalence
1	2	2	2	2	6	7	8	9 (0.0%)	10 (0.0%)
Malta and Gozo	20 456	14 330	12 728	12 728	1	0	0	88.81%	0.008%
Total	20 456	14 330	12 728	12 728	1	0	0	88.82%	0.008%

Year: 2006

Situation on date: 31-12-06

Disease^(b): BRUCELLOSIS

Animal species: Bovine

Region ^(a)	Total number of animals ^(c)	Number of animals ^(c) to be tested under the programme	Number of animals ^(c) tested	Number of animals tested individually ^(c)	Number of positive animals	Slaughtering		INDICATORS	
						Number of animals with positive results slaughtered or culled	Total number of animals slaughtered ^(c)	% coverage at animal level	% positive animals Annual prevalence
1	2	3	4	5	6	7	8	9: 10-16.3x100	
Malta and Gozo	19 734	13 491	12 612	12 612	2	2	0	90.77%	0.015%
Total	19 734	13 494	12 612	12 612	2	2	0	90.77%	0.015%

Year: 2007

Situation on date: 31-12-07

Disease^(a): BRUCELLOSIS

Animal species: Bovine

Region ^(b)	Total number of animals ^(c)	Number of animals ^(c) to be tested under the programme	Number of animals ^(c) tested	Number of animals tested individually ^(d)	Number of positive animals	Slaughtering		INDICATORS	
						Number of animals with positive result slaughtered or culled	Total number of animals slaughtered ^(e)	% coverage of animal level ^(f)	% positive animals Animal prevalence
1	2	2	4	4	6	7	8	9 653/100	10 667/100
Madagascar	19383	11231	11200	11200	1	1	0	99 72%	0 000%
Total	19383	11231	11200	11200	1	7	0	99 72%	0 000%

(a) Disease and animal species if necessary.

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

(c) Total number of animals existing in the region including eligible herds and non-eligible herds for the programme.

(d) Includes animals tested individually or under bulk level scheme.

(e) Include only animals tested individually, do not include animals tested by bulk level samples (for instance: milk bulk tank tests).

(f) Include all positive animal slaughtered and also the negative animals slaughtered under the programme.

6.2. Stratified data on surveillance and laboratory tests

6.2.1. Stratified data on surveillance and laboratory tests (one table per year and per disease/species)

Year:2003

Disease^(a): BRUCELLLOSIS

Animal species/category: Bovine

Description of the used serological tests: Rose Bengal Plate test (RBT) / Complement Fixation test (CFT)

Description of the used microbiological or virological tests: Not Applicable

Description of the other used tests:

Region ^(b)	Serological tests		Number of positive samples ^(a)	Microbiological or virological tests		Other tests	
	Number of samples tested ^(c)	Number of positive samples ^(a)		Number of samples tested ^(d)	Number of positive samples ^(e)	Number of samples tested ^(f)	Number of positive samples ^(g)
Maha and Gono	1112, RBT	10			na		na
	CFT	2					
Total	1112				na		na

Year: 2004 Disease^(a): BRUCELLOSIS Animal species/category: Bovine
Description of the used serological tests: Rose Bengal Plate test (RBT) / Complement Fixation test (CFT)

Description of the used microbiological or virological tests: Not Applicable

Description of the other used tests:

Region ^(c)	Serological tests		Microbiological or virological tests		Other tests	
	Number of samples tested ^(b)	Number of positive samples ^(c)	Number of samples tested ^(d)	Number of positive samples ^(d)	Number of samples tested ^(e)	Number of positive samples ^(e)
Malta and Gozo	7,836 RBT 1 CFT	1 0	00	00	00	00
Total	7,837		00	00	00	00

Year: 2005

Disease^(a): BRUCELLIOSIS

Animal species/category: Bovine

Description of the used serological tests: Rose Bengal Plate test (RBT) / Complement Fixation test (CFT)

Description of the used microbiological or virological tests: Not Applicable

Description of the other used tests:

Region ^(b)	Serological tests		Microbiological or virological tests		Other tests	
	Number of samples tested ^(c)	Number of positive samples ^(c)	Number of samples tested ^(c)	Number of positive samples ^(c)	Number of samples tested ^(c)	Number of positive samples ^(c)
Malta and Gozo	12 728 RBT	2	04	3/3	02	2/2
	2 CFT	1				
Total	12 730		04	03	02	02

Year: 2006 Disease^(a): BRI, CEI, LOSIS Animal species/category: Bovine
 Description of the used serological tests: Rose Bengal Plate test (RBT) / Complement Fixation test (CFT)

Description of the used microbiological or virological tests: Not Applicable

Description of the other used tests:

Region ^(a)	Serological tests		Microbiological or virological tests		Other tests	
	Number of samples tested ^(c)	Number of positive samples ^(d)	Number of samples tested ^(e)	Number of positive samples ^(f)	Number of samples tested ^(g)	Number of positive samples ^(h)
Maha and Gozo	12,613RBT	9	na	na	na	na
	9CFT	2				
Total	12,623		na	na	na	na

Year: 2007

Disease^(a): BRUCELLOSIS

Animal species/category: Bovine

Description of the used serological tests: Rose Bengal Plate test (RBT) / Complement Fixation test (CFT)

Description of the used microbiological or virological tests: NA

Description of the other used tests: NA

Region ^(a)	Serological tests		Microbiological or virological tests		Other tests	
	Number of samples tested ^(b)	Number of positive samples ^(c)	Number of samples tested ^(b)	Number of positive samples ^(c)	Number of samples tested ^(b)	Number of positive samples ^(c)
Malta and Gozo	11,200 RBT 4 CFT	4 1		02	na	001
Total	11,204			na	na	na

(a) Disease and animal species if necessary.

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

(c) Number of samples tested.

(d) Number of positive samples.

6.3. Data on infection (one table per year and per disease/species)

<u>Year: 2003</u>	<u>Disease^(a): BRUCELLLOSIS</u>	<u>Animal species: Bovine</u>	
	<u>Region^(b)</u>	<u>Number of heads infected^(c)</u>	<u>Number of animals infected</u>
	Malta and Gozo	2	2
	Total	2	2

Year: 2004

Disease^(a): BRUCELLOSIS

Animal species: Bovine

Region ^(b)	Number of herds infected ^(a)	Number of animals infected
Malta and Gozo	0	0
Total	0	0

Year: 2005

Disease^(a): BRUCELLOSIS

Animal species: Bovine

Region ^(b)	Number of herds infected ^(c)	Number of animals infected
Mali and Guzo		
Total		

Year: 2006

Disease^(a): BRUCELLOSIS

Animal species: Bovine

Region ^(a)	Number of heads infected ^(a)	Number of animals infected
Mulla and Gozo	2	2
Total	2	2

Year: 2007

Disease^(a): BRUCELLOSIS

Animal species: Bovine

Region ^(b)	Number of herds infected ^(c)	Number of animals infected
Malta and Gozo	1	

6.4. Data on the status of herds at the end of each year³

Year: 2003

Disease^(a): Brucella

Animal species: Bovine

Region ^(b)	Status of herds and animals under the programme ^(c)															
	Total number of herds and animals under the programme		Unknown ^(c)		Not free or not officially free from disease		Last check positive ^(d)		Last check negative ^(d)		Free or officially free from disease status suspended ^(e)		Free from disease ^(b)		Officially free from disease ^(f)	
	Herds	Animals ^(g)	Herds	Animals ^(g)	Herds	Animals ^(g)	Herds	Animals ^(g)	Herds	Animals ^(g)	Herds	Animals ^(g)	Herds	Animals ^(g)	Herds	Animals ^(g)
Malta/Gozo	398	11,269	30	157			2	2					366	11,110		
Total	398	11,269	30	157			2	2					366	11,110		

(a) Disease and species if necessary

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

(c) At the end of the year

(d) Unknown: No previous checking results available

(e) Not free and last check positive: Herd checked with at least one positive result in the latest check

(f) Not free and last check negative: Herd checked with negative results in the latest check but not being *Free* or *Officially Free*

(g) Suspended as defined in Community or national legislation for the respective disease at the end of the reporting period.

³ Only data to provide for bovine tuberculosis, bovine brucellosis, ovine and caprine brucellosis (*B. melitensis*), enzootic bovine leucosis (EBL) and Aujeszky's disease

Year: 2004

Disease^(a): **Brucella**

Animal species: **Rovine**

Region ^(b)	Status of herds and animals under the programme ^(c)													
	Total number of herds and animals under the programme		Unknown ^(d)		Not free or not officially free from disease Last check positive ^(e)		Last check negative ^(f)		Free or officially free from disease status suspended ^(g)		Free from disease ^(h)		Officially free from disease ⁽ⁱ⁾	
	Herds	Animals ^(j)	Herds	Animals ^(k)	Herds	Animals ^(l)	Herds	Animals ^(m)	Herds	Animals ⁽ⁿ⁾	Herds	Animals ^(o)	Herds	Animals ^(p)
Malta/Gozo	420	13,538	82	5692						338		7846		
Total	420	13,538	82	5692						338		7846		

Year: 2005

Disease⁽¹⁾: Brucella

Animal species: Bovine

Region ⁽⁸⁾	Status of herds and animals under the programme ⁽⁹⁾															
	Total number of herds and animals under the programme		Unknown ⁽⁴⁾		Not free or not officially free from disease		Last check positive ⁽⁵⁾		Last check negative ⁽⁶⁾		Free or officially free from disease status suspended ⁽⁷⁾		Free from disease ⁽¹⁾		Officially free from disease ⁽¹⁾	
	Herds	Animals ⁽³⁾	Herds	Animals ⁽³⁾	Herds	Animals ⁽³⁾	Herds	Animals ⁽³⁾	Herds	Animals ⁽³⁾	Herds	Animals ⁽³⁾	Herds	Animals ⁽³⁾	Herds	Animals ⁽³⁾
Malta/Gozo	413	14,330	32	1602	1	1					380	12,727				
Total	413	14,330	32	1602	1	1					380	12,727				

Year: 2006

Disease^(a): Brucella

Animal species: Bovine

Region ^(b)	Status of herds and animals under the programme ^(c)													
	Total number of herds and animals under the programme		Unknown ^(e)		Not free or not officially free from disease Last check positive ^(e)		Last check negative ^(e)		Free or officially free from disease status suspended ^(e)		Free from disease ^(b)		Officially free from disease ^(b)	
	Herds	Animals ^(c)	Herds	Animals ^(c)	Herds	Animals ^(c)	Herds	Animals ^(c)	Herds	Animals ^(c)	Herds	Animals ^(c)	Herds	Animals ^(c)
Malta\Gozo	424	13,894	6	1282	2	2					417			
Total	424	13894	6	1282	2	2					417			12611

Year: 2007

Disease^(a): Brucella

Animal species: Bovine

Region ^(b)	Status of herds and animals under the programme ^(a)													
	Total number of herds and animals under the programme		Unknown ^(d)		Not free or not officially free from disease Last check positive ^(e)		Last check negative ^(e)		Free or officially free from disease status suspended ^(f)		Free from disease ^(h)		Officially free from disease ^(g)	
	Herds	Animals ⁽ⁱ⁾	Herds	Animals ⁽ⁱ⁾	Herds	Animals ⁽ⁱ⁾	Herds	Animals ⁽ⁱ⁾	Herds	Animals ⁽ⁱ⁾	Herds	Animals ⁽ⁱ⁾	Herds	Animals ⁽ⁱ⁾
Malta\Gozo	421	11,231	0	31		1	1				420	11,199		
Total	421	11,231	0	31		1	1				420	11,199		

6.5. Data on vaccination or treatment programmes¹

Year:

Disease^(a):

Animal species:

Description of the used vaccination, therapeutic or other scheme:

Not applicable

Region ^(b)	Total number of herds ^(c)	Total number of animals	Information on vaccination or treatment programme					
			Number of herds ^(c) in vaccination or treatment programme	Number of herds ^(c) vaccinated or treated	Number of animals vaccinated or treated	Number of doses of vaccine or treatment administered	Number of adults ^(d) vaccinated	Number of young ^(d) animals vaccinated
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

¹ Data to provide only if vaccination has been carried out.

6.6. Data on wildlife⁵

6.6.1. Estimation of wildlife population

Year: _____ **Method of estimation^{6a}:** _____

Not applicable

Region ^{6b}	Estimation of the population of the concerned wild species		
	Species:	Species:	Species:
Total			

(a) The hunting bag is considered to be the standard method of estimation. If other method is used, explain

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

⁵ Data only to provide in case the programme comprises measures as regards wildlife or if the data are epidemiologically relevant for the disease.

6.6.2. Monitoring of wildlife (one table per year and per disease/species)

Year: _____ Disease^(a): _____ Animal species: _____

Description of the used serological tests:

Description of the used microbiological or virological tests:

Description of the other used tests:

Not applicable

Region ^(b)	Microbiological or virological tests		Serological tests		Other tests	
	Number of samples tested	Number of positive samples	Number of samples tested	Number of positive samples	Number of samples tested	Number of positive samples
Total						

(a) Disease and species, if necessary

6.6.3. *Data on vaccination or treatment of wildlife*

NOT APPLICABLE

Year: _____ Disease^(a): _____ Animal species: _____

Description of the used vaccination, therapeutic or other scheme:

Region ^b	Square km	Number of doses of vaccine or treatment to be administered	Vaccination or treatment programme	
			Number of campaigns	Total number of doses of vaccine or treatment administered
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
Total				

(a) Disease and species if necessary

7. Targets

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

7.1.1. Targets on diagnostic tests

Disease^(a): **BRI/CELLULOSIS** Animal species: **Bovine**

Region ^(b)	Type of the test ^(c)	Target population ^(d)	Type of sample ^(e)	Objective ^(f)	Number of planned tests
Malta and Gozo	Rose Bengal test - screening Complement fixation - test confirmatory Milk ring test	All bovine animals over 1 year RBT positive samples Milk producing herds	blood Mixed milk	Monitoring, Control and eradication	14,395 20 375
Total					14,395

(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-FITSA, 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, ...)

7.1.2. Targets on testing herds and animals⁶

7.1.2.1 Targets on the testing of herds^(a)

Region ^(c)	Total number of herds ^(b)	Total number of herds under the programme	Number of herds expected to be checked ^(b)	Number of expected positive herds ^(b)	Number of expected new positive herds ^(b)	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
1	2	3	4	5	6	7	8	9	10	11
Malta and Gozo	421	421	421	7	3	0	0	100		0.7%
Total										

(a) Herds or flocks, or holdings as appropriate.

(b) Disease and animal species if necessary.

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

(d) Total number of herds existing in the region including eligible herds and non-eligible herds for the programme.

(e) Check means to perform a herd level test under the programme for the respective disease with the purpose of maintaining, upgrading, etc., the health status of the herd. In this column a herd must not be counted twice even if it has been checked more than once.

(f) Herds with at least one positive animal during the period independent of the number of times the herd has been checked.

(g) Herds which status in the previous period was *Unknown*, *Not free-negative*, *Free*, *Officially Free* or *Suspended* and have at least one positive animal in this period.

⁶ Data not to provide in case of rabies.

7.1.2.2. Targets on the testing of animals

Disease^(a): BRUCELLOSIS

Animal species: Bovine

Region ^(b)	Total number of animals ^(c)	Number of animals ^(d) under the programme	Number of animals ^(e) expected to be tested	Number of animals to be tested individually ^(f)	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 ^(g)	Expected % coverage at animal level	% positive animals (Expected animal prevalence)
1	2	3	4	5	6	7	8	9 (1-3)X100	10 (6-3)X100
Milio and Cervo	19 398	11 231	11 231	11 231	5	5	5	100	0.04%
Total	19 398	11 231	11 231	11 231	5	5	5	100	0.04%

(a) Disease and animal species if necessary.

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

(c) Total number of animals existing in the region including eligible herds and non-eligible herds for the programme.

(d) Includes animals tested individually or under bulk level scheme.

(e) Include only animals tested individually, do not include animals tested by bulk level samples (for instance milk bulk tank tests).

(f) Include all positive animals slaughtered and also the negative animals slaughtered under the programme.

7.2. Targets on qualification of herds and animals⁷ (one table for each year of implementation)

Disease^(a): Animal species:

Region ^(b)	Total number of herds and animals under the programme		Targets on the status of herds and animals under the programme ^(c)											
	Expected unknown ^(d)		Expected not free or not officially free from disease		Expected free or officially free from disease status suspended ^(e)		Expected free from disease ^(a)		Expected officially free from disease ^(f)		Expected free from disease ^(a)		Expected officially free from disease ^(f)	
	Herds	Animals ^(g)	Herds	Animals ^(g)	Herds	Animals ^(g)	Herds	Animals ^(g)	Herds	Animals ^(g)	Herds	Animals ^(g)	Herds	Animals ^(g)
I	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Malta and Gozo	421	11231					3	5					418	11226
Total	421	11231					3	5					418	11226

(a) Disease and species if necessary

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

(c) At the end of the year

(d) Unknown: No previous checking results available

(e) Not free and last check positive: Herd checked with at least one positive result in the latest check

(f) Not free and last check negative: Herd checked with negative results in the latest check but not being *Free* or *Officially Free*

(g) Suspended as defined for the respective disease in Community or national legislation where appropriate or according national legislation.

⁷ Data to provide only for bovine tuberculosis, bovine brucellosis, ovine and caprine brucellosis (*B. melitensis*), enzootic bovine leucosis (EBL) and Aujeszky's disease

7.3. Targets on vaccination or treatment (one table for each year of implementation)

7.3.1. Targets on vaccination or treatment²

Disease^(a):

Animal species:

Region ^(b)	Total number of herds ^(c) in vaccination or treatment programme	Total number of animals in vaccination or treatment programme	Targets on vaccination or treatment programme					Number of young ^(d) animals expected to be vaccinated
			Number of herds ^(c) in vaccination or treatment programme	Number of herds ^(c) 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 ^(d) expected to be vaccinated	
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

² Data to provide only if appropriate.

<u>Costs related to</u>	<u>Specification</u>	<u>Number of units</u>	<u>Unitary cost in €</u>	<u>Total amount in €</u>	<u>Community funding requested (yes/no)</u>
<u>1. Testing</u>					
<u>1.1. Cost of the analysis</u>	<u>Test: RBT</u>	14,000	0.03	420	yes
	<u>Test: CFT</u>	20	0.03	0.6	
	<u>Test: MRI</u>	375	0.79	296	yes
<u>1.2. Cost of sampling</u>		14,000	.11	1540	yes
<u>1.3. Other costs</u>					
<u>2. Vaccination or treatment</u>					
<u>2.1. Purchase of vaccine/treatment</u>					
<u>2.2. Distribution costs</u>					

<u>2.3. Administering costs</u>						
<u>2.4. Control costs</u>						
<u>3. Slaughter and destruction</u>						
<u>3.1. Compensation of animals</u>	5	2329.37	11646.85	yes		
<u>3.2. Transport costs</u>						
<u>3.3. Destruction costs</u>						
<u>3.4. Loss in case of slaughtering</u>						
<u>3.5. Costs from treatment of products (milk, eggs, hatching eggs, etc)</u>						
<u>4. Cleaning and disinfection</u>						

