Implementation of bovine tuberculosis eradication programme

Portugal 2015

PAFF Standing Committee
Brussels, 5, 6 July, 2016

Direção Geral de Alimentação e Veterinária

Bovine Tuberculosis - 2015 Eradication Programme
Bovine population

Regions	Number of holdings	Number of animals
Norte	20 973	327 785
Centro	8 657	156 836
LVT	2 269	154 158
Alentejo	4 614	657 959
TOTAL	**36 513**	**1 296 738**

Algarve Region : **Officially tuberculosis-free**
Commission Decision 2012/204/EU, 19.04.2012

Bovine Tuberculosis - 2015 Eradication Programme
Routine Diagnosis

Annual holding screening test - Compared Intradermal Tuberculin test (CIT)

❑ **Officially tuberculosis free holdings:**

% of infected holdings at each of the last two years	Tested animals	
< 0,2%	All bovine, males and females older than 24 months	
> 0,2% and ≤ 1%	All females and reproductive males older than 6 weeks	
> 1%	All bovine, males and females older than 6 weeks	

❑ **Infected holdings:**

All bovines older than 6 weeks of age

Bovine Tuberculosis - 2015 Eradication Programme
Pre-movement tests (PMT)

"Manual for the implementation of pre-movement tests on national territory"

PMT are mandatory for:

➤ Movements within national territory, for animals older than 12 months

➤ Intra-Community Trade for animals older then 6 weeks

Post-movement testing of all animals in the holdings is also possible in holdings with biosecurity and isolation conditions

Year	Nº Holdings	Nº tested animals
2013	15.074	52.655
2014	14.604	51.490
2015	16.258	60.961

Bovine Tuberculosis - 2015 Eradication Programme
Diagnosis in Slaughterhouses

Slaughterhouse meat inspection - **official veterinarians**
In case of suspicious lesions:

→ Registration in data base and communication to Regional veterinary authority

→ Trace back the animal to the holding of origin, epidemiological investigation

→ Suspension of holding classification, if T3

→ Notification of OPP for testing the animals in the holding

→ Follow up of the holding by the official veterinary services

Bovine Tuberculosis - 2015 Eradication Programme

Slaughter of CIT positive animals / suspected lesions at slaughterhouse:

→ Collection of samples from suspected lesions for histopathology and bacteriology (except in already identified infected holdings)

→ Analysis of samples in INIAV (National Reference Laboratory)

If *M. bovis* is confirmed

Holding is classified as infected (**T.2.1**)

Bovine Tuberculosis - 2015 Eradication Programme
Measures in positive holdings

- Movement restrictions in the holding

- Marking and isolation of positive animals

- Slaughter */Post mortem* sampling for histopathology and bacteriology tests

- Epidemiological investigation/Identification of contact holdings and possible sources of infection

- **Cleaning and disinfection** of premises, equipment and other utensils

- Follow up CIT tests

Bovine Tuberculosis - 2015 Eradication Programme
Measures in positive holdings - Stamping out

Decision on Stamping out – Evaluation based on:

- ❏ Isolation of *Mycobacterium* .

- ❏ **No improvement in the qualification** of an infected holding or an epidemiological unit, in the last 12 months.

- ❏ Specific **epidemiological conditions** of the geographical area, that allows to conclude that it is the most appropriate measure to improve the situation.

- ❏ When it is not possible to implement any other prophylatic animal health measures.

The decision on stamping out takes into consideration an expressed commitment of the owner regarding it's compliance with the "waiting period before restocking" and with the expressed conditions for restocking.

Bovine Tuberculosis - 2015 Eradication Programme
Measures in positive holdings-Epidemiological evaluation

TB - Possible source (Mainland and Açores)	2012	2013	2014	2015	% 4 years
Total de IE	86	57	49	39	(N=231)
Direct contact with ruminants from other holding	**8**	**13**	**13**	**4**	**16.4%**
Contact with holdings from the same owner	5	7	1	5	7.8%
Contact with caprine animals	0	6	4	0	4.3%
Contact with wild animals	**17**	**19**	**22**	**10**	**29.4%**
Non conformity of pre-movement tests	5	3	2	2	5.2%
Sharing of equipment	4	8	1	1	6.1%
Re-occurrence	**11**	**13**	**11**	**4**	**16.9%**

Source: Pisa.Net

Bovine Tuberculosis - 2015 Eradication Programme
Surveillance and control in wild animals

EDITAL nº 1 /2011 – measures for the control of bovine tuberculosis in wild animals in identified risk areas

- Mandatory presence of a veterinarian in big game hunting activities

- All animals submitted to initial examination

- Correct disposal of by-products of hunting

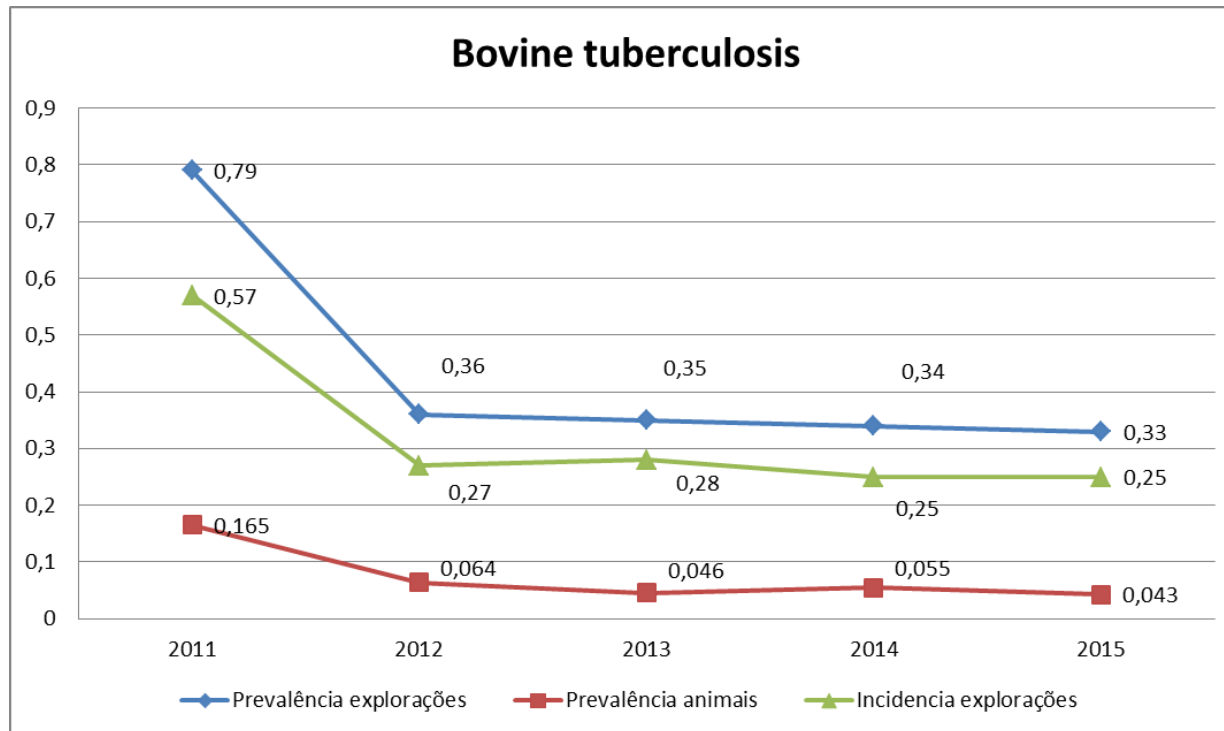- Collection of samples from suspected lesions for laboratory diagnosis

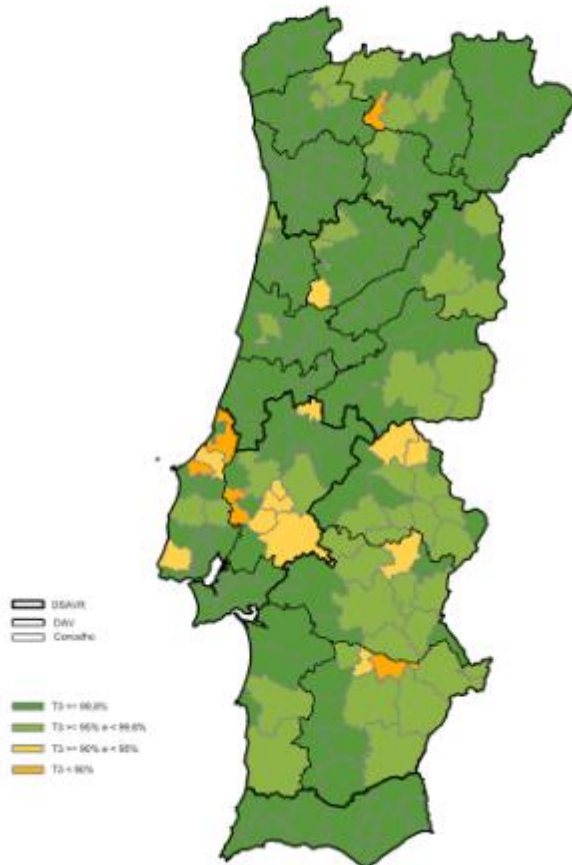| 10/2015 to 3/2016	Hunted animals	Histopathology			Bacteriology			
		Nº samples	Typical lesions	Other lesions	Nº samples	*M. avium*	*M. bovis*	*M. spp*
Deer	1049	99	96	3	104	0	101	0
Wild boar	1237	110	64	46	106	31	52	5

Bovine Tuberculosis 2012-2015

Tuberculosis - % positive holdings (blue) and animals (red)
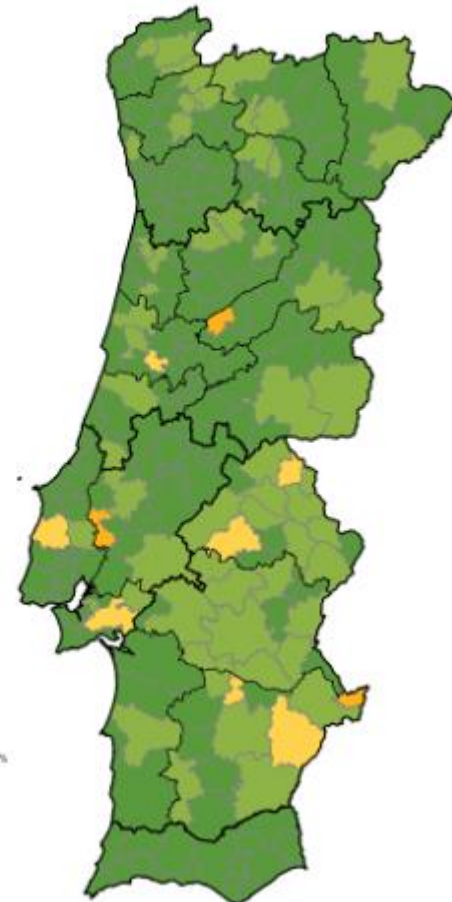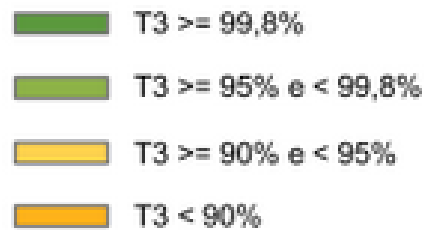
Holding incidence (green)

Bovine Tuberculosis 2013-2015

(distribution of tuberculosis classification - % T3 holdings)

Bovine Tuberculosis 2013-2015

Evolution of indicators

	Mainland	Norte	Centro	LVT	Alentejo	**Açores**
% positive holdings 2013	**0.34**	0.20	0.35	0.29	0.94	**0.44**
% positive holdings 2015	**0.35**	0.15	0.14	0.29	1.36	**0.08**
% decrease from 2013 to 2015	**-0.01**	0.05	0.21	0	-0.42	**0.36**

Targets for bovine TUBERCULOSIS - Working document SANCO/10181/2014 – rev. 5
Guidelines for the Union co-funded programmes of eradication, control and surveillance of animal diseases and zoonoses for the years 2015-2017

	Baseline 2013	Target 2016 % reduction compared to 2013 of at least:	Target 2016
Holding Prevalence	0.35	30%	0.25
Holding Incidence	0.28	30%	0.20

Bovine Tuberculosis
Measures to be taken

Regions with favourable indicators of evolution of the disease

 Maintain surveillance / Rapid intervention in case of outbreak / depopulation

Regions with more difficulties in decreasing prevalence

- Reinforce training of veterinarians on CIT
- Implement stricter rules for non-compliance in diagnosis
- Reinforce controls at field level
- Increment sensitivity of diagnosis in infected holdings – decision based on SIT
- Faster slaughter of infected animals
- Depopulation of persistently infected holdings
- Improve quality of epidemiological investigation
- Reinforce Animal movement control
- Segregation of wildlife / control of densities / correct disposal of by-products

Thank you for your attention