



GOVERNO DE  
PORTUGAL

MINISTÉRIO DA AGRICULTURA  
E DO MAR



Direção Geral  
de Alimentação  
e Veterinária

# Implementation of Bovine Brucellosis Eradication Programme in Portugal 2014

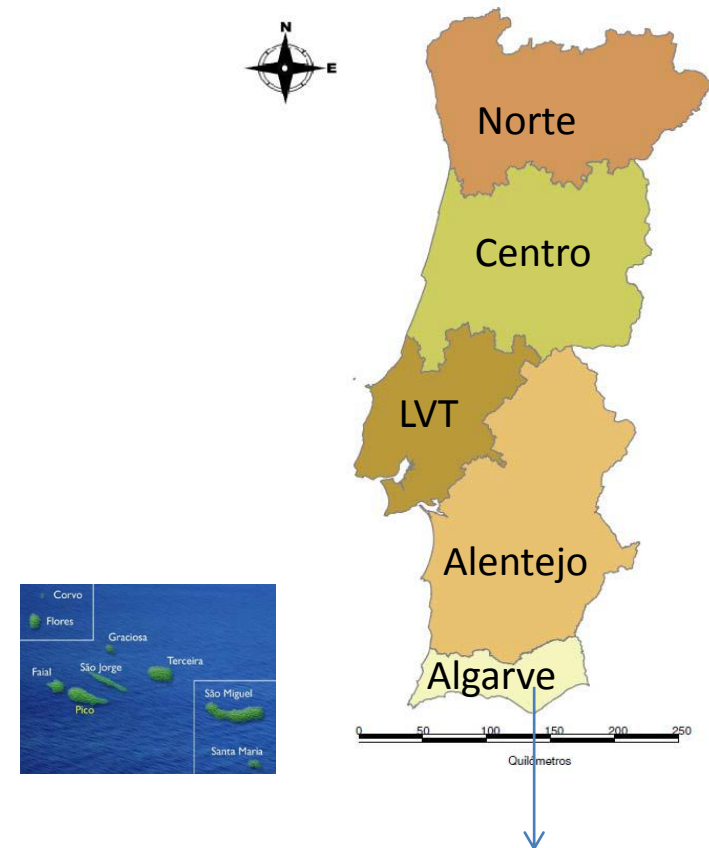
PAFF Standing Committee  
Brussels, 7-8 July 2015

# Bovine Brucellosis eradication programme

Characterization 2014 – Mainland & Azores

Approved by Commission Decision 2013/722/UE

Regions	Number of herds	Number of animals
Norte	17 333	256 472
Centro	6 350	118 247
LVT	1 080	85 409
Alentejo	4 196	533 978
Açores	4 619	131 414
<b>TOTAL</b>	<b>33 578</b>	<b>1 125 520</b>



Algarve is Officially Free since April 2012  
(Commission Decision 2012/204/EU)

# Bovine Brucellosis eradication programme

Strategy 2014

## Officially brucellosis free and Free herds - annual herd screening test

→ **Rose Bengal Test** (RBT) to all animals over 12 months

→ If RBT positive results are found → samples are submitted to  
**Complement Fixation Test** (CFT)

Control of animal movement control and **pre-movement testing**

# Bovine Brucellosis eradication programme

Strategy 2014

**In positive suspended herds** (at least 1 animal RB positive and CFT  $\geq$  20 IU/mL)

- Farmer is **notified** by DSAVR - herd is under **sanitary sequestration**
- **Animal movement** is prohibited unless for immediate slaughter
- **Control of milk** according with Reg. 853/2004
- Positive animals are marked, collected and **slaughter** under official control, in the 30 days following the date of notification
- Samples are collected from slaughtered animals of B3/B4 suspended herds and submitted to **bacteriology**
- Remaining animals are submitted to a **serological control** within 30 days after the withdrawal to slaughter of positive animals
- Suspended status is lifted with 2 consecutive negative tests to all animals over 12 months of age, with 30 and 60 days interval

# Bovine Brucellosis eradication programme

Strategy 2014

## In infected herds:

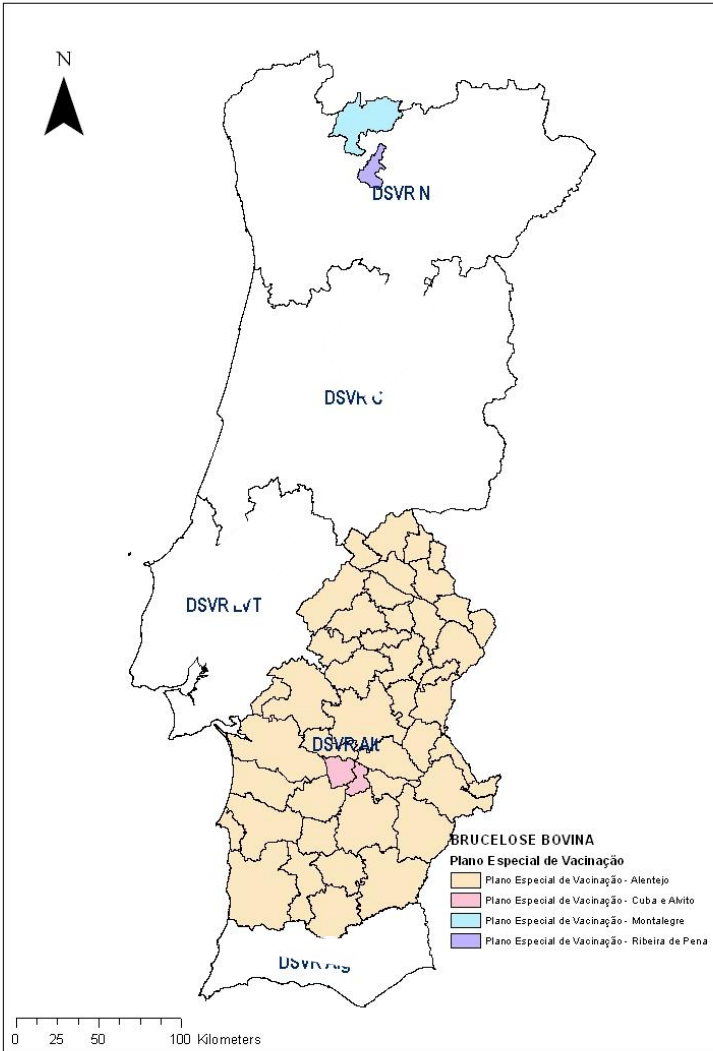
→ **Epidemiological evaluation** and identification of contact herds and possible sources of infection

- Decision on stamping out
- Supervision of cleaning and disinfection of premises, equipment and other utensils when herd is depopulated

In total, lifting of restrictions require, from infected to officially free status, 4 negative surveys covering all animals over 6 months of age, with 30, 60, 90 and 90 days intervals

# Bovine Brucellosis eradication programme

Strategy 2014



## RB51 Vaccination Programmes

### Mainland:

- ✓ Montalegre and Vieira do Minho
- ✓ Ribeira de Pena
- ✓ Alentejo Region
- ✓ Cuba/Alvito (at Alentejo Region)

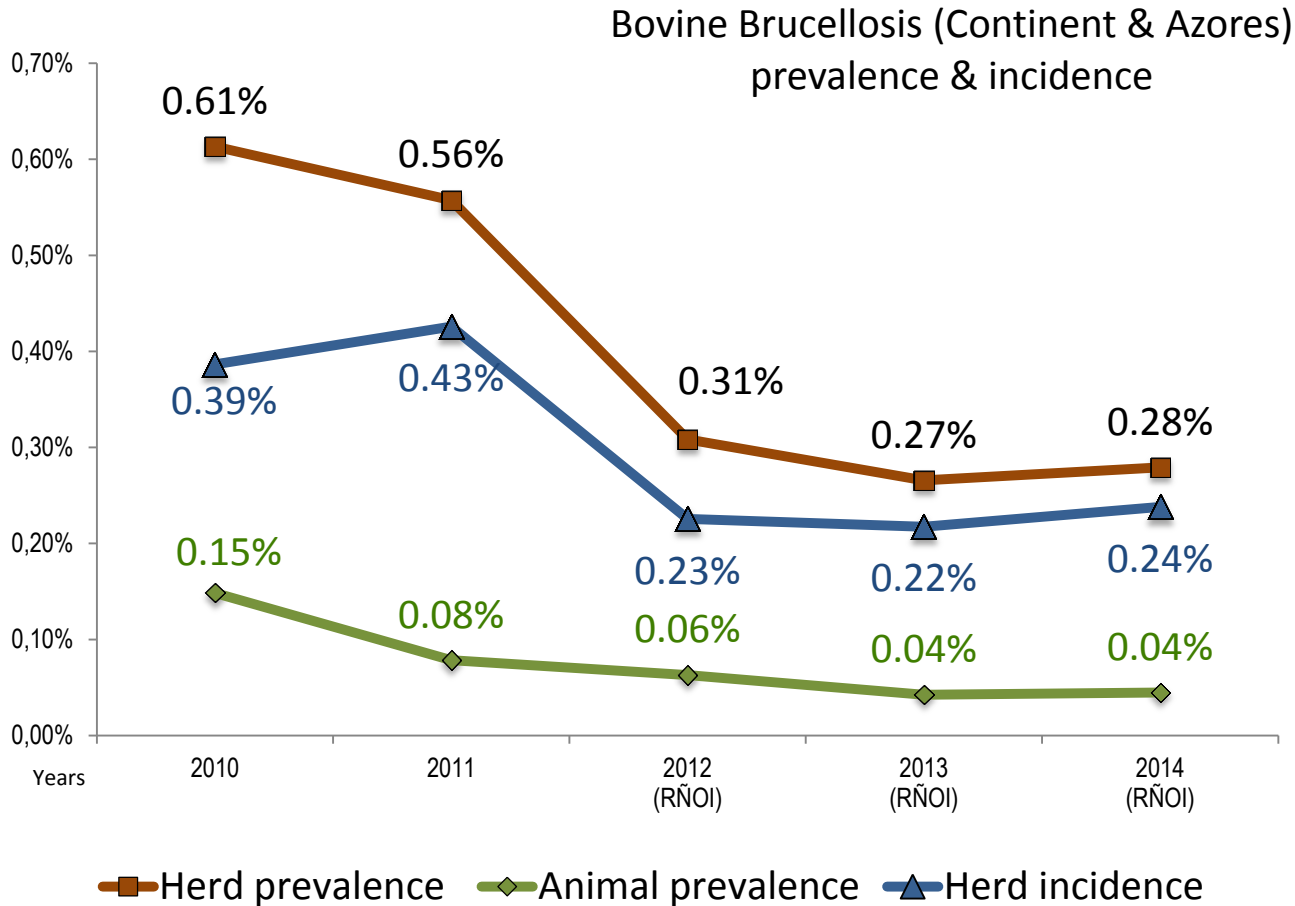
### Autonomous Region of Azores:

- ✓ Terceira
- ✓ São Jorge
- ✓ São Miguel



# Bovine Brucellosis eradication programme

Results 2014



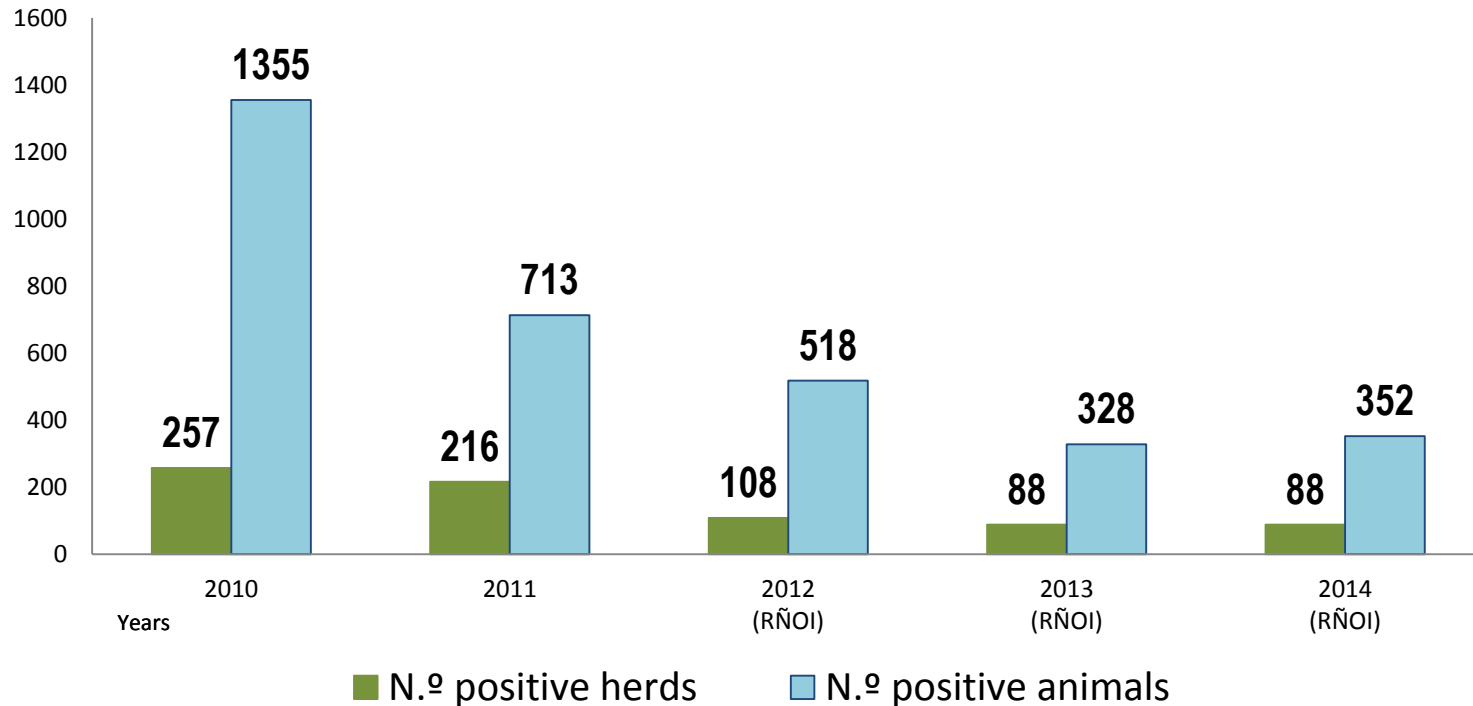
Nº Herds tested  
31 515

Nº animals tested  
785 303

# Bovine Brucellosis eradication programme

Results 2014

Bovine Brucellosis (Continent & Azores)  
No positive herds & No positive animals



**8 holdings with bacterial isolation (13%, n=62)**  
6 by *B. abortus* and 2 by *B. melitensis*



# Bovine Brucellosis eradication programme

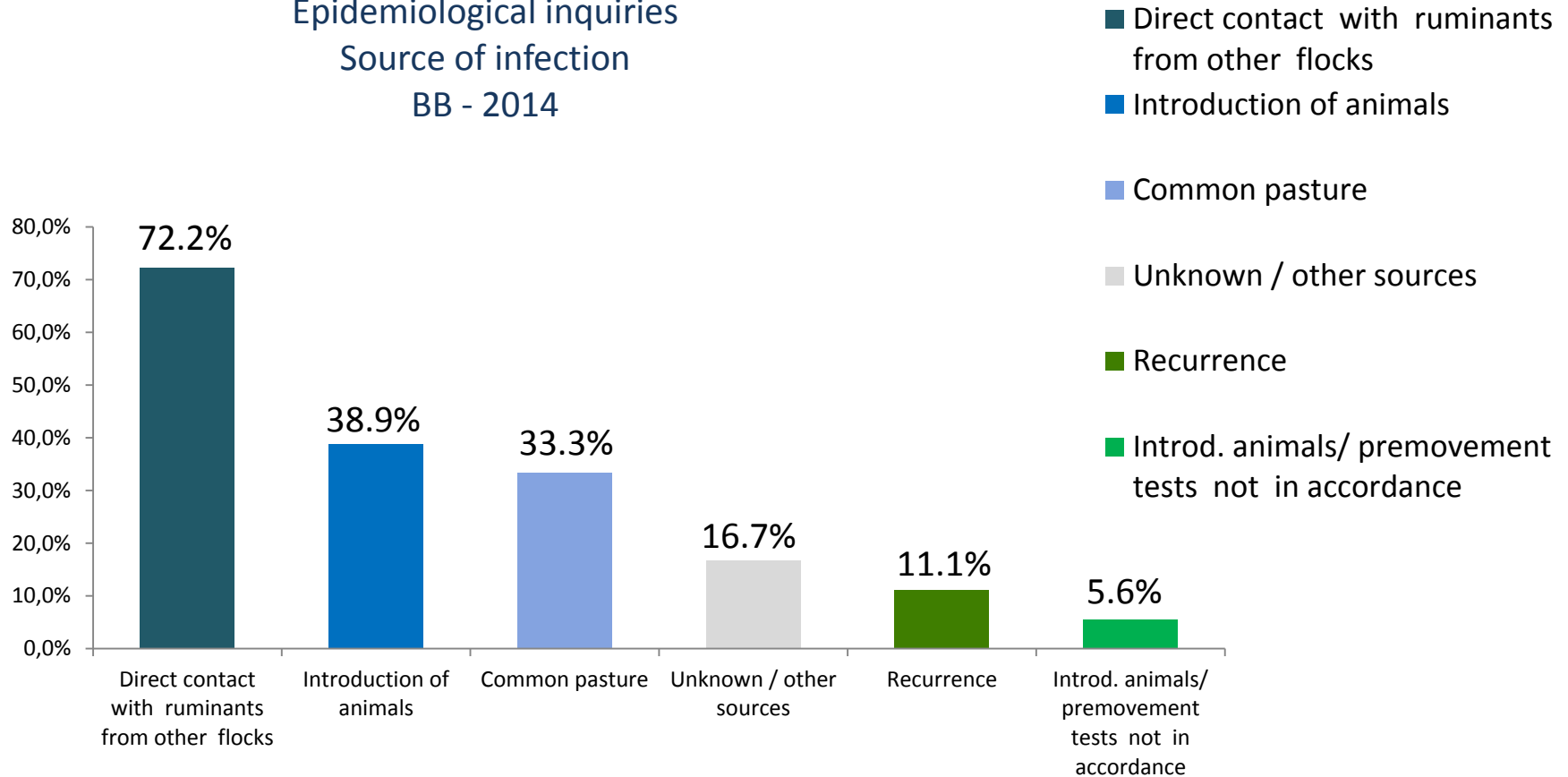
Results 2014

Regions	Number of positive herds	Number of new positive herds	% positive herds	% new positive herds
Norte	39	28	0.23	0.16
Centro	4	4	0.06	0.06
LVT	0	0	0	0.00
Alentejo	25	24	0.60	0.58
Açores	20	19	0.69	0.66
<b>TOTAL</b>	<b>88</b>	<b>75</b>	<b>0.28</b>	<b>0.24</b>

# Bovine Brucellosis eradication programme

Results 2014

Epidemiological inquiries  
Source of infection  
BB - 2014



# Bovine Brucellosis eradication programme

Results 2014

## Vaccination programme

BB 2014	TOTAL	Norte	Alentejo	Açores
N.º vaccinated herds	<b>2 717</b>	517	16	2 184
N.º vaccinated animals	<b>25 194</b>	1 309	1 238	22 647

# Bovine Brucellosis eradication programme

Results 2014

## Ongoing work

### Regions with favourable indicators of evolution of the disease

- Additional measures for a better understanding of possible cases of False Positive Serological Reactions
- Herd depopulation

### Regions with more difficulties in decreasing prevalence

- Thorough epidemiological investigation of outbreak's
- Animal movement control
- Reinforcement of vaccination
- Improve quality of bacteriological investigation

# Implementation of Sheep and Goats Brucellosis Eradication Programme in Portugal 2014

PAFF Standing Committee  
Brussels, 7-8 July 2015

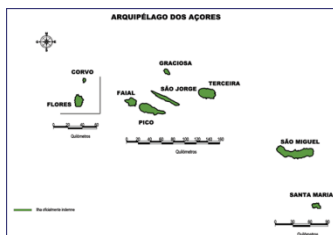
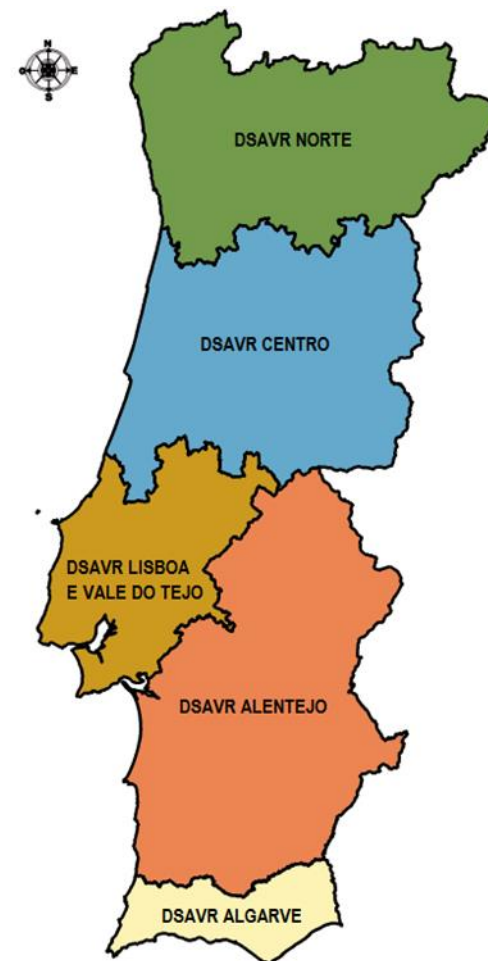


# S&G Brucellosis eradication programme

Characterization 2014

Approved by Decision 2013/722/UE

Regions	Number of herds	Number of animals
Norte	16 741	419 284
Centro	27 959	551 923
LVT	7 106	184 539
Alentejo	7 926	1 065 055
Algarve	1 224	59 858
<b>TOTAL</b>	<b>60 873</b>	<b>2 280 659</b>



**The Autonomous Region of Azores is Officially Free of *Brucella melitensis***

Commission Decision 2003/644/CE, 17th January

# S&G Brucellosis eradication programme

Strategy 2014

**Serological** control is mandatory for animals over 6 months  
or  
over 3 months in the case of vaccinated with Rev1

In areas where 99.8% of S&G flocks are B3/B4,  
the representative fraction of the population over the age of 6 months  
to be tested is the following:

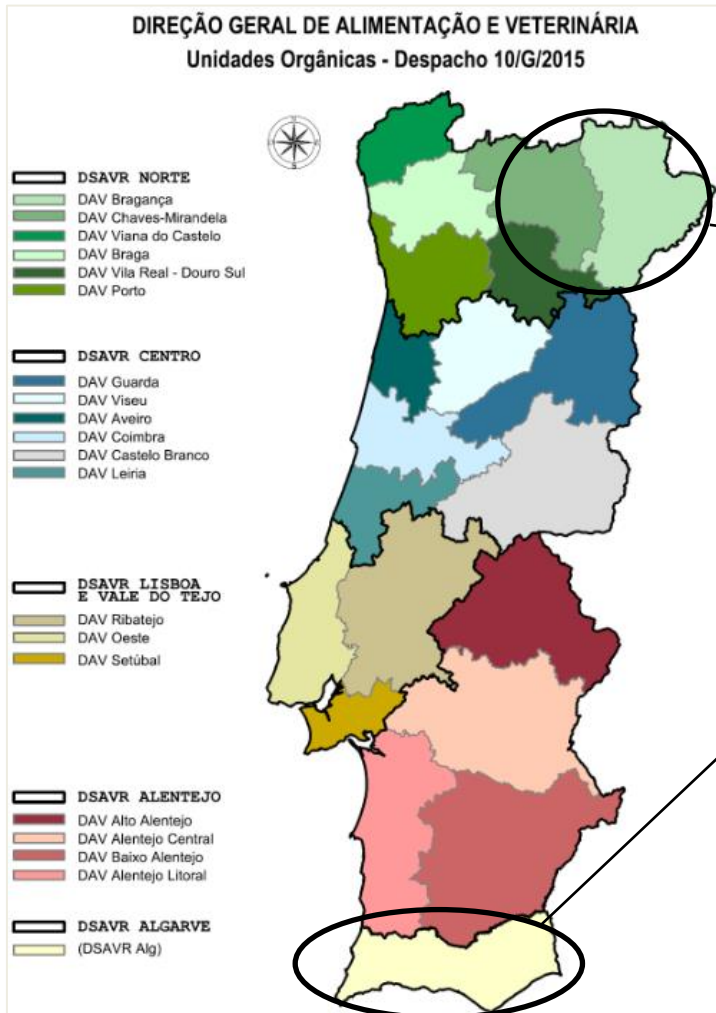
- all non-castrated male
- all animals brought into the holding
- reproductive females

**Measures in positive and infected flocks**  
are identical to those applied in bovines

N.º of females at reproductive age	N.º of females to be tested
0 - 50	all
50 - 200	50
> 200	25%

# S&G Brucellosis eradication programme

Strategy 2014



## REV1 Vaccination Programmes

In regions with higher prevalence :

Trás-os-Montes (part of DSAVR Norte)

Centro Region

Algarve Region

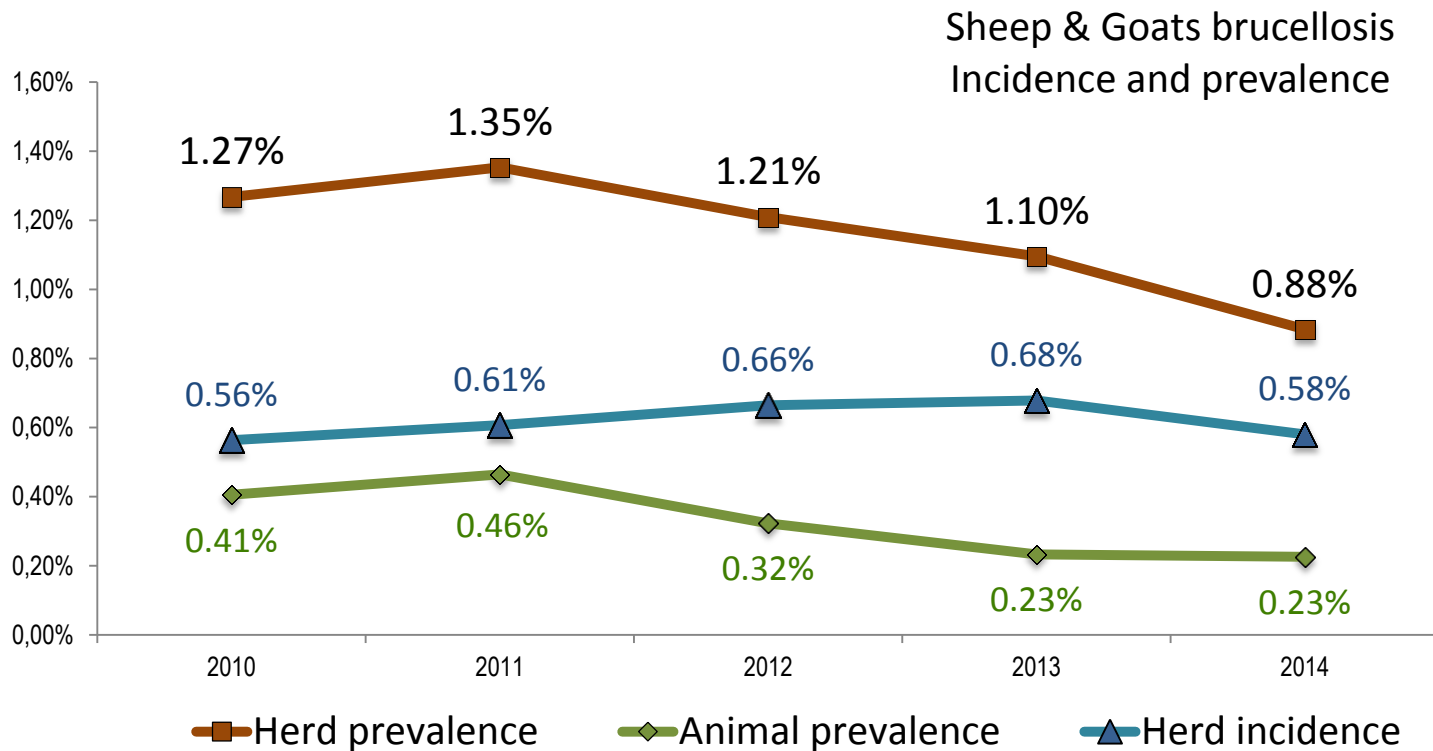
Young animals 3-6 months of age





# S&G Brucellosis eradication programme

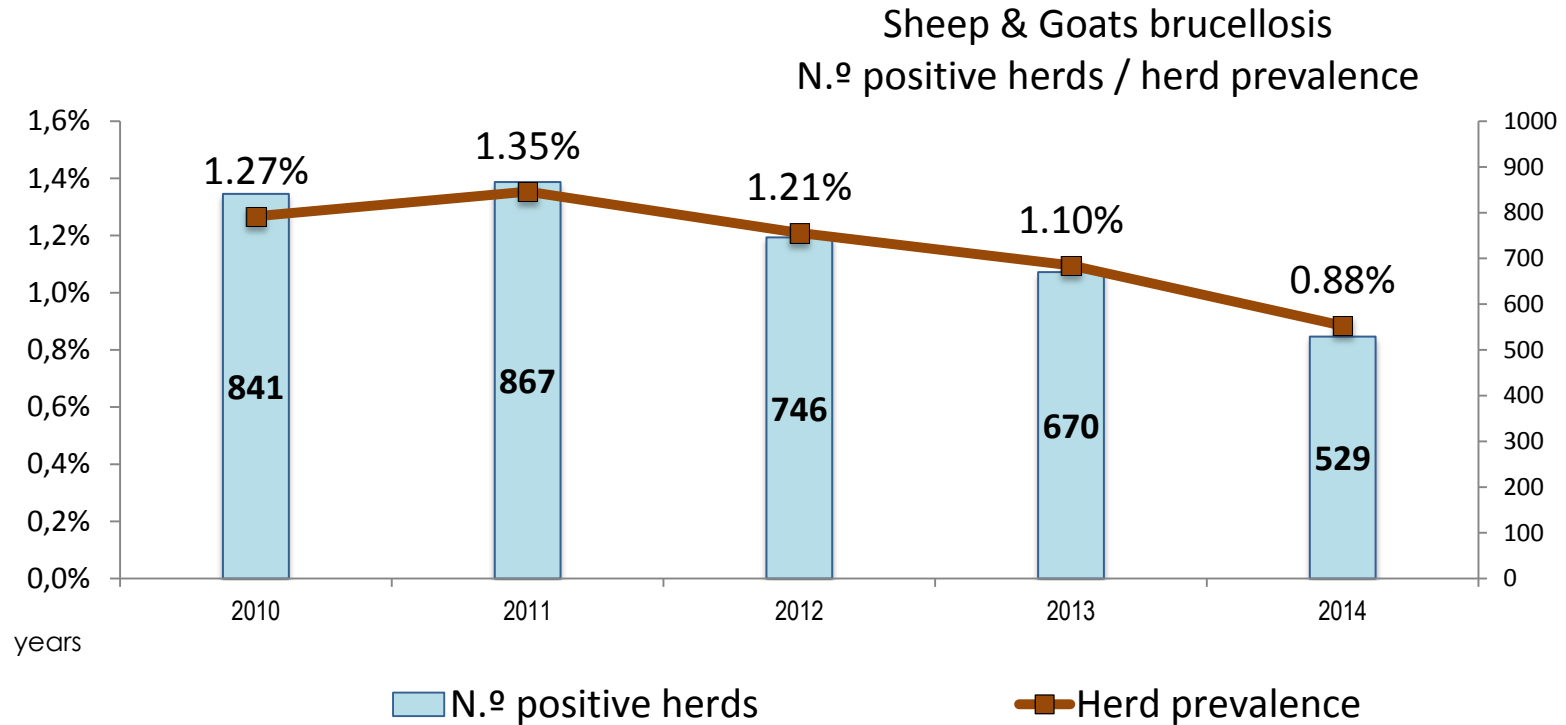
Results 2014



98.2% coverage of herds under the programme  
2 124 294 animals controlled

# S&G Brucellosis eradication programme

Results 2014



**62 holdings with *Brucella melitensis* isolation (15.3%, n=404)**

# S&G Brucellosis eradication programme

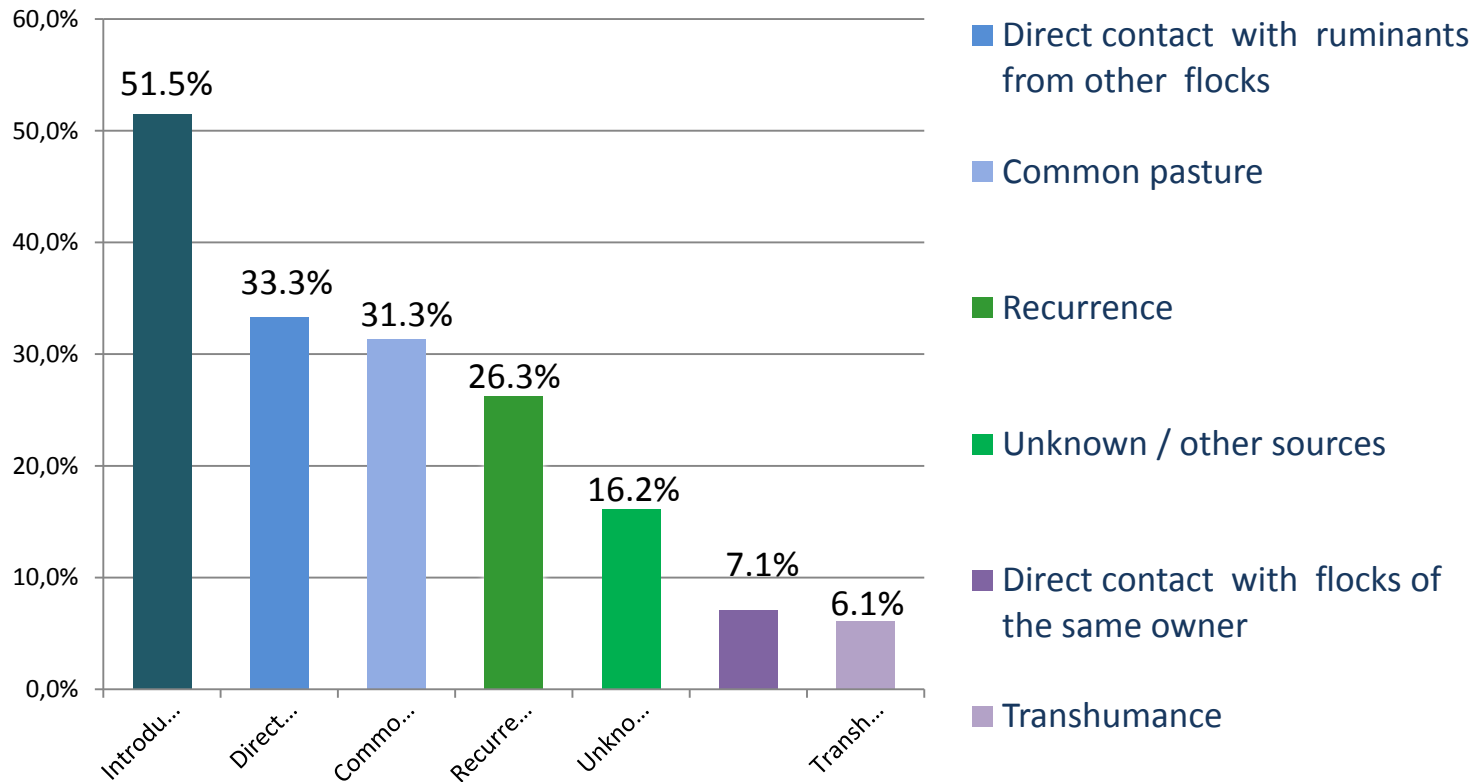
Results 2014

Regions	Number of positive herds	Number of new positive herds	% positive herds	% new positive herds
Norte	374	228	2.28	1.39
Centro	35	35	0.13	0.13
LVT	53	36	0.81	0.55
Alentejo	44	39	0.57	0.51
Algarve	23	9	1.88	0.74
<b>TOTAL</b>	<b>529</b>	<b>347</b>	<b>0.88</b>	<b>0.58</b>

# S&G Brucellosis eradication programme

Results 2014

Epidemiological inquiries  
Source of infection  
Bpr -2014



# S&G Brucellosis eradication programme

Results 2014

## Vaccination programme

2014	<b>TOTAL</b>	Norte	Centro	Alentejo	Algarve
N.º vaccinated flocks	<b>2 827</b>	2 411	327	25	64
N.º vaccinated animals	<b>32 379</b>	25 203	5 530	833	813

# S&G Brucellosis eradication programme

## Ongoing work

### **Regions with favourable indicators of evolution of the disease**

- Additional measures for a better understanding of possible cases of False Positive Serological Reactions

### **Regions with more difficulties in decreasing prevalence**

- Thorough epidemiological investigation of outbreaks
- Animal movement control
- Reinforce of vaccination
- Investigate interference of vaccination in the serological diagnosis
- Revision of quality of bacteriological investigation

# Brucellosis eradication programme

## Notified human cases

Year	N.º of human cases
2010	86
2011	79
2012	47
2013	35
2014	52

*Data from the Directorate-General of Health (DGS)*



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# Thank You for your attention

