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04- Veterinary Control Programmes

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**REPORT OF THE
“BOVINE BRUCELLOSIS”
TASK FORCE SUBGROUP**

Meeting held in Santander, Spain, on 27-28 October 2010

REPORT OF THE “BOVINE BRUCELLOSIS”

TASK FORCE SUBGROUP MEETING HELD IN SANTANDER, SPAIN, ON 27-28 OCTOBER 2010

1 AGENDA

See Annex 1.

2 PARTICIPANTS

See Annex 2.

3 INTRODUCTION

The meeting was held in the Autonomous Community (AC) of Cantabria, in Santander, in the Hotel Santemar.

The presentations and discussions were either in English or Spanish and a simultaneous translation service was provided.

4 FIRST DAY

Welcome & introduction.

Dr. Ismael Esparza Escayola, the General Director of Livestock Productions of the Autonomous Community of Cantabria welcomed the members of the Task Force, the Central Veterinary Office, the Autonomous Communities (AC's) of Castilla y León, Extremadura, Navarra and the Spanish experts. He highlighted the strategic importance of agriculture in the region and the efforts made by his administration to support farmers and the veterinary services in eradicating Brucellosis in the past decades.

Dr. Lucio I. Carbajo Goñi, CVO, Subdirección General de Sanidad de la Producción Primaria, Ministry for Environment, Rural and Marine Affairs thanked everyone for their participation and anticipated a fruitful meeting. He referred to the last meeting held from 15 to 16 November 2004 in Santander, to the implementation of the recommendations that were made and to the progress achieved during these six years in Spain towards the eradication of brucellosis. A significant extra effort was made regarding the coordination at all levels of the Administration (Central Level, Regional Level, Province Level, Local Veterinary Units (UVL)).

Dr. Francisco Fernandez Martinez, Chief of the Regional Veterinary Office of the Autonomous Region of Cantabria, also welcomed everyone and spoke about the changes implemented since the last meeting held six years ago and the progress made in the AC of Cantabria.

James Moynagh, responsible for the eradication programmes at the European Commission, DG SANCO E2 thanked all the speakers and recalled the purpose of the meeting, which was to assist the Spanish Administration in improving the Spanish National Eradication Programme.

Ernst Stifter, chairman of the Bovine Brucellosis Subgroup introduced the members of the subgroup and asked each expert to briefly introduce himself.

Structure and organization of the Official Veterinary Services in Spain. Other veterinary services involved in the implementation of the bovine brucellosis programme.

Dr. Lucio I. Carbajo Goñi, CVO. Subdirección General de Sanidad de la Producción Primaria. Ministry for Environment, Rural and Marine Affairs.

The Ministry for Environment, Rural and Marine Affairs (MARM) is responsible at national level for Animal Health. A new Minister of MARM was recently nominated a few days before the meeting. The Subdirección General de Sanidad de la Producción Primaria, Direction General de Recursos Agrícolas y Ganaderos is the body of MARM responsible for animal health issues, for coordination and planning the eradication programmes and in defining ongoing strategies. This has been done since 2001 through a National Committee (Comité Nacional del Sistema de Alerta Sanitaria Veterinaria - CNSASV), chaired by the Spanish CVO and where all the AC's and the MARM are represented.

Functions:

- Relations with extra-national bodies: European Union, OIE, WHO, FAO etc..
- Introduction of new national legislation.
- Design and coordination of animal health policies.
- Coordination of intra-community trade and trade with Third Countries of live animals.
- Coordination of animal identification, information systems, national databases and rapid alert systems.
- Coordination of National Reference Laboratories.
- Cooperation with AC in developing regional policies
- Responsible for the supervision of the eradication programmes and for reporting to the EU
-

Spain is composed of 17 AC's; two of them are the islands of Canaries and Balears. The AC's implement directly the eradication programmes, perform epidemiological surveys, official controls and manage compensation. Regional Competent Authorities are organized in a common pattern, although some specific differences may exist because of operational needs:

- Chief of the Regional Animal Health Veterinary Services.
- Chief of the Local Animal Health Service (Province).
- Local Veterinary Units (LVU) (Comarca).

The Regional Veterinary Services implement the programme according to operational manuals that include the activities of inspections and audits of all operators. Veterinary Officers of LVU are responsible for the implementation and control of the programmes at local level. Field teams may be integrated by Veterinarians of public enterprises, or in areas with a consolidated structure of Farmers Sanitary Associations (ADS), by authorized veterinarians operating under their directions. The implementation of the operative systems may vary slightly in the various AC's.

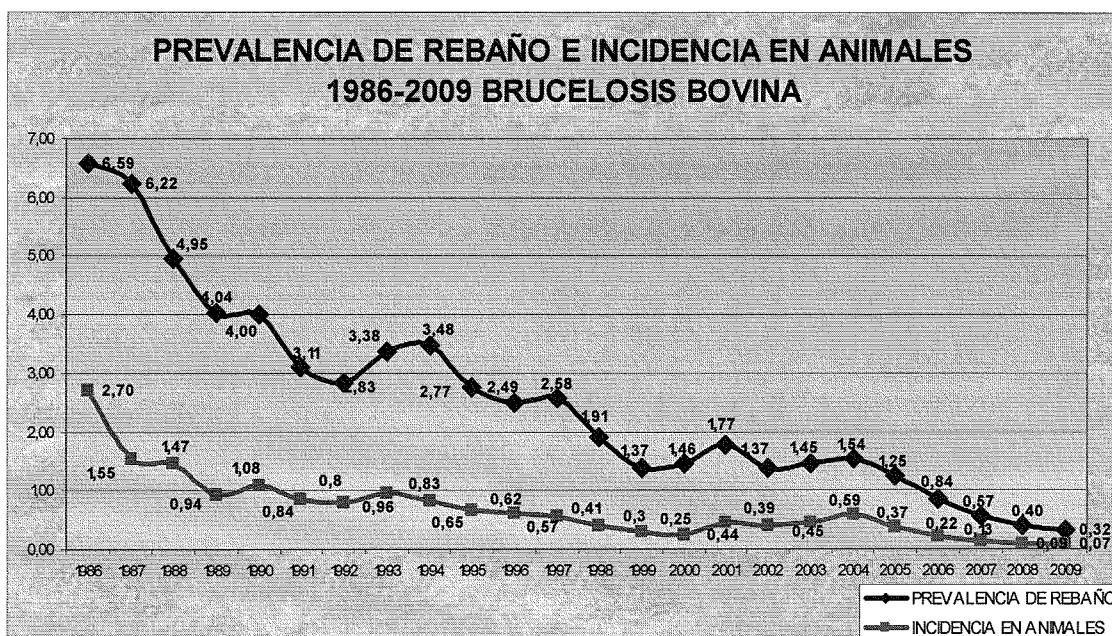
Evolution of the National Eradication Programme on bovine brucellosis in Spain. Epidemiological situation. The National Eradication Programme 2008-2010.

Dr. José Luís Sáez Llorente. Subdirección General de Sanidad de la Producción Primaria (MARM).

The National Control Programme on Bovine brucellosis started in Northern Spain in 1965, based on vaccination of females between 3 and 6 months of age in milk production herds,. Since the early 90's the measures of Council Directive 64/432/EEC have been implemented in the whole country, starting with individual identification of animals included in the programme with a metallic ear tag, test and slaughter of positive reactors in authorised slaughterhouses, compulsory vaccination of young females with S-19 vaccine and the use of the RBT and CFT in parallel.

In Spain from 1986 to 1997 the herd prevalence decreased progressively from 6.48 % to 2.58 %. In the same period the animal incidence also decreased, from 2.70 % to 0.57 %. This decrease resulted in a change in strategy: vaccination was forbidden in order to facilitate trade and the use of the RBT and CFT in series was implemented. The evolution of the disease in the following years in some regions since 2001 indicated that the decision was premature in some cases. At national level, from 2005 to 2009 the herd prevalence has decreased from 1.54 % to 0.32 %. In the same period the animal incidence has decreased also from 0.59 % to 0.07 %. The decrease of the herd prevalence and animal incidence was more or less 25 % each year (see Figure 1).

Figure 1



In 2009, the AC of the Canary Islands acquired Officially Free regional status. That same year, there were also no positive herds detected in seven AC's (Aragon, Asturias, Baleares, Canary Islands, La Rioja, Murcia and Valencia). In the AC of Navarra only two positive herds were detected in the same period. From 2001 to 2009 in the AC of Andalucía the herd prevalence decreased from 3.06 % to 0.27 %. In the same period in the AC of Galicia herd prevalence decreased from 0.38 % to 0.04 %. There was an increase in the AC of Cataluña due to *Brucella melitensis*. In 2004, herd prevalence in the remaining four AC's (Castilla y Leon, Castilla la Mancha, Extremadura, and Cantabria) exceeded 3 % and the regions implemented vaccination programmes, stamping-out, or both (see Table 1).

Table 1

CCAA	EVOLUCIÓN DE LA PREVALENCIA DE REBAÑO (EN %)								
	2001	2002	2003	2004	2005	2006	2007	2008	2009
ANDALUCÍA	3,06	2,70	2,70	2,66	1,91	0,95	1,00	0,36	0,27
ARAGÓN	1,44	1,44	2,66	1,68	0,64	0,29	0,27	0,00	0,00
ASTURIAS	0,31	0,34	0,22	0,19	0,19	0,04	0,00	0,01	0,00
BALEARES	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
CANARIAS	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
CASTILLA Y LEÓN	3,80	3,59	3,52	3,40	3,35	2,78	1,44	0,99	1,27
CANTABRIA	4,81	3,27	5,49	3,84	1,54	0,66	1,04	0,98	0,60
CASTILLA LA MANCHA	2,46	2,52	3,45	5,23	2,71	1,91	1,09	0,72	0,48
EXTREMADURA	3,03	3,71	4,71	6,15	5,76	3,98	2,17	1,39	0,67
CATALUÑA	3,62	0,54	1,34	1,18	0,91	0,34	0,21	0,16	0,44
LA RIOJA	0,81	0,00	0,00	1,23	0,00	0,00	0,00	0,00	0,00
GALICIA	0,38	0,30	0,26	0,17	0,09	0,06	0,11	0,06	0,04
MADRID	0,91	0,43	1,68	2,23	1,35	2,07	1,51	1,03	1,21
MURCIA	3,28	0,00	0,00	0,89	0,00	0,26	0,72	0,00	0,00
NAVARRA	0,34	0,25	0,04	0,00	0,00	0,00	0,00	0,06	0,12
PAÍS VASCO	0,20	0,57	0,13	0,11	0,25	0,04	0,00	0,00	0,02
VALENCIA	2,33	0,68	0,67	1,16	0,99	0,00	0,19	0,00	0,00
TOTAL	1,77	1,37	1,45	1,54	1,25	0,84	0,57	0,40	0,32

Progress has been good in almost all regions, particularly in the AC's of Extremadura, Cantabria, Castilla la Mancha and Castilla y Leon. The increase in herd prevalence in Castilla y León was due to an outbreak in 2 districts of the Province of Segovia, which is already controlled due to a mass vaccination programme implementation by the end of 2009.

CURRENT STRATEGY FOR 2010 -2011:

First situation (herd prevalence = 0)

In AC's where herd prevalence = 0%, serological testing is performed once a year and the programme includes stamping-out of all infected herds.

Second situation (herd prevalence < 1%)

In AC's where herd prevalence < 1%, serological testing is performed twice a year (once in the UVL where the prevalence =0). In these AC's, stamping-out of all infected herds is implemented if the percentage of positive animals in the herd is above 5% or in case of two consecutive positive tests .

Third situation (herd prevalence > 1%)

In AC's where herd prevalence > 1 %, serological testing twice a year is compulsory. Testing is more frequent in positive herds (every 2 months) and in herds epidemiologically linked to positive herds (every 3 months). In the UVL with herd prevalence > 2.5 %, compulsory mass vaccination (different programmes) or stamping-out of positive herds is implemented, or both.

Complementary measures

Since 2004 two protocols for epidemiological studies were implemented to trace all movements in a positive herd in the previous 6 months and to detect risk factors.

Since 2005, the positive animals of a holding are identified by ruminal bolus or genetic demarcation. The only destination for these animals is slaughter. Derogation to the identification is granted only in extreme cases, "Fighting bulls" or animals with handling problems. The interval from notification of the results to the farmer, and the slaughter of reactors has been reduced from 30 days to a maximum of 15 days and all offspring (born in the previous 6 months 12 months after 2010) of positive females are also slaughtered. In infected herds, parallel testing is performed instead of testing in series (RBT and FCT), with the slaughter of positive animals for each test.

Pre-movement testing has been implemented according to Directive 64/432/CEE, in all situations of movements for transhumance or to communal pastures.

At the Autonomous Region, the Official Veterinary Services have carried out audits namely: on the field regarding surprise visits to private vets, supervision of cleaning and disinfection process in positive herds, control visits to confirm if reactors are isolated, if there is a delay of more than 5 days after the 15 days notification, and finally to confirm if control measures have been implemented for herds grazing on common pastures especially 60 days quarantine and sanitary qualification of the animals grazing on common pastures.

All fattening units are included in the programme in provinces with prevalence = 0 for Officially Free qualification purposes. In 2011, Spain intends to implement the same procedure in fattening units included in the LVU with herd prevalence = 0. Animals in fattening units are sourced from Officially Free herds, remain at the unit until 14-16 months of age and are consigned exclusively to the slaughterhouse; only females > 12 months of age are sampled, females are not in puberty, are not pregnant and are physically separated from males. Spanish authorities are at the moment evaluating whether sampling in fattening herds is necessary under the cost/benefit efficacy or epidemiological approach.

Two new manuals were implemented, one of them is the bovine sampling manual and the other is the FRSP manual. Epidemiological studies are implemented based on the Manual for Epidemiological studies regarding outbreaks and risk assessments in outbreaks. The results of all epidemiological inquiries and the risk factors are registered manually and in a web system in all suspected or confirmed outbreaks.

The eradication programme of bovine brucellosis in the Autonomous Community of Cantabria. Evaluation of the epidemiological situation and implementing measures.

Dr. Francisco Fernández Martínez. Head of Animal Health Service. Autonomous Community of Cantabria

Cantabria is located in the north of Spain with a area of 5,321 km² (1% of Spain's surface) and a population of 549,690 people (103 inhabitants/ km²), mostly concentrated on the coast. The territory is mainly a complex of hills and hillsides which lose height and incline from the top of the mountains till the coast line; the weather is warm and wet on the coast, and more extreme inland. Farming represents 1.5% of Internal Gross Product of Cantabria, 80% of which is cattle farming. Dairy herds are more concentrated on the coast, while breeding cows are mainly concentrated on mountain areas with an extensive production system, utilizing the high mountain pastures.

The functional structure of veterinary services comprises a "Health and Welfare Animal Service", (responsible for designing, planning and managing the eradication programmes as well as for implementing measures and instructions for monitoring, controlling and eradication of outbreaks), a "Laboratory and Control Service" (which take care of samples testing, as well as of technical assistance in planning and developing new analytical techniques), twelve "Veterinary Units" (responsible for implementing eradication measures in the field, as well as control of the field teams) and "Field Teams" (which take care of sampling collection and incidence reporting).

The eradication program comprises two serological tests per year, together with three ELISA tests on bulk milk. Pre-movement testing is required. Serological control at slaughterhouses has been carried out for a number of years but is currently suspended. Also a monitoring programme on wildlife has been carried out in the past, which led to the isolation of *Brucella abortus* from two deer.

Prevalence of positive herds has been high in the past (up to 7%) due to the extensive production system combined with the use of common pastures and the high frequency of movements between herds. Measures were taken to reduce the impact of these risk factors. After the last Task Force Meeting in Santander (November 2004) further measures were put in place such as stamping out in defined cases, the slaughter of progeny from positive cows, and an attempt to improve the number of isolates of *Brucella abortus* from positive animals sent to the slaughterhouses.

There was a rapid decrease in prevalence from 2001 (7.68%) to 2005 (1.54%), while from 2006 onwards, the decrease was slow, reaching 0.6% in 2009. Animal prevalence also followed the same trend, decreasing from 1.35% (2001) to 0.03% in 2009.

Brucella abortus isolations decreased with the reduction in prevalence, and the last isolation from positive cattle was obtained in 2008.

The eradication programme of bovine brucellosis in the Autonomous Community of Extremadura. Evaluation of the epidemiological situation and implementing measures. Mass vaccination as a complementary tool to eradicate an outbreak of bovine brucellosis.

Dr. Cristina Sanz Jiménez. Head of animal health service. Autonomous Community of Extremadura.

Extremadura, situated on the western border of Spain, is the 5th largest AC at approx. 42 000 km² and is characterized by a low human population and extensive cattle farming. There are approximately 10 000 herds [9500 beef, 400 dairy, 80 bullfighting (“lidia”)] of which 93% are managed on an extensive basis.

The veterinary administration of the AC includes 41 veterinarians in the Central Services, 78 in the Field (OVZ) and 17 in the laboratories. Under a Technical Assistance convention, a further 206 veterinarians are employed to assist in the programme. A central database (“BADIGEX”) is used to record farm, animal, sanitary (testing, vaccination etc.) and animal health information. Six abattoirs in the AC are authorized to slaughter cattle removed under the Brucellosis programme.

The percentage of *Brucella*-free herds increased from 95.62% in 1996 to 98.26% in 2002, reduced slightly in 2003 (97.07%) and 2004 (96.73%) before increasing to 99.8% by 2009. Animal prevalence decreased between 1996 (0.46%) and 2000 (0.20%) before increasing to 1.36% in 2004; it reduced sharply in 2005 (0.15%) and continued to decrease until the present (0.015% in 2009). The increasing incidence in 2003/4 was largely restricted to two areas of small farms and high cattle density. An emergency zone of high incidence was declared, which included 17 municipalities in the north of the AC, comprising 1028 farms (72 000 cattle, of which 38 500 were breeding animals). A range of emergency measures was implemented including restrictions on animal movements, increased test frequency (from two to four times per year), increased depopulation and compulsory vaccination of female cattle of 3 to 5 months with B-19. In May 2003, the herd prevalence in the area was 27.0% (animal prevalence = 1.19%) and in June 2004 it was 30.58% and 4.43% respectively. Additional vaccination with RB51 was employed in the higher prevalence areas; the first round was between September and December 2004, repeated six months later and thereafter on an annual basis. Between 31 500 and 37 700 animals were vaccinated each year from 2004 to 2007. The herd and animal prevalence in the region reduced consistently from early 2005 (approx. 20% and 1.5% respectively) to 0% by December 2009. B-19 vaccination ceased in 2005 while RB51 vaccination has continued to the present. The number of test-positive animals removed in 2003 was 4 200, at a compensatory cost of 1.5 million Euros; this increased to 6 800 cattle in 2004 (2.4 million Euros) but reduced sharply thereafter to 24 cattle by 2008 (8 300 Euros) and none in 2009. Success in the programme was largely attributed to the use of RB-51 vaccination as a complementary measure of many others (mainly movement restrictions).

SECOND DAY

The eradication programme of bovine brucellosis in other Autonomous Communities (focused on Castilla y Leon, Madrid, Castilla La Mancha, Navarra and Cataluña). Evaluation of the epidemiological situation and implementing measures.

Dr. José Luís Sáez Llorente. Subdirección General de Sanidad de la Producción Primaria (MARM).

CASTILLA Y LEÓN

In 2004 an outbreak occurred in Castilla y León due to the failure of measures included in the programme for eradication of the Bovine brucellosis. The affected area was located to the south of the region, in the Province of Salamanca. In the outbreak area there were 2 000 cattle herds with 150 000 animals. Most of the herds were managed extensively and animal density was relatively high.

The measures implemented in the affected area began in October 2005. These measures included:

- Identification of areas of higher incidence for application of special measures.
- Restricting movement of breeding animals in these areas.
- An increase in routine testing, from two to four annual serological tests.
- Compulsory reporting of abortions in both infected and officially free herds.
- Segregation and compulsory slaughter of test reactors within 15 days; in the case of slaughter of infected herds, disinfection under official supervision and quarantine of infected facilities (including pastures, stables) for at least 3 month after removal of test positive animals.
- Compulsory vaccination of young, replacement heifers (3-6 months of age) with *B. abortus* S19 vaccine (CZ Veterinaria, Porriño, Spain).
- Compulsory vaccination in all females older than 6 months of age with RB51 *B. abortus* vaccine (CZ Veterinaria, Porriño, Spain). Revaccination of adult cattle was performed 6 months after the first inoculation and then every 12 months.

In addition, a secondary area including the surroundings of the main outbreak area (called "área de vigilancia" or "surveillance area") was also defined. In this surveillance area the competent authority established the same schedule of periodical testing and strict movement restrictions as used in herds in the main outbreak area.

In the affected area from 2005 to 2009 the herd prevalence has decreased from 15.53 % to 1.26 % (see Figure 1). In the same period the animal incidence has also decreased, in this case from 0.44 % to 0.01 % (see Figure 2).

Figure 1: herd prevalence: vaccination area - Salamanca 2005 - 2010.

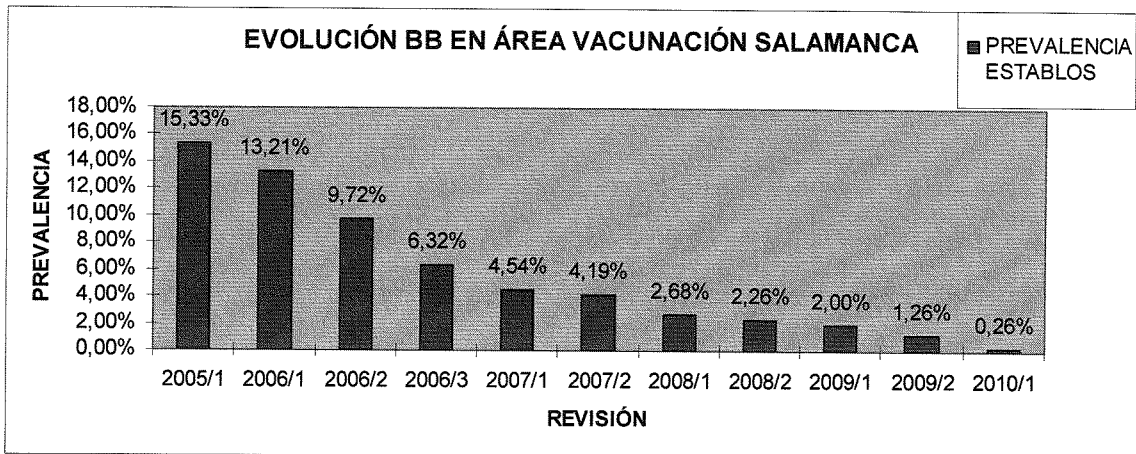
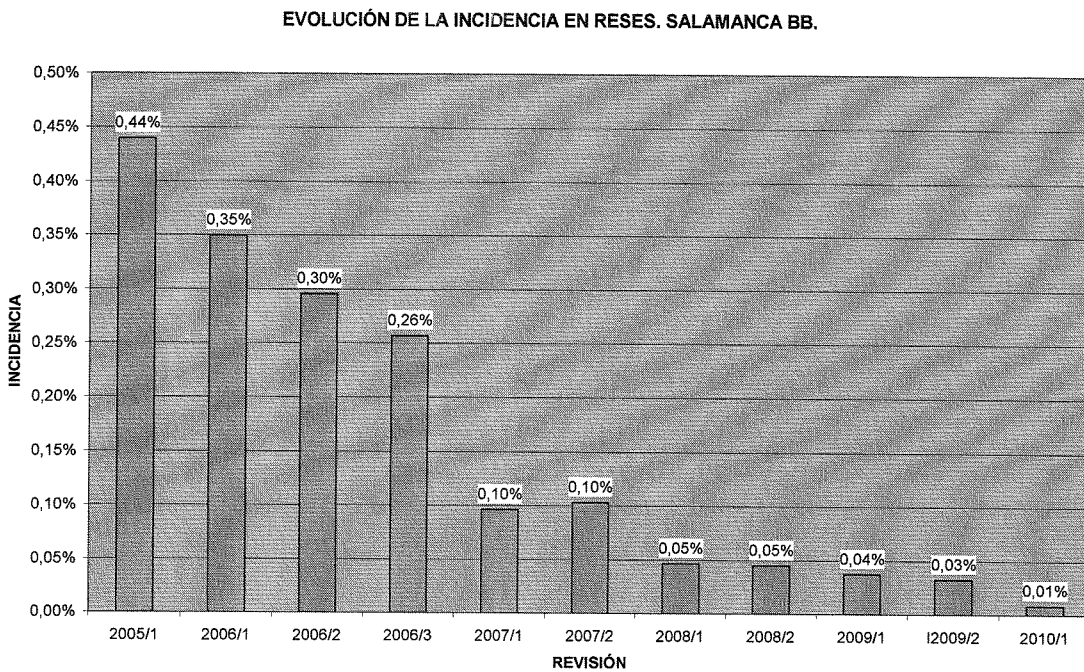


Figure 2: Animal Incidence: vaccination area - Salamanca 2005 - 2010.



In 2008 a new outbreak occurred in the region of Castilla y León, in the province of Segovia. It involved 488 herds and nearly 30 000 animals. Most herds are under extensive management conditions.

In December 2009 Castilla y León implemented special measures in the affected area. These measures are the same described in paragraph 2 above.

As far as epidemiological indicators are concerned, herd prevalence has decreased from December 2009 to October 2010, from 24.17 % to 11.25 %, so the decrease of the herd prevalence was 53.4 % in less than one year. In the same period the animal incidence has decreased from 1.32 % to 0.38 %.

There has been good progress in the region. The increase in herd prevalence in 2009 was due to the new Segovia outbreak affecting two UVL. The herd prevalence in the region in 2010 is < 1%.

CASTILLA LA MANCHA

In 2004 there was an increased herd prevalence due to an outbreak located in the Province of Toledo and in three UVL of Ciudad Real Province. The herds were dairy cattle under intensive management conditions. Epidemiologically investigations showed that the outbreaks are related through a common water source that ran through the region.

The measures implemented for Brucellosis control in Castilla la Mancha were:

- Stamping out of infected herds.
- Increased herd testing and use of parallel testing.
- After depopulation all stakeholders strengthened bio security measures.

The herd prevalence has decreased from 5.23 % in 2004 to 0.48 % in 2009. In the same period the animal and herd incidence have also dropped significantly. The eradication programme is progressing well in Castilla la Mancha region with a steady decrease of prevalence.

COMUNIDAD DE MADRID

The affected area is located to the north of the Autonomous Community. The outbreak occurred in 2008 and involved 15 of 1 452 (herd prevalence 1.04 %), herds, that were beef herds managed extensively. The measures implemented were the same than the ones described in Castilla la Mancha region. In the whole region the herd prevalence has decreased from 2008 to 2010 from 1.04 % to 0.37 %. In the same period the animal incidence has also decreased from 0.10 % to 0.01 % and the herd incidence from 0.61 % to 0.37 %. At the moment herd prevalence in the Autonomous Community of Madrid is < 1% and there are only two positive herds; the outbreak is under control.

NAVARRA

A positive case was detected in October 2008, after an absence of five years, in a herd of 40 breeders. Brucellosis was confirmed by the NRL.

The actions taken were:

- stamping out
- epidemiological survey (a truck was suspected as possible origin, no entry of animals to the farm)
- testing of linked holdings (55 herds and 3.000 animals)
- increased surveillance in the area

In April 2009, a positive herd (3/128 reactors) was detected 55 km from the previous case; brucellosis was confirmed by the NRL. Stamping out was employed and the epidemiological survey identified purchase of forage in the 2008 outbreak area as the likely route of transmission. In July 2009 another positive herd was detected in the 2008 outbreak area. It was depopulated and all linked herds tested (72 herds and 4.600 animals). The isolates were typed and found to belong to Profile: "Pamplona 1.993", which is an old strain from this area. The outbreak was totally eradicated.

CATALUÑA

In this AC there was an outbreak involving four farms, more than 2000 cattle and several human cases. It was due to *Brucella melitensis*. Stamping out and test and slaughter strategies were applied. The outbreak was totally controlled.

Main aspects of the Brucellosis laboratory network activity in Spain – Recent improvements.

Dr. Fulgencio Garrido Abellán, Head of the NRL, Granada, Santa Fé, MARM.

The National Reference Laboratory (NRL) is a service of the Central Veterinary Services of the MARM and is participating in the veterinary laboratories network that includes also regional (n=17) and local (Comarca/provincial; n= 33) veterinary laboratories.

The NRL has implemented techniques for isolation and biotyping of *Brucella* according or close to internationally standardized procedures (a manual of procedures was produced with a special emphasis on the investigation of FPSR and of abortions), with training of the regional laboratories by the NRL for *Brucella* isolation. Cultures are performed by local labs and strains are to be sent to the NRL for confirmation and typing (particularly with the help of the Bruce-ladder technique).

The NRL organizes training sessions, workshops and meetings and gives continuous technical advices to improve the personnel skills and the quality assurance. The NRL is also in charge of the following tasks:

- Control of diagnostic reagents
- Control of vaccines (enumeration of CFU per dose)
- Establishment of national standard sera and working sera
- Edition of SOPs
- Organisation of Proficiency ring-trials
- Confirmation diagnosis (investigation of singleton reactors, large outbreaks)

As far as ISO 17025 laboratory accreditation is concerned,

- in 2008, 11 labs were already accredited (22%)
- in 2009, all 51 labs have applied for accreditation and
- in 2010, all have been audited by the ENAC (the Spanish accreditation body) and it is expected that all will be accredited by the end of 2010.

5 GENERAL DISCUSSION – CONCLUSIONS & RECOMMENDATIONS OF THE SUB-GROUP

Conclusions

- There has been a considerable and ongoing reduction of Bovine brucellosis prevalence and the group acknowledges the major efforts made by national and regional authorities.
- The programmes implemented in specific high risk areas, including vaccination and other control measures, have proven to be effective in reducing prevalence.
- The recommendations made by the group in the last meeting in Santander (15 - 16 November 2004) have been largely implemented in the eradication programme. Efforts have been made to standardise the epidemiological investigations of brucellosis outbreaks.
- The level of data collection and analysis has been improved both at national and regional level.
- The group recognises the difficulty arising from the considerable resources required for testing of fattening herds, given that evidence from other Member States suggests that they play a minor role in the epidemiology of bovine brucellosis.
- The high proportion of culture negative herds suggests a possible relative increase in the rate of false positive reactors (FPSR) in the regions that are in the final stages of the eradication programme.

Recommendations

- The group recommends that efforts in eradicating bovine brucellosis be continued and even intensified where appropriate. In particular, vaccination should be maintained and only reduced following appropriate epidemiological analysis.
- The results of epidemiological investigations should be presented to allow a better understanding of the sources and routes of infection.
- Data about fattening herds testing should be made available by the Spanish authorities for consideration in the event of future changes in the legislation at EU level and to better focus the priorities of the eradication programme.
- Cases of FPSR should be investigated to clarify if their epidemiological characteristics are similar to those identified in other MS and to develop strategies at national level to manage them.

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ANNEX 1

PARTICIPANTS

OF THE "SHEEP & GOATS BRUCELLOSIS" TASK FORCE SUBGROUP MEETING HELD IN SANTANDER, SPAIN, ON 27-28 OCTOBER 2010

- **Task Force Sub-Group**
 - Ernst STIFTER Chairman, Italy
 - Darrell ABERNETHY UK (N-I)
 - Fabrizio DEMASSIS Italy
 - Bruno GARIN-BASTUJI France
 - Olga MÍNGUEZ GONZÁLEZ Spain
 - Antonio PINA FONSECA Portugal
 - James MOYNAGH Commission
 - Valentina PIAZZA Commission

- **Spanish Representatives (main list)**
 - **Ministry for Environment, Rural and Marine Affairs (National Veterinary Services)**
 - Lucio I. Carbajo Goñi
 - José Luís Sáez Llorente
 - Beatriz Muñoz Hurtado
 - **National Reference Laboratory for Brucellosis**
 - Fulgencio Garrido Abellán
 - **Autonomous Community of Cantabria (Veterinary services)**
 - Francisco Fernández Martínez
 - Luis Antonio Calderón Sainz
 - M^a del Sol Solares González
 - **Autonomous Community of Castilla y León (Veterinary services)**
 - Anna Grau Vila
 - **Autonomous Community of Extremadura (Veterinary services)**
 - Cristina Sanz Jiménez
 - Bernardo Galiñanes Fernández
 - Aurelia Reyes Galán
 - Félix Rubio Sánchez
 - Carlos González Breña
 - Raquel Carbonero Lozoya
 - **Autonomous Community of Navarra (Veterinary services)**
 - Cesar Fernandez Salinas

ANNEX 2

AGENDA OF THE "BOVINE BRUCELLOSIS" TASK FORCE SUBGROUP HELD IN SANTANDER, SPAIN, ON 27-28 OCTOBER 2010

Wednesday, 27 October

- | | |
|--------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 9.30-10.00 | Welcome & introduction.
Presentation of the Expert Sub-group & Introduction. |
| 10.00-10.30 | Structure and organization of the Official Veterinary Services in Spain.
Other veterinary services in the implementation of the Bovine brucellosis programme. |
| 10.30-11.30 | Evolution of the National Eradication Programme on Bovine brucellosis in Spain. Epidemiological situation. The National Eradication Programme 20010 -2011. |
| 11.30-11.45 | Coffee break. |
| 11.45 -12.15 | Discussion. |
| 12.15 -13.00 | The eradication programme of Bovine brucellosis in the autonomous Community of Cantabria. Evaluation of the epidemiological situation and implementing measures. |
| 13.30 -15.30 | Lunch. |
| 15.30 -16.45 | The eradication programme of Bovine brucellosis in the autonomous Community of Extremadura. Evaluation of the epidemiological situation and implementing measures. Mass vaccination as a complementary tool to eradicate an outbreak of bovine brucellosis. |
| 16.45 -17.00 | Coffee break. |
| 17.00 -18.30 | General Discussion. |

Thursday, 28 October

- | | |
|--------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 9.30 - 10.30 | The eradication programme of Bovine brucellosis in other Autonomous Communities (focused on Castilla y Leon, Madrid, Castilla La Mancha, Navarra and Cataluña). Evaluation of the epidemiological situation and implementing measures. |
| 10.30 -10.45 | Main aspects of the Brucellosis laboratory network activity in Spain. Recent improvements. |
| 10.45 -11.00 | General discussion: all participants. |
| 11.00 -11.30 | Coffee break. |
| 11.30 -12.30 | Meeting of the Sub-Group. |
| 12.30 -13.00 | Final meeting: conclusions and recommendations. |
| 13.00 | End of meeting. |